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## **IT'S ABOUT PEOPLE 2023: SOCIAL AND TECHNOLOGICAL DEVELOPMENT IN SERVICE OF SECURITY AND DIGNITY**

*The 11<sup>th</sup> Annual Conference of Europe's Sciences  
and Arts Leaders and Scholars*

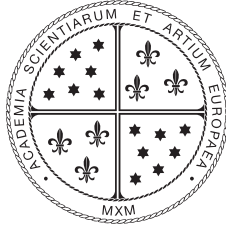


# BOOK OF ABSTRACTS

1<sup>ST</sup> REVISED ONLINE EDITION

MARIBOR | 10 – 17 March 2023

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The 11<sup>th</sup> Annual Conference of Europe's Sciences and Arts Leaders and Scholars

## **IT'S ABOUT PEOPLE 2023: Social and Technological Development in Service of Security and Dignity**

organized by Alma Mater Europaea - ECM & European Academy of Sciences and Arts  
under the auspices of the President of the Republic of Slovenia, Dr. Nataša Pirc Musar

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**The 11<sup>th</sup> Annual Conference of Europe's Sciences and Arts Leaders and Scholars  
It's About People 2023: Social and Technological Development in Service of Security and Dignity  
Book of Abstracts**

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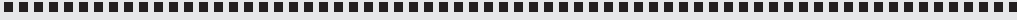
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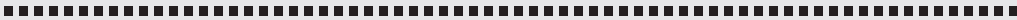


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# FOREWORD





# FOREWORD

Ludvik Toplak, President of Alma Mater Europaea – ECM



Ludvik Toplak

Foto: Marko Pigac

The 11<sup>th</sup> international scientific conference "*It's About People*" 2023 is dedicated to the current challenges of our time.

Reputable international scientists and international science and arts leaders and scholars analyzed the pressing challenges of our time in 81 panels, with more than 300 speakers, all with the aim of finding ways to overcome the challenges.

Special thanks go to the President of the Republic of Slovenia, Dr. Nataša Pirc Musar for honorary patronage and to the honorary president of the European Academy of Sciences and Arts, Prof. Dr. Felix Unger, the European Commissioner for Innovation, Research, Culture, Education and Youth, Maryja Gabriel, and the Minister of Higher Education, Science and Innovation Republic of Slovenia, Dr. Igor Papič for opening messages.

We would like to thank the President of the European Academy of Sciences and Arts, Prof. Dr. Klaus Mainzer for co-organizing the conference and for chairing the program committee of the conference. We are grateful for the cooperation and moral support of Prof. Dr. Igor Emri, who spoke on behalf of the suspended President of the Slovenian Academy of Sciences and Arts, Prof. Dr. Peter Štih. I would like to thank the chairman of the organizing committee, Prof. Dr. Jurij Toplak, and professional colleagues for organizing the conference.

Keynote speaker Prof. Dr. Jeffrey Sachs from Columbia University gave the framework "*The geopolitics of a changing world*", and Prof. Dr. Klaus Mainzer "*Digital transformation through sustainable innovation: Challenges for Europe*". Distinguished scientists Prof. Dr. Michael Molls from the Technical University of Munich, Prof. Dr. Markus Schwaiger from the Bavarian Academy of Sciences, Prof. Dr. Jeremy Howick from the University of Leicester, and the University of Oxford presented the scientific achievements of world-renowned universities. The keynote speaker of the plenary session Dr. Sonia Ehrlich Sachs from Columbia University spoke on "*Universal Health Coverage in Low Income Setting*" with an emphasis on health and social issues in the Global South. H.E. Cardinal, Archbishop of Vrhbosna, Vinko Puljić from Bosnia and Herzegovina emphasized: "*The Importance of Religion for the Peace and Development of Central Europe*".

Judge of the Constitutional Court of the Republic of Slovenia, Prof. Dr. Rok Svetlič gave an emphasis under the title "*The course of "development": The vulnerable Human Rights Hinterland*".

In the following, the scientific conference in 81 panels dealt with many questions from practice, theory in the field of education and mental health, as well as special questions in the field of physiotherapy, neuroscience, social gerontology, medicine, and health. The section dealing with legal issues was particularly rich in content, dealing with constitutional and legal issues, human rights, elections, and numerous border issues related to technological changes, artificial intelligence, political systems, human rights, and peace in these turbulent times.

A special section in the field of Project Management opened up the questions of the business and technological nature of the company's project design. The Applied Artificial Intelligence section, as a new tool of the society of the future, drew attention to the technological, economic, communication, and ethical aspects of the new reality.

Scientists from the field of Humanities specifically discussed the aspects of cultural formations and the role of various media and cultural institutions in the digital age. Traditionally, Archival science was strongly represented at the conference, this year dedicated to the security aspect of archives.

Finally, I would like to thank the chairman as well, thanks to the Organizing Committee, Prof. Dr. Jurij Toplak, and colleagues for the organizational preparations and implementation of the 11th conference dedicated to social and technological development in the service of security and dignity (*Social and Technological Development in Service of Security and Dignity*).

The organizers of EASA Salzburg and AMEU – ECM and their partners invite esteemed colleagues and the international academic public to initiatives and cooperation for the 12th "*Its about people*" conference, which is expected to be held on March 8, 2024.

Prof. Dr. Ludvik Toplak  
President of Alma Mater Europaea – ECM







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# **INVITED TALKS OF THE CONFERENCE**

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# WELCOME SPEECH

**Jurij Toplak**, University Professor, Fordham University, President of the Organisational Committee of the It's About People Conference, Alma Mater Europaea – ECM

Dear President Dr. Pirc Musar, Minister Dr. Papič, presidency of the academies, rectors, deans, distinguished guests, faculty and, first of all, students. Welcome to the 11th Conference, It's About People. Fifteen years ago, when my father started his school project, and a few years later, when he fathered the It's About People conference, it was met with doubts and obstacles. However, his and his team's strong will, vision, passion and hard work brought us to where we are now. Alma Mater Europaea is an institution with 2000 students from numerous countries, 30 study programmes, and a reputable, strong international faculty. The It's About People conference is bigger and stronger every year, and this year I welcome you to attend over 80 panels with 300 speakers from more than 30 countries. I encourage you to all participate actively.



Jurij Toplak

Foto: Marko Pigac

The message of this year's week-long conference is that social and technological development should not be an aim in itself but should be in the service of humanity, security and dignity.

And now? What a pleasure it is to welcome to the podium the first speaker. We met 20 years ago when she strove so eagerly for transparent government and the right to access information, and I learned really tremendously from her. When you agreed that you would be given honorary patronage to this conference and when you agreed that you would come and speak to us, it meant so much to me.

Welcome the President of Slovenia, Ladies and Gentlemen, Dr. Nataša Pirc Musar.

# WELCOME ADDRESSES

**Nataša Pirc Musar**, President of the Republic of Slovenia,  
Honorary Patron of the It's About People Conference

Your Excellency Minister Higher education, Science and Innovation, esteemed President of Alma Mater Europaea, esteemed Honorary President of the European Academy of Sciences and Arts, dear President of the Organizing Committee, distinguished guests, ladies and gentlemen,

I am pleased to be able to welcome you as an honorary patron of this international scientific conference, where discussions in the next few days will revolve around topics and contents that present many challenges for all of us today. These are the growing needs for technological development in relation to safety and human dignity. Security is one of the fundamental human rights. I have in mind not only national or state security, but also a person's personal security, his protection against the violation of human rights, diseases, natural disasters, poverty. It is therefore about the need to ensure the well-being of both, the individual and the community in all segments of our lives. This requires the exchange of knowledge and experience, as well as a joint action of all of us, not only the competent state bodies and institutions, but also non-governmental organizations, civil society, and every individual. Only in this way can we ensure the widest possible security for everyone, and with it the prosperity and development of the community. The solutions that lead us to this must be unwaveringly committed to respecting the rule of law, i.e., its three constitutive elements: legality, democracy and human rights and fundamental freedoms.



Nataša Pirc Musar

Foto: Marko Pigac

Dignity is also a human right. In the Universal Declaration of Human Rights from 1948, the first article states the fundamental idea: „ All human beings are born free and equal in dignity and rights.“ Dignity and human rights belong to us as human beings and are not conditioned by gender, skin colour, religion or ethnicity, age, education, social position and power, wealth, merits and achievements or any other personal circumstance. The only condition for them is belonging to a common lineage. Our future rests on two large and connected foundations: knowledge and related technological development, without which we cannot face challenges such as sustainable

development and the green transition, adaptation to climate change and the decline of biodiversity, and food security.

Slovenia was among the initiators of the new human right to a clean and healthy living environment, which was announced by the United Nations General Assembly last year. In addition to this right, we also wrote the right to clean drinking water into our constitution. Now the key question is how to ensure the aforementioned right. We also talked about this at the conference for the less developed countries this week in Doha, where I specifically highlighted the need to encourage local innovation, research, and development in the less developed countries, and I emphasized that for sustainable economic growth it is necessary to promote equality and, of course, the empowerment of women. In Doha, I came to the realization, which I may have been subconsciously aware of, that the world is unfair, that wealth is very unevenly distributed in this world. When you talk to the president of Malawi, who tells you that an individual there has to survive on €1.20 a day, while watching from the side-lines the European Union, which causes a lot of emissions and releases harmful effects into the environment (of course, Europe is not the only one, also China and the United States America), and when these underdeveloped countries talk about the catastrophic consequences they have as a result of climate change, while they themselves contribute only 4 percent to it but represent a quarter of the entire world population, then I don't know if the developed world is doing enough to make us all happy on this planet. Sometimes I lose a little faith in hope. But you know, as long as we in Europe and other parts of the world, where we have more resources at our disposal to live well, realize how very important the green breakthrough is, how very important it is that we all do something together to ensure that our planet survives, then there is light at the end of the tunnel. And I believe that at your faculty - and that you will probably also talk a lot about this at this conference, that this awareness will be transferred to the young people, some of whom are sitting here in the hall today. Then, even as president, I will look with happier eyes at this future of ours.

The European Union contributes, as Team Europe, as we like to say, 71 billion dollars annually for less developed countries within the framework of the United Nations. It's a big resource, but giving money just isn't enough. Sometimes it's the little things that are needed. For example, the president of Seychelles and I talked about whether we could arrange for one student to come and study in Slovenia. And now I'm working on it. One student. Slovenia is certainly such a rich country that it will be able to afford and help one student from the Seychelles, maybe one from Malawi, Mozambique... I hope that even such a small project will be successful.

Dear participants, an even more important foundation of our perspective and development are values as life guides and the ethics based on them. Especially bioethics and morality. Talking about values and ethics, even in connection with scientific and technological progress, is also not enough. It is necessary to implement them in the life of the individual and the community. High ethical principles and values have ensured that knowledge will be used for the benefit of humanity. The essential mechanisms here are the intergenerational transfer of knowledge, values, and ethics, including the greater role of education.

How does this work in practice? What challenges await us in this area of our lives and coexistence? People over the age of 65 already represent more than a fifth of all Slovenian residents. Projections predict that in 2050 there will already be 48% of 65+ years old. According to the recommendations of the World Health Organization, the elderly belong to the group of vulnerable both in the field of health maintenance, appropriate treatment at home, as well as in the community and social care institutions. The high risk of ageism and violence against the elderly is also recognised, which was also pointed out by the latest epidemic.

Simone de Beauvoir already wrote about the silence of old age more than 50 years ago, and her theses are still relevant today. We must stop the growth of stereotyping, hating the elderly, paternalism and even discrimination against the elderly, fed by the mantra of neoliberalism. It is believed that when you are older, you are not useful, and you are not worth anything. It is unacceptable that as many as 60,000 pensioners, single elderly women in Slovenia, live in poverty. Respect for the dignity and fundamental human rights of the elderly must be the main guide in finding solutions for the care of the elderly. The condition for all this is intergenerational solidarity, cooperation and, above all, a strong welfare state with public healthcare, education, and social services, as well as a

good pension policy that will eliminate long-term poverty among the elderly. Along with personal freedom, safety and dignity, health is the most important value for young and old alike. My goal is therefore clear: no one should be left without health services when they need them. As president, I will work hard for this goal and contribute to its fulfilment to the best of my ability.



Nataša Pirc Musar

Foto: Marko Pigac

Autism, for example, which will be one of the topics at this conference, is just one of the areas that are important to both children and the elderly. It is important that doctors and the entire team of health workers diagnose autism as soon as possible, and subsequently, people with autism need a lot of support and help from various experts so that they can live integrated into society like everyone else. Unfortunately, even in the field of paediatrics and child psychiatry, despite extraordinary efforts at all different levels, there are unwanted waiting times and also problems when, after a diagnosis has been made, further help is needed at the primary or secondary level of medical activity. At the transition to adulthood, however, this help is completely unsystematized and left to private initiative. The public health system thus still faces many challenges in this area.

I would like to talk about another very important topic. About behaviour that represents a serious violation of human rights, including the right to life, safety and dignity. Behaviour that is a serious social problem even in our country, even though we live in a society in which we are all equal according to the law, yet our everyday life is still strongly permeated with inequality. I am talking about violence against women, not only because I am a woman and not only because I am the president of the republic, but because it is necessary to talk about it out loud. It is about domestic violence and femicide, which I don't know if you are aware of, is the most common cause of death for women in the world. It is most characterized by prior intimate partner violence in the form of prior threats, stalking, manipulation, crossing acceptable boundaries, subjugation, and intimidation. Increased social, political and media pressure is needed to strengthen efforts to respond appropriately to domestic violence. My thanks and my support go to the non-governmental organizations for their work in this area. Courage and solidarity are essential in a global society that still discriminates against women. Without brave women, feminists, we would not have the rights we have today. Bell Hooks, or Gloria Jean Watkins, in her book *Feminism for everyone* emphasized that we must courageously learn from the past and work for a future in which feminist principles will underpin every aspect of our public and private lives. To be clear, feminism supports the equality of men and women. Us women are not in the world in order for men to have less rights, but to have equal rights. And to not take advantage of the potential of this planet, which in our country

represents half of the population (even in Slovenia, there are 51.1% women), would be extremely unwise and harmful to the society. We need a clear message to everyone, especially the youngest, that we will live better as a society if we strengthen and live solidarity and are tolerant and respectful towards each other. Or, as Marcus Aurelius wrote: "Waste no more time arguing what a good man should be. Be one."

Learning and empowerment with knowledge is an investment in society that builds bridges between us. In conclusion, I would like to wish you a constructive discussion and exchange of knowledge, experience and also wisdom, which is enormous in this hall. If I use Hegel's multi-meaning phrase, this kind of discussion can be a condition that Minerva's owl does not arrive too late.

Thank you very much and I wish you a good work.

**Felix Unger, University Professor**  
Honorary President, European Academy of Sciences and Arts

Especially over the last years, I have seen an enormous improvement from Alma Mater Europaea and in the shadow of the European Academy of Science and Arts. And I recall very good all of our talks, dear Professor Toplak, when you came to discuss the possibility of having an Alma Mater Europaea established. You have been very enthusiastic about this topic and endeavour, and now we are facing your endeavours with the final results. Every year, you convene meetings, It's about people, and this is a very, very important topic. Especially to say about people because we sometimes forget in our endeavours that all it is existing around human men, with all the problems with all the things which are incompetent with the human being. I know it is difficult to always have man in focus; we think it is so easy, but in reality, it is very difficult to have the right strategy. I think that education is a very important topic, especially when we are thinking today in terms of medicine, with the question of how we have to establish a proper medical curriculum that is truly patient-oriented and not somehow bureaucratically driven. The patient has to be at the centre of all our interests. And therefore, I am always very grateful to Professor Toplak and Professor Jurij Toplak because they are organising this important meeting and giving a special action to the human dimension because what is our life when we do not consider the human dimension? We are man, we all have our problems, and when you can find a balance, then you have a good way to live in a wonderful way. This balance we see we have only to open our newspapers, and we are faced with horrible situations and burning spots in different parts of the world, especially now in Ukraine, and these are all things which should be overcome. We have to work on this, and one thing that is essential is tolerance. What is tolerance? Tolerance is something very difficult, and it is not only an acceptance of your neighbour. It is a way of treating them as well. We have to address people how humans are, and therefore this makes the whole thing so difficult.

Again, I have to congratulate Professor Toplak and Professor Jurij Toplak for setting up this meeting. I hope that in the tradition of Alma Mater Europaea, we will always have at the beginning of the year meeting on about people. Thank you very much. And again, it is a great pleasure to come to Maribor. For me, as I told you, it is like coming home.



## **Mariya Gabriel, European Commissioner for Innovation, Research, Culture, Education and Youth**

Dear President of the Alma Mater Europea, dear high representatives of the scientific community, dear Member of the European Parliament, ladies, and gentlemen, it goes without saying that it is a pleasure to address you at the 2023 edition of the It's About People Conference.

I fully agree that what we do in science is indeed about people. It is about the scientific community and about our citizens and society as targets and inspiration of our efforts. I commend the focus of this year's event on the need to put people at the center of digital transformation to ensure sustainable development through human-centric research and innovation. Integrity and ethics in research are key components of a robust European research and innovation system and the guide for a holistic concept of excellence and resilience. Ethics, by design principle in the horizon neural programme for artificial intelligence research is an example where we call for an inclusive framework for ethics governance of AI. We must lead by example to increase public trust and to avoid the detrimental impacts of research misconduct, it is necessary to continue strengthening the European Research area, including social responsibility. Researchers have a responsibility to engage with the public regarding the appropriate use of science in addressing societal issues. Policymakers have the responsibility to put in place the framework conditions that make such co-creation processes a reality. The Pact for Research and Innovation in Europe has social responsibility as a main principle underpinning research and innovation in the Union. It recommends that Member States engage with citizens and local communities. The COVID-19 pandemic and the crisis related to the war in Ukraine showed that policymakers need access to timely and high-quality scientific advice in times of crisis. Two advisory groups of the European Commission, the Scientific Advice Mechanism and the European Group on Ethics have recently published recommendations on how to improve strategic crisis management in the EU. The report on supporting and connecting policy making in the Member States with scientific research is another important reference that will be further developed during the Swedish and Spanish presidencies to further develop concrete proposals. The Commission has played a strong role in ensuring that academic freedom and fundamental academic values are prominent. Together with the European Parliament and Member States, we stand ready to deepen the interinstitutional dialogue involving the research community and our citizens. The Raw ministerial communique, the Bond Declaration on Freedom of Scientific Research, and the Pact for Research Innovation are key milestones in that direction. Your discussions today are exactly the kind of dialogue we need to ensure we are equipped to protect fundamental values not only for science but for the future of our democracies.

Thank you very much for your attention, and I wish you a very fruitful event.

**Igor Papič**, Minister of Higher Education, Science and Innovation, Republic of Slovenia

Dear President of the Republic (Dr. Nataša Pirc Musar),  
Honourable European Commissioner (Mariya Gabriel),  
Respected President of Alma Mater Europaea (Prof. Dr. Ludvik Toplak),  
Dear Ladies and Gentlemen

„Social and technological development for safety and dignity“ is the theme of this year’s conference, entitled Its About People. This topic is very close to me, because I am an engineer by education, but I have always been interested in the social aspect of development.

I, myself, am an advocate of Society 5.0, i.e. a society in which all sciences participate. Without an interdisciplinary approach, we cannot ensure the successful implementation of ideas in society.

There is a lot of talk about artificial intelligence. Its development is mainly carried out by technicians and naturalists. The questions of how to place it in society and what its use means for society are mainly dealt with by humanists and social scientists. Both aspects are important - without technicians and natural scientists there will be no new technologies, without humanists and social scientists they will not be accepted in society.

In medicine, we have many examples of the extraordinary potential that technology has for the quality of human life, and here again it is important that engineers do their part, humanists or social scientists, and the key in this process are, of course, doctors or medical personnel. All of the above have the same goal – work for the benefit of people.

But we must also be aware of the limitations of technology. At least for now, no technology can replace human contact. We have robots that can provide assistance to the elderly and make their lives much easier, and even restore some of their independence, but these people also need the help of people, or above all, human contact.

Technological and social development have always been linked, but never before have they occurred at such a rapid pace. It is important that both tempos are as coordinated as possible. Only in this way will society and technology develop in a positive direction.

The topic of the conference is therefore extremely important and I look forward to your conclusions.

# KEYNOTE SPEAKER

## THE GEOPOLITICS OF A CHANGING WORLD

**Jeffrey Sachs**, University Professor, Director  
Center for Sustainable Development, Columbia University; Bestselling Author

President Toplak, thank you for welcoming us to Alma Mater Europaea, and thanks to all of you for this incredibly warm homecoming, as I'm going to call it.

For me, being in Slovenia and being associated with this wonderful country now dates back, 37 years actually. But even before that, 43 years ago, I married into the Austro-Hungarian empire. My wife is from Prague. My father-in-law, who was a brilliant and wonderful person, was born in 1915. And when he got his American passport, he actually did not want it to say *Born in Czechoslovakia*. He wanted to say that he was born in the Austro-Hungarian Empire because he believed in it and lived his life with the values of a multinational culture and the ability of many nations to coexist peacefully. He fought for that against the Nazis. He struggled for that to build a better society. He ended up doing a great service to me, which is bringing his daughter to the United States in 1967 so that I could marry her a few years afterwards. We met at Harvard University 51 years ago. And all of this is to say that Slovenia is a kind of home for me, if you'll permit me. If you'll have us.

Janez Drnovšek showed up in my office in 1987 at Harvard University, saying "Would you come to visit Yugoslavia?" And that was my introduction to this region and this country. In 1989, he invited me to a most unusual event, I have to tell you, speaking to not the President of Yugoslavia, but the Presidency of Yugoslavia. It was a room of nine leaders, 7 presidents of republics, and two presidents of autonomous regions, rather imposing moment. And then I was working with the final, the last Prime Minister of Federal Yugoslavia, Ante Marković, to try to combat the hyperinflation which was tearing apart the economy of Yugoslavia in its last years. We know the complicated and dramatic events that followed, including the independence of Slovenia; an invitation came to come here and work closely together with Boris Plesković; and with Prime Minister Peterle in the early years of the independence of this country to help establish an economic foundation for what is a very successful country and a very remarkable and inspiring country.

Well, I'd like to have a speech just with good news, but we're actually meeting at a time that is filled with bad news, filled with difficult news, and filled with major challenges. The world is not like it should be. And the world is certainly not like I ever envisioned it, would or could be when I began my own journey in this region in the 1980s. I want to talk about how we got from a vision of a peaceful European home at the end of the 1980s to a raging war in the Ukraine and a possibility of World War breaking out in a short time. And if that sounds dramatic, it is dramatic and it's quite real. We are, as the world did in 1914, in this region, sleepwalking into history right now. Every day in the US media, which becomes stranger and stranger by the day, we talk about war with China, we talk about the coming conflict. I think the people who write these things don't have any idea what they're talking about. They are filled with ignorance and filled with the profoundly misguided thoughts. I thus want to talk about not just the new geopolitics of our world order, but a geopolitics of peace which we desperately need and don't have. Europe doesn't even have diplomats right now, because Europe's diplomats are the biggest war mongers right now. This is very unfortunate. But what comes out of most of the foreign ministers is more weapons, more weapons rather than the call for negotiation. This is extremely seriously wrong, and I want to explain why it's wrong and what can be done about it. So for me, my own hopes, I really were given full birth by this man, the greatest statesman of the modern age, Mikhail Gorbachev, who was truly the great leader of the 1980s and 90s. But we didn't listen and didn't understand what he was trying to say. He spoke in a famous address on 6 July 1989 to the Council of Europe in Strasbourg, and he talked about Europe as a common home.

He inspired me profoundly I have to say, at a personal level, and I worked for him as an economic advisor to his economic team in 1990 and 91 to absolutely no effect, because the world was cruel and not listening to Gorbachev. Then I worked with his successor, President Boris Yeltsin in 1992 and 1993, again to no useful effect at all, because the world was not listening. I also worked as an economic advisor to Leonid Kuchma, the 1<sup>st</sup> President of Independent Ukraine.

I don't take sides. I believe in peace. I've worked both for Ukrainian and Russian leaders, and I can tell you there is no reason for this war right now at all. But one terrible blunder after another with a heavy, heavy responsibility of the United States, I'm sorry to say, and one that must be understood. What Gorbachev said in his speech in 1989 is "now that the 20<sup>th</sup> century is entering a concluding phase, and both the post war period and the Cold War are becoming a thing of the past, the Europeans have a truly unique chance to play a role in building a new world, one that would be worthy of their past, of their economic and spiritual potential." This is completely correct, and it remains true till today.



Jeffrey Sachs

Foto: Marko Pigac

Europe, incidentally, is the most prosperous place on the whole planet. It is the place with the highest living standards on the whole planet. It has been a place of peace. It has been a place of human rights. Europe has something to tell the world, but not about war, but about peace. Europe's vocation is a vocation of peace. And that's what needs to be fulfilled. Gorbachev said, "There is an inevitable need to do everything within the power of the modern intellect so that Man would be able to continue the role assigned to him on this earth, perhaps in the universe at large, so that he would be able to adapt himself to the stress-inducing newness of modern existence and win the fight for the survival of the present and succeeding generations."

We're in a time of radical technological change. Will we use these technologies for peace or for war? By the way, all technologies are dual-use. They can be used for destruction, or they can be used for peace. Technological progress is not an answer. It is a possibility. Every technology we're talking about, whether, of course, nuclear power, and modern atomic science, whether artificial intelligence, to make expert systems for healthcare or expert systems for drones, for destruction, or advanced biotechnology, whether to create new cures or new pathogenic viruses, because both can be done in the laboratory. And a footnote, I believe that most likely, SARS-Cov-2, the virus that causes COVID-19, came out of a laboratory accidentally, not out of nature. All the technologies are dual-use. They can destroy, or they can create, so they do never by themselves answer the question of how we will live and what use we will make of them.

Gorbachev said, "It is time to consign to oblivion the Cold War postulates when Europe was viewed as an arena of confrontation, divided between spheres of influence and someone else's forward-based defences". He unilaterally disbanded the Warsaw Pact. This is crucial to remember. Gorbachev unilaterally disbanded the Warsaw Pact. That was the end of the Cold War. And then the question is, what response did he get? Well, let me just say that my own economic philosophy, strategy and tactics, and by tactics, I mean how to do a quick economic reform in 1992 in Slovenia; or strategy - what kind of economic approach should this country take, or Poland where I advised or Russia or Ukraine, always was based on the idea of a common European home that no country, no society lives in isolation, no economy functions in isolation. We are part of a world, and when we integrate peacefully into the world, then we get prosperity. When we go to war, of course, we get suffering destruction and economic disaster. And we should be looking not only for a common European home but for a common planetary home, a common home for Earth. That has always been my own idea. It's pretty deeply embedded in economic thought because economics teaches about the benefits of trade, specialization, integration... A world-linked economy is more prosperous than a group of autarkic nations, shown again and again in history.

However, a world economy depends on peace. It is destroyed by war. So, the idea is to build a peaceful underpinning of a globally integrated economy now. Doing so works. I had an idea back in 1989 that was pretty basic, which is that if the Communist divide ended, the economic barriers came down, and the economies that had been either under Soviet domination or under Yugoslavia's system became normal market economies, integrated with the rest of Europe and integrated globally, there would be a rapid and significant rise of living standards. A pretty basic idea. I'm a mechanic. In other words, I know how to tinker with the monetary system or the trade rules, so one of the things I recommended early on in Poland first and then here in 1992 was to make a convertible currency so that it can trade freely and be the basis for open economic trade. In Poland on January 1, 1990, I recommended immediate convertibility of the Polish currency, which was misnamed shock therapy in the newspapers as a kind of silly term, because what it did was facilitate the rapid integration of economies into normal economic life. Contrary to many thoughts, I only wanted economies to be normal, not neoliberal, not new, experimental, not worker-owned, not capitalist-owned, just normal, mixed economies as Europe has. Normalcy was probably the most common word that I used and, by the way, that Boris Yeltsin used. He said, "Russia should just be normal". That's what he said repeatedly. But no one was listening on the other side, by that, I mean Washington. So just to say, Slovenia has been a great economic success with all the twists and turns and ups and downs that go with real life in this world.

Slovenia in 1992 was 50% of Germany's GDP per capita, and now it's 80% of Germany's GDP per capita. It's closed the gaps with Western Europe. That's a success. It doesn't get better than that. You could say that government should have done better; after 2008, there was a dip because of the financial crisis globally in borrowing that had been done here, and there are mistakes on and off. But basically, Slovenia became integrated into the European economy and, of course, into the European institutions. And that was the idea, that was the idea of the tolar, that was the idea of the quick reforms at the beginning. And it worked. No magic. Basic economic knowledge and sense with a little tinkering now and then. John Maynard Keynes, the greatest economist of the 20<sup>th</sup> century, said, "Wouldn't it be wonderful if economists eventually came to be respected as much as dentists? Decent dentists. You know who could fill a tooth or do a root canal or something else, but just would be functional," and that, I believe, is the goal of economics. Be helpful, be useful in a context of peace and openness. So, this basic economics works, and it worked wherever it was accomplished.

But it didn't work the way that Gorbachev imagined. And I would argue because we failed Gorbachev to help make it work that way. Life doesn't take care of itself in economics. If you're an economics student and you've read something about the invisible hand, that's a nice fairy tale. It's a nice slogan. It gives a little bit of an idea about a self-organizing market, but it's not real life. Real life is an economy that we call a mixed economy of markets and government. As the President just said so eloquently, taking the lead on healthcare, for example, or on education as the Minister just said, this is a mixed economy, not a national market economy.

What happened was that the divide between East and West, strangely enough, did not end. It was just pushed about 1000 kilometres to the east. Broadly speaking, the United States had the view

that Central Europe and Eastern Europe will be incorporated into the new US-led system. But the Soviet Union, the former Soviet Union, other than the Baltic States, that's something else. A new divide was made. What I'm showing you here is, as of 2022, the per capita income of the former communist countries. What you can see is the ones in red with the highest per capita income measured relative to German GDP are the European Union members. Where countries are members of the European Union, there has been convergence; where countries are not members of the European Union, whether it's in former Yugoslavia or the bulk Western Balkans region, and, of course, still less in the former Soviet states, convergence did not take place. A new wall came down. And this is the sad reality of the post-89 world. Now I can tell you in retrospect that this was to a significant extent, the result of US thinking. I'm very sorry to say it, and I'll give you just an example of my experience.

When I advised Poland in 1989, I made a series of recommendations about how to help Poland. Everything I recommended was adopted by the White House, usually within 8 hours. I felt "Wow, not bad, Mr. Sachs". I said to the National Security Adviser one morning in 1989, "General Scowcroft, Poland needs a billion dollars to stabilize the currency." At 5:00 PM that day, the White House called and said, "Mr. Sachs, tell your friends they have the billion dollars". I thought that was pretty nice. I like being an economic advisor. And Poland made its reforms. In 1991, I advised the White House to do the same for Mr. Gorbachev. And they said, Are you kidding? Are you crazy? Help them? No way". And when Gorbachev went home empty-handed from the G7 summit that year, he was abducted in a coup. In the putsch. Then President Yeltsin came to prominence, who was still President of Russia within the Soviet Union, and he immediately asked me to help advise his team, Yegor Gaidar, being the head of the economic team. I flew to Moscow in September 1991 and I said "you need help because there's a financial crisis, and here's what worked in Poland, so let's ask the United States for this". And they did, and the answer was *Njet*. Don't even dream of it. Not a chance. I was a little surprised, and I'm also very stubborn and I didn't understand what was going on because the advice was good economic advice, so I persisted. Then I was told by the IMF: "No, it's not going to happen, Mr. Sachs. And then, interestingly, in March 1992, I was on a television show, again, imploring some kind of help for Russia. I was on a panel with the Secretary of State on this news show, Laurence Eagleburger. He said to me at the end of a session which must have annoyed him "Mr. Sachs, can I give you a ride back to Washington?" We were in Alexandria, VA, and I said "yes". And so I got into his limousine. I did get out again, which is lucky, but in any event, he said. "Mr. Sachs, I want to explain something to you. Your ideas are fine. I may even agree with them, but they're not going to happen. The United States could not make the mental advance that Russia could be a partner not an enemy". This is the most basic point. A mental blockade. And a decision in early 1992 by Cheney, Wolfowitz, and Rumsfeld, who came to be called the neoconservatives, that this was now a US-led world and the US could do what it wants. That, to my mind, unfortunately, ladies and gentlemen, as wide the world has remained as divided as it is, let me just recount a few quick things to you. The US and Europe failed. But Europe had no independent foreign policy at the time, Europe was completely enmeshed as individual countries and individual issues. No European foreign policy then, and none now. Europe does not know how to represent Europe. Still till today. Europe follows the United States. Well, first there was the failure to help Russia adequately. Then there was the first phase of NATO enlargement, which already started to raise the tensions with Russia. Then there was the NATO bombing of Serbia next door for 48 days in 1999. That definitely poisoned the waters. Then, after September 11, President Putin said we want to cooperate with the United States in the War on Terror, so even then, there was no break. But then the United States unilaterally abandoned the anti-ballistic missile treaty in 2002. The US unilaterally invaded Iraq in 2003. The second phase of NATO enlargement came, including this country, but as part of expanding to the Black Sea and to the Baltics. In 2008 the US unilaterally recognized Kosovo again over strenuous Russian objections. Then, at the Bucharest Summit in 2008, the United States said NATO will enlarge to Ukraine and Georgia, and Putin told Bush then that would be war. Those are our red lines. Stop moving eastward. In 2011, the United States tried to overthrow Bashar al-Assad in Syria. It's not described that way in the media, but that was a presidential order to the CIA to overthrow Assad. It led to the Syrian civil war. It's nothing less than that, ladies and gentlemen. This was not a civil war. This was a US regime change operation. I know it from the inside. I was aghast at it. In 2011 NATO overthrew Ghaddafi against UN principles. In 2014, the United States helped to overthrow the Ukraine President Yanukovich. I also know that first hand, that was not simply a street protest, that was a regime change operation. In 2019, the US unilaterally withdrew from the intermediate Nuclear Force agreement. Eu-

rope absolutely failed to help implement the Minsk agreements for the Donbas with the Normandy process, and so all of this is to say, the idea that this war started in February 24, 2022 because President Putin is an irrational Peter-the-Great-want-to-be, is simply a myth of US narrative. This is a conflict that has been building for 30 years. And it comes, unfortunately, I'm sorry to say, from the US attitude, which is the US can do what it wants because it's the most powerful country. So, it does not have to respect the other side. It even believes that vis-a-vis China, which is a little bit terrifying because China is four times larger than the United States. And we are not going to defeat China in a war in East Asia. But the rhetoric is soaring these days about confronting China the same way that it is soaring about confronting Gorbachev, just to say, the US really did, and Germany really did promise that NATO would not move eastward. It really did make the promise. I think the first two waves of NATO enlargement, even to the Adriatic, that was not decisive. But what was decisive was saying that Ukraine and Georgia would be part of NATO because that goes back to an old idea from the first Crimean War of surrounding Russia in the Black Sea region. That is a conscious idea of surrounding Russia with Ukraine, Romania, Bulgaria, Turkey and Georgia to prevent Russian ability to operate in the eastern Mediterranean in the Middle East. And Putin, sad to say, finally reacted in this terrible, terrible war.

Now, let me say that our problems go even beyond this, because the real underlying economics of the world are changing in ways that are utterly contrary to the US aspiration to be the sole superpower of the world.

The most fundamental change that is happening is the rise of Asia. Even more basic than the changes that occurred here after 1989, for the basic reason that industrialization came to Europe 150 years before it came to Asia. The Asian economies had become impoverished backwaters of the world economy by 1950, and Europe, or the North Atlantic, including the United States, had about 60% of world output by 1950 and Asia, with 60% of the world population, just 20% of world output, so the North Atlantic, led by the United States, dominated Asia. But since that time Asia's had the most dramatic rise of economy in history. The reason is it's just catching up for lost time. When you were under colonial rule, as India was, that was 100 years of completely lost time because the British did not support development of India. The opposite, the British repressed development of India. So once India gained independence, its economy started to grow first and foremost through literacy, because the idea of imperial rulers "don't educate the colonial possessions", but once independence came, these former imperial regions started to rise, so the point I want to make here is the world has changed in a fundamental way, not only in Europe but at the global scale. The North Atlantic, our NATO, is no longer in charge of the world economy. The world is very different today. Asia now is a larger part of the world economy than the West. China in particular has overtaken the United States in total output somewhere around 2012 and with the footnote depending on how you measure things. So, I'm showing you the measurements at so-called purchasing power adjusted prices. China is larger, but why wouldn't it be? It has four times the population. The only way China could be smaller in output than the US would be to stay less than 1/4 the per capita income. China doesn't want to stay poor. China is extremely effective at education, science, technology, planning, and investment. It's a success story, and it is a very well-governed country, especially for 1.4 billion people. It's had the fastest rise of economy in history for a large region. But it means that the United States certainly cannot dictate to China over issues like Taiwan, or any other issues for that.

China doesn't like our Diplomats waving fingers at them every day, warning them, "Don't do this! Don't do that!" The experience of 2000 years is "Don't talk to China that way". Period. Show some respect. It goes a long way. Don't wag fingers. But the US has no sense of etiquette, in addition to the sense of proportion right now, so it's all about warnings and threats, not about actual cooperation.

It's also fascinating that the BRICS countries, that is, Brazil, Russia, India, China and South Africa, are larger than the G7 countries now. This is a different world. When we hear every day the West has isolated Russia - What? Sorry, Russia has friends and trading partners all over the world, in Africa, in Latin America, in Asia - the West may be right or wrong about this, I've explained why it's a much more complicated story. But it's not a story of the West isolating Russia. Not even close. Because the West, so-called the North Atlantic, is not what it believes itself to be. It is a part of the world, not the part that runs the world. There are lots of theories about our geopolitics now, and I'll wrap up. One theory is that war between the US and China is inevitable. The so-called Thucydides trap referring to the conflict between Sparta and Athens, described by Thucydides in the Peloponnesian Wars. The

bottom line I would tell you about this is twofold. One: Sparta and Athens did not inevitably fight. In fact, there were periods of peace. And second, both were destroyed by the Peloponnesian Wars. There was no victor, even though on paper, so to speak, Sparta won, it soon disappeared from world history. In fact, Athens not only survived, not as a political power but as home to the first universities of the world. Plato's Academy and Aristotle's Lyceum. And that's what really changed the world. Universities are where it's really at. Not armies and political power, after all. That's the lasting truth of this story.

Thus one theory is we're destined to war. Another theory that I find a captivating read but profoundly troubling is a book by our leading realist, international relations scholar in the United States, John Mearsheimer, who was a very wonderful, kind, brilliant, knowledgeable scholar. But he says that there is inevitably a tragedy of great power politics. That great powers inevitably go to war with each other because they're always battling for hegemony. And I can't accept tragedy as an inevitable outcome. And that's where I feel we need to do something completely different, and I especially refer to the words of President John F Kennedy in his inaugural address who told us something extremely important. He said the world is very different now and students, this is 1961 already, so it's more than 60 years ago, but he got it completely right. And he was the favorite president, my favorite president of my lifetime. In fact, I think the only relatively decent president we had during those 60 years. He said "the world is very different now for man holds in his mortal hands the power to abolish all forms of human poverty and all forms of human life. "

You see what he's saying is our technology is so powerful, we could end poverty. But it's also so powerful we can destroy the planet. He was referring to nuclear war. But now we could also refer to environmental devastation. This is the basic point. Technology doesn't solve our problems, there are tools. It can be used for ending poverty, if we're thinking clearly. It can be used for global destruction, that's a choice. That's not an inevitability. And that's not an inevitable tragedy. I won't belabor a basic idea of the prisoners' dilemma. The idea of the prisoners' dilemma is to explain how two adversaries that should gain through cooperation end-up not cooperating and the logic is simple. If Russia deescalated, the United States says, "oh, that's great". If Gorbachev disbands the Warsaw Pact to the United States, even better, we'll expand NATO. And if Russia escalates, the United States says, "oh, now we have to escalate". And so, no matter what Russia does, the US escalates. Similarly, no matter what the US does, Russia escalates, and so in the prisoners dilemma, you end up in the lower right hand quadrant. Escalate. Escalate. War, even though the upper left hand quadrant is better for both parties. That's why it's a dilemma. The question is how to get from the lower right hand quadrant, which economists say is the rational equilibrium, even though it's a disaster. Each party is playing rationally. How to get to the upper left hand quadrant, that is our real challenge.

A good place to start, incidentally, is to read Pope Francis's encyclical Fratelli Tutti. Because a good place to start (I'm moving from the lower right to the upper left) is ethics. Social teachings and Catholic social teachings basically are "Behave yourself", and cooperate. I'm a great fan of Jesus's foreign policy advice. His foreign policy advice is *Why do you point to the spec in the other one's eye when you have a beam in your own eye? If you want to find peace, look inside first, and improve your society. Don't point fingers at the other. Don't attack the other, build confidence with the other. Discuss and negotiate. The greatest failure of the last year, in which hundreds of thousands of people have died, is that President Biden did not pick up the phone one time to speak with President Putin. That is a shame. Why didn't their mothers tell them to talk to each other? Honestly, our President should behave like grown-ups, not like children. And they should not lead us on a path towards nuclear war when they don't even talk to each other. Because how can you reach the upper left-hand quadrant of cooperate if you're not even talking? If you're just saying he's evil, he's irrational. No one to talk to. What kind of idea is that? And the more you know of the last 30 years of history, which I've lived through every day watching those events, the more you know that it was a failure to talk all the way along. Not something that just started a year ago with the one-sided invasion.*

Therefore, we need to move to diplomacy and to cooperation. We need to understand the very basic idea, which is that not only is war destructive and terrifying and potentially world ending, it's also the biggest distraction in the world to the real problems that we face, because in the meantime we're destroying the planet, the environmental basis for our civilization.



Climate change is no joke. It's no small matter. It's not going away on its own. It's accelerating. It's dramatic. We need to be solving these problems through cooperation. We need international connections of a green energy system, so it's a bad idea to blow up the North Stream pipelines and other international infrastructure. And if you want to know a secret, the US did it. We need to stop this kind of destruction. We need to cooperate urgently.

I'll try to close with my favorite words of President Kennedy, my favorite president, who lived through the near destruction of the planet, partly through his own blunders. The Cuban missile crisis. Because the United States did something absolutely terrible in 1961, it invaded Cuba. And that led Nikita Khrushchev, the chairman of the Soviet Union, to put nuclear weapons into Cuba. And that led to the Cuban Missile Crisis 60 years ago, in October 1962. The world came within one second of nuclear war. Even the leaders didn't realize that a Soviet disabled submarine had a nuclear-tipped torpedo that the Captain ordered into the torpedo Bay for firing because the submarine thought it was under attack when it was not. But it was disabled and without communication, so it came within a moment of firing a nuclear torpedo, which under U.S. military doctrine in October 1962 called for a complete retaliation against the entire communist world, including Slovenia, by the way. Thus the whole world would have perished, and a Soviet political officer happened to be on the ship, on the vessel and countermanded the order of the captain and saved the world. We don't even know about him, except if you are reading the fine print. His name was Antipov, and he saved the world. This is how close we came. After these events, Kennedy and Khrushchev were actually rather terrified. They were both very decent people who had nearly blundered into ending the world. So they decided that they would make peace. And in June 1963, President Kennedy gave the finest foreign policy speech ever given by an American president, where he appealed to the American people to make peace with the Soviet Union. He didn't appeal to the Soviet Union to make peace with America. He appealed to the American people, to explain to the American people they are human beings too, and they want peace just like we do. It was an unbelievably brave speech and an unbelievably brave initiative, and on some theories, it cost Kennedy his life, because there are reasonable theories that Kennedy was killed afterwards by rogue parts of the US government that opposed his peace initiatives. I happen to believe that that's likely to be the fact. But Kennedy gave this speech and made peace with Krushchev though Kennedy only lived for another four months after that. Johnson changed the direction, perhaps under the weight of the deep state that had led a coup against Kennedy. But Kennedy said something in 1963 in making peace that led to the partial Nuclear Test Ban Treaty that we need to remember and repeat today. I'll just end here. Kennedy said: "So let us not be blind to our differences -- but let us also direct attention to our common interests and to the means by which those differences can be resolved. And if we cannot end now our differences, at least we can help make the world safe for diversity. For, in the final analysis, our most basic common link is that we all inhabit this small planet. We all breath the same air. We all cherish our children's future. And we are all mortal".

Thank you very much.

# INVITED SPEAKER

## DIGITAL TRANSFORMATION THROUGH SUSTAINABLE INNOVATION: CHALLENGES FOR EUROPE

**Klaus Mainzer**, University Professor,  
President, European Academy of Sciences and Arts,  
President of the Scientific Committee of the It's About People Conference

### REQUEST FOR STRATEGIC THINKING IN EUROPE

Against the background of the current political, economic and military world situation, it becomes glaringly obvious what has been seriously lacking in Europe in the recent past - strategic thinking. The time of visual flight and short-term political and economic interests led to disaster. Others seized the opportunity to indulge their long-term strategies and interests. What can we do on the part of science, research, education and training? Answer: Learn to think strategically, because only on this basis is responsible leadership possible!

### PATH DEPENDENCE IS DANGEROUS IN POLITICS, ECONOMY, AND TECHNOLOGY

The key to a successful strategy for Europe, according to the thesis of this talk, is innovation. People tend to prefer not to leave familiar and hitherto successful development paths rather than focus on new innovation. As head of a study by the German National Academy of Science and Engineering (acatech) on "Responsibility in Companies and Institutions for Sustainable Technology Development", the author was able to learn how, for example, parts of the German automotive industry preferred to follow the "path dependence" of profits arising from polluting diesel technology rather than switching to sustainable electromobility in time.

The "path dependence" is even more dramatic in the recent past, when those responsible in politics and business brought European countries (especially Germany) into the energy policy dependence of essentially one country. The proven profits from fossil fuels such as gas, oil and coal were tempting, although there was no lack of strategic warnings against blind trust in the dominant supplier. But every small shareholder knows that one should never rely on a single equity line, however tempting it may be in the short term. A good portfolio is characterised by diversity and variety in order to make a good long-term cut despite all crises.

### REQUEST FOR INNOVATION PORTFOLIOS

The thesis is therefore that the pressure of the current political, economic and military crisis should be used to accelerate the shift to sustainable innovations in order to exit the path dependency of fossil energies. In this way, the actual major human problem should be solved - the global environmental and climate crisis. As in politics, however, the focus must not be on a single solution, but rather the entire technological potential must be bundled in an innovation portfolio.

Future technologies, like shares, are also bets on the future. For this purpose, the advantages and disadvantages of e.g. solar and wind energy, hydropower, hydrogen, nuclear and fusion energy must be weighed against each other for Europe and combined in a "hybrid" energy system in order to orient the European innovation portfolio towards a sustainable future. Diversity also ensures resilience in an innovation portfolio, allowing it to respond flexibly to the risks of the future and to recover overall in the event of selective setbacks.

Energy supply chains are just one example of complex networks of modern civilisation, whose vast amounts of data and information cannot be managed without digitalisation and artificial intelligence (AI). However, digitisation requires a huge amount of energy, which differs for different computing technologies. As in the energy issue, digitisation must not be based on a single solution, but rather the entire technological potential must be bundled in an innovation portfolio. Therefore, classical digitisation and artificial intelligence must be examined together with future technologies such as neuromorphic computing (following the energy-saving mode of natural brains) as well as quantum computing, quantum communication and quantum technology. For this purpose, the advantages and disadvantages of digital and analogue technologies must be weighed against each other for Europe and combined in a "hybrid" IT and AI, so that this European innovation portfolio is also oriented towards a sustainable future together with the energy issue.

An innovation portfolio is made up of basic, bridging and future technologies that need to change, be abandoned and replaced by new ones in the short and medium term. An innovation portfolio is therefore dynamic and must be constantly shaped. Methodologically, this is done by drawing on the mathematical theory of complex systems and non-linear dynamics, which can be used to model complex systems and networks in nature, the economy and society and which the author has been working with for decades. On this basis, chaos and risks can be assessed in early warning systems and translated into strategic action.

The recent political, economic and military crisis also shows that strategic thinking and action cannot be confined separately to individual branches of research, technology and business. Innovation strategies are part of a global confrontation of political world systems. Innovation systems, according to another thesis of this talk, are an expression of different value systems in, for example, the United States of America, Russia, China and Europe. The free democratic constitutional state is not only an expression of the human rights highlighted in the UN Charter, but also provides legal certainty for innovations and markets on which economic competition takes place.

## REQUEST FOR INTERNATIONAL LAW INSTEAD OF IMPERIAL THINKING

Imperial thinking and the insistence on imperial spheres of influence and the law of the strongest only set humanity back centuries and lead it into the abyss. Therefore, this talk is also a plea for an international law of nations, according to which the citizens of a sovereign country alone, and no one else, determine their future. A global international law, according to the future perspective, must include an international jurisdiction, as in a democratic state, with which all those responsible must reckon.

In the end, it is about global innovation and leadership to prepare this planet for its true global challenges. However, as long as we continue to push back against each other in bickering and wars, there is a real danger that the red lines set by nature will be displaced and crossed. But then it is irreversibly too late, as the mathematical models of complex system dynamics prove to us.

Suggestions for this talk go back to my work on the advisory board of the BMBF (German Ministry of Education and Research) Future Cluster "NeuroSys - Neuromorphic Hardware for Autonomous Artificial Intelligence Systems". As President of the European Academy of Sciences and Arts (EASA), I would like to thank the authors of the EASA expert groups "Digitalisation, AI, and Societal Impact" and "Environment, Climate, and Energy", whose expert papers are expressly referred to on this occasion.

# EDUCATIONAL AND RESEARCH STRATEGIES FOR EUROPE; ESPECIALLY FOR MEDICINE AND HEALTH SYSTEM

## PLENARY SESSION 1

### INTRODUCTION TO THE PANEL DISCUSSION

**Klaus Mainzer**, University Professor  
President of the European Academy of Sciences and Arts  
President of the Scientific Committee of the It's About People Conference

The panel discussion that now follows is dedicated to a central topic of the Alma Mater Europaea in Maribor - the health system. To this end, we will consider the natural law framework of nature, but also current developments in the health strategies of medicine. Here, too, technical innovation is of decisive importance for the progress of medicine. The costs of medical innovation are immense and are becoming a huge problem for national budgets. However, cost savings must not come at the expense of patients' health. In the end, we must keep the well-being of a human being holistically in mind and, to this end, recall the Hippocratic Oath, according to which all medical action must be oriented towards healing and helping.

We all agree that human civilisation has reached the point in time when we have to reconsider, re-think and replan our criteria of values for the upcoming decades. The key issue, and most important thing for the future, is how to ensure to each and all of us a healthy life and a clean environment. And that is, of course, a very serious challenge, which is the central theme of this conference.

In my short presentation, I will shed light on these issues from the point of view of non-equilibrium thermodynamics, which is also known as the theory of complex dissipative systems. This term was coined by Ilya Prigogine, who in 1977 received the Nobel Prize for his contributions to non-equilibrium thermodynamics. The highest forms of dissipative systems are living beings and their associated environmental and socioeconomic systems, what means that the study of such systems combines not just physics but also social sciences, law and whatever is related essentially to the nature of these dissipative systems. Everything on Earth is essentially a dissipative system and all dissipative systems demand exchange of energy and matter for maintaining their structural form. However, within the existing profit based social order the issue of a clean environment is essentially an unsolvable problem. It is a problem because within the current techno-socioeconomical system in which we live, we do not have answers to questions such as *"what is the value of a single breath of clean air?"*, *"who will provide the clean air and how?"* or *"how much profit will be generated for the investor?"*. This tells us that there are major changes needed to solve the environmental problems, health problems and so forth. In addition, the laws of thermodynamics teach us that the existing profit oriented social system is not sustainable because continuous growth is possible only in thermodynamic open systems and Earth is a closed system, even though the economy of Earth behaves, with a view to the developing countries, as though it is an open system. Therefore, the question arises, if it might be possible to make the world market, which represents a closed system, sustainable? And the answer is yes. Namely by empowering the research-based inventions and innovations that will result in new breakthrough technologies, products and business models that have not existed before. That means, what we really need are inventions, and I would like to emphasise that inventiveness is an independent cognitive ability that has nothing to do with the intellectual ability to achieve the highest level of education. New breakthrough ideas happen in cross section, through communication in a horizontal and vertical direction, through the interactions of people from different fields.

In conclusion, I would like to emphasise that we need the so-called citizen science, based on communication in a horizontal and vertical direction, even if it is not yet entirely clear how this can be materialised. However, it is clear that we need to establish new think tank environments, called innovation communities, to materialise a societal transition to a knowledge-based society or world order which will also require a redefinition of legal systems.

We have to move from civil law and common law towards a common-sense legal system. A common-sense legal system should focus on research-based innovation and education; it should be the central focus for the future of humanity. Inventions, innovations and, of course, education bring knowledge from one generation to the next.

*(final words)*

Learning from patients, as Professor Unger has demonstrated in his talk, means vertical communication, and together with horizontal communication we can achieve a cross disciplinary interaction.

**Michael Molls**, University Professor of Medicine,  
Director of the Institute of Advanced Studies, Technical University of Munich

INVITED TALK

I would like to share some ideas with you concerning planetary health, sustainability of ecosystems, and human well-being. Alterations of ecosystems and global warming impact health, e.g. somatic and mental diseases and transformations in healthcare need the cooperation of medicine with social sciences, economics and philosophy. Sustainability thinking and change processes offer a big chance to reduce the huge problem of chronic diseases in the global society. Understanding the benefit of screenings (biomarkers), early disease detection (imaging technologies) and prevention (multiple approaches) is most important. Postponing suffering from chronic diseases by prevention assures quality of life for individuals and many advantages for society. Epidemiology, supported by artificial intelligence, is the most prominent instrument in sustainable healthcare research and implementation. Let us consider the methods of epidemiology and collecting data as examples. We can achieve a much deeper understanding of the outcome of medical interventions, e.g. the survival rates in cancer diseases. Another point is the optimisation of steering processes in healthcare, an example is COVID-19, which we experienced very recently. Furthermore, we can follow the participation of groups and stakeholders and sustainable healthcare research and implementation. A better and more consistent formulation of hypotheses in biomedical research and medical technical development of new products, e.g. humanoid robots, become possible. And generally, as my final point, future research proposals in the sense of third-party funding in medicine should consider the epidemiological background with population-based data and healthcare research results in relation to the planned project. For example, in cancer research the very important data from tumour registries must be considered. Projects which are finishing in the cosmos of molecular biology and promise new curing medications (wonder pills) should not be accepted anymore.

*(final words)*

With reference to the Oath of Hippocrates, for the future it is important to move away from clinical traditions and to postpone the suffering from chronic diseases by prevention, because that assures quality of life for individuals and provides many advantages for society. And in my opinion, all that can be seen under the cover of planetary health, sustainability of ecosystems and human well-being.

One of the greatest challenges we face, and which was already mentioned by Professor Mainzer, is the transformation from analogue to digital medicine. With the recent advances in computing, but also by the introduction of artificial intelligence and medical approaches to disease detection, therapy is rapidly changing. Medicine always relates on empirical analysis of data. The impressive advance of data collection and integration currently possible with all the new technologies allow us to compare individual patients with a large group of reference patients with similar medical problems. Therefore, these powerful tools will revolutionise clinical research by comparing the effects of innovative therapies with historic data in a matched patient group. The so-called real-world research will revolutionise the way we evaluate new drugs and new therapies. We are currently just learning about the power of AI in dealing with large data sets, the methods employed in ChatGPT. It will not only support communication of medical information, but also will help us to develop a dynamically learning healthcare system. Important for this transformation is a cooperation of all parts of our health care system. The pyramid graph "*House of Digital Medicine*" summarises what is necessary to realise digital managing. It starts with data acquisition, which is currently available with a lot of heterogeneous hospital information systems, thus, the immediate need is to standardise this data acquisition in order to make it useful. The next level is the data integration. Data integration needs not only the right tools but also the willingness to actually share data to the benefit of the patient and in order to improve patient care. The top level of the graph comprises the analysis and research, which include artificial intelligence, modelling, bioinformatics, and machine learning, and this new knowledge has to be brought back to the lower level in order to generate the circular process of learning dynamically, of learning medicine. Such a model involves tremendous organisational and financial as well as ethical considerations. Part of the public discussion in Germany is, for example, the privacy issue of medical data and I personally believe that data collection and analysis have to be controlled and must follow strict rules protecting the individual rights of the patient.

As the potential benefit by far outweighs this broad concern, the scientific community has the important role of communicating to the public the potential of modern technology. Furthermore, a trustworthy environment needs to be developed in which we will be able to control the use of AI and other modern technologies for the benefit of individual patients and not for the benefit of any commercial users in the health care system. And therefore, I am very optimistic that this transformation will be successful and will help us to advance patient care, but also very important, medical science in the future.

*(final words)*

In my final sentence I would like to come back to Professor Unger's point. To benefit the individual patient, who needs to be the focus of all our activities, we should use all of the impressive technology that is available today.

**Felix Unger**, University Professor of Medicine,  
Honorary President of the European Academy of Sciences and Arts

INVITED TALK

When we wanted to stimulate the set-up of a new faculty of medicine for the Academy, based on the new demands, we came across enormous resistance to the idea of changing the traditional approaches. However, today there are many tools in existence that make it easier to learn about the human body or to make, for example, diagnoses easier. In the past, medical students learned from dead bodies, but today modern tools make it possible to learn directly from the patient. However, even today there is still not one single method that leads to the desired result in a treatment, there are always different approaches and different techniques, and it remains to be weighed up which method is most suitable for the individual patient; it is a cascade of different decisions which we have to go through. Another task is to educate the patients and their relatives. Especially in the media we often see promises of healing methods that are misleading, but through such misinformation patients have their expectations raised too high and such expectations cannot be fulfilled in reality.

*(final words)*

In my closing words I would like to say that the most important thing is to train the students to learn from each other, to focus on interdisciplinarity and to be open minded regarding the different possibilities that might be necessary.



# PLENARY SESSION 2

## INVITED SPEAKER: HEALTH

### HEALTH MANIFESTO ON THE NEED FOR COLLABORATION BETWEEN HEALTHCARE TECHNOLOGY AND EMPATHY

**Jeremy Howick**, Professor of Empathic Healthcare  
 Director of the Stoneygate Centre for Excellence in Empathic Healthcare  
 University of Leicester  
 Senior Research Associate, Faculty of Philosophy, University of Oxford  
 Author of "Doctor You"

I'm going to be talking about a manifesto on the need for collaboration between healthcare technology and empathy. I'll start with a question for everybody here. To what extent do you think that care bots, basically, robots that offer care, will replace human healthcare practitioners? Please choose one of the following:

Do you believe that robots can replace human doctors?

Do you think that they will ever replace you, the doctors?

Or that robots might replace doctors sometimes or a little bit?

Do you believe that robots can do most things, so they'll replace them to a great degree?

Do you think that robots can do everything doctors can do?

Maybe in the future, at some point in the near future?

Just think about that, where do you stand there. Because I'll ask this question again at the end of the conference. Well, no matter what your answer is, the future is here. Asimo is a real robot that helps people with disabilities to feed themselves. It was made by the Honda Motor Company. Robaer reduces the physical strain of carers work by lifting and moving heavy patients. Pepper is another robot, organises sing songs, makes gin and tonics, and can mirror your tone of voice when speaking. There are also even more common chat bots. These are the cousins of care bots, or the cousins of robots. They simulate human speech, but not physical behaviour. They can allegedly provide cognitive behaviour therapy for an array of psychological disorders. For example, a chatbot called robot uses artificial intelligence to track moods and offers tips, and claims it can reduce depression, anxiety and other problems. And another chat bot called Shim successfully promoted mental well-being using CBT. So, these artificial carers are often presented as a means to deal with a problem in healthcare, that the population is aging and there aren't enough doctors to treat them. I published the results of a paper where I summarised my thoughts on this in a paper entitled »An Empathy Imitation Game: Empathy Turing Test for Care- and Chat Bots«. If you can't find it online, e-mail me, I'll send you a copy.

Now for the main body of my talk, I'll discuss the problem with some background on why empathy is important, the evidence, and why empathy is doubly important. Back to robots. Background - How did I become interested in empathy? Well, I used to do a sport called rowing. This is a picture of me before you were born. I used to row all over the world. And sometimes they would test us for drugs that we shouldn't have taken. I never took those kinds of drugs, but you get used to being very careful when the doctor prescribes something. You check the ingredients very carefully before taking it. But at some point, I got an allergy to a cat, and I couldn't sleep properly. I couldn't train properly, therefore I was becoming very nervous. I didn't know what to do. I went to the doctor. There was a

waiting room that was kind of dirty with a rude receptionist. Eventually the doctor pricked me 30 times in my arm and confirmed that I had an allergy, and they prescribed a nasal spray. And as was my habit at the time, I checked the ingredients. One of them was cortico steroid. I paused and I said: "Well, maybe I can't take it. Maybe it will lead to a positive drug test?" I was making inquiries with Sport Canada, but it was taking too much time to respond. In the meantime, I was suffering with lack of sleep, anxiety, stress. As a last ditch effort, I accepted my mother's suggestion to visit a herbal doctor. I thought it would be crazy, but I said: "Well, I'll try it." I expected to see crystals and so on. All it was, was really a cleaner waiting room with plants and nice music playing. And then we spoke for about 45 minutes with the herbal doctor, not just about the symptoms of the allergies, but also of the stresses associated with high level rowing. Now, at the end of this long empathic conversation, she prescribed two things. One, keep your head and neck warm, which is just common sense in the winter in Canada. Two, she said, drink ginger tea. I thought it wouldn't work, but I thought ginger tea can't be poisoned because so many people in the world drink ginger tea or tea with ginger in it. And it might work out. I'll try it. I did try to drink the ginger tea and then within three days, the allergies went away. That got my academic brain spinning. Was it the ginger tea that caused the reduction in my allergy symptoms? Was it the long, empathic conversation? Was it empathy? Was it a placebo effect? And if it was a placebo effect, how would we know? How could you design tea, placebo ginger tea that looks like ginger tea, tastes like ginger tea, smells like ginger tea, but is not ginger tea? It's not theoretically impossible, but let's say it's pragmatically impossible to do that. This led me to an academic journey. Along the way, I've published over 150 peer reviewed journals, a few books and so on. I still don't know the answer to the question of whether ginger tea is a placebo or not, but what I have done is I've taken the tools normally used to investigate the benefits and harms of drugs, namely randomised controlled trials and systematic reviews of randomised trials. Those are the main tools used to investigate the benefits of drugs. I've taken those and used them to investigate the effects of so-called soft things like communication skills, empathy and so on. What have I found? Before I tell you that, let me give you some definitions because there are as many definitions of empathy as there are people researching empathy. However, the good news is that there's a growing consensus at least in the healthcare setting, that empathy involves understanding, demonstrating understanding and some therapeutic action. So, the first - empathy is, of course, related to a number of other terms, including compassion and so on. I'm not territorial about these things. They're all roughly similar, and they're all about putting the care back into healthcare. As my colleague mentioned, my research has taken a big step forward on June 1st, when I became the Director of this new Centre for Excellence in Empathic Healthcare. Our remit is to place empathy at the core of the medical school curriculum. Not to the exclusion of the teaching of the important things about pathophysiology, but to include empathy and good communication alongside those things. We've got a number of successes to date, our team is growing, we've published a number of papers and so on. I won't bore you with the details. Now let's get into the evidence, of why empathy is important. Well, the first systematic review we did because of the reasons I mentioned are the main tool used, the Gold standard of evidence, on whether practitioners are empathic. Because when I give these kinds of talks, people often say, "We already do it anyway". If I ask the nurses, the nurses say, "Well, we do this very well. It's the GPs, the other doctors, who aren't very good at empathy". Then I speak to the other doctors, and they say, the GPs, for example, the general practitioners or family doctors, they say, "Well, we do empathy very well. It's actually the surgeons who aren't very good at empathy." And then I go talk to the surgeons and the surgeons say, "Who cares about empathy? All that's important is to cut properly." I'm just joking. Some of the most empathic doctors I've met are surgeons. It turns out, though, this is the care measure, which is a questionnaire that patients fill out about their doctors. It's a bunch of questions that ask patients to rate their doctor's empathy; questions like, do they really understand? Do they fully understand? Did they really listen? And are they honest and positive and so on? We published this review. We found 64 studies. The main result was great variability in the extent to which healthcare practitioners display empathy. As you can see from these, the lines are all over here now. Now, the big difference was: A) the longer people spend with patients, the more empathic the empathy is felt. And B) Being female. If being female was a drug, I know it was International Women's Day 2 days ago, if being female was a drug, it would be a blockbuster because female practitioners are rated by their patients as being more than 15% more empathic than their male counterparts.

The second review we did: people say, well, sure, maybe it's the variability, but you can't teach it. Either you have it, or you don't have it. That's not true. We did a systematic review of over 26 randomised controlled trials and we found out, I won't bore you with statistics, but when you train doctors to be more empathic, it makes a difference in how empathic patients take them to be. So, empathy varies. You can't teach it. Last question is "Does it make a difference to patient outcomes?" These kinds of trials are more difficult to do and more difficult to find, but there have been seven, and we published our results. There are trials, they take healthcare practitioners, they randomised some of them to be trained in empathy, some of them to not be trained in empathy. And both groups measure patient outcomes. We found seven such trials, and now you see the Black Diamond at the bottom is entirely to the left of the vertical line, which means there is an effect that the patients treated by doctors who had additional empathy training, had lower pain, higher satisfaction with care, better quality of life. It's a small effect, but it's an important effect.

I'll give you one example of the kind of trial that we found. Here was a trial published by my colleagues in France and they took 180 general practitioners. They trained 84 to enhance their empathy and they used 96 as a control group. They said: "Just carry on as usual". Then both groups treated patients with pain. The patients treated by doctors who had empathy training had less pain over the 14 days following their treatment. And this difference was statistically significant and clinically relevant. How does empathy work, you might ask? Well, when the practitioner is empathic, it reduces stress. We also know from other studies that stress is strongly associated with pain and depression. So, an empathic practitioner, just by being empathic, just by empathic communication, cannot eliminate pain or depression, but they can reduce it. Also, empathy, which – remember - is defined as the ability to understand and demonstrate understanding, by definition, they're making a more accurate diagnosis and therefore more personalised and appropriate treatments. And the opposite is true also. Unemphatic practitioners can actually harm patients. Here is a real example. In a study published in the British Medical Journal, my colleagues reported the true story of a woman who died of smoking related heart disease. They said the cause of her early death was the fact that she had not been to the doctor for two years. She refused to, because she said, "All they do is talk about my smoking". She worried they would judge her and refused to engage with the healthcare profession altogether. Now, had she engaged with the medical profession, would she have lived longer? Well, my colleagues who published the paper in the BMJ believe so. So, a lack of empathy can be harmful. It doesn't mean, or I'm not going to say it kills people, but in this case, the lack of empathy seems to have contributed to someone's early tragic demise. Most examples, of course, of lack of empathy are far less dramatic, just lower satisfaction with care, a bit too much stress, maybe exacerbating depression, the wrong and inappropriate medication, and so on. Those are bad, but not as bad as death. Now people often say, what are the side effects? It's important we look for side effects. When we did our systematic review, we did not find any negative side effects reported, but we did explore things in a qualitative way. People report, they say, well, if I'm too empathic, I might get burned out. I'll be so tired because I'm getting involved with my patients' stories too much. That might be true for some people, and when we do our empathy training to healthcare practitioners, we give them a technique to protect themselves against becoming burned out. More importantly, however: the evidence suggests a very clear negative correlation, inverted correlation between empathy and burnout. The more empathic the practitioners are, the less burned out they are. That's very clear. On average, being more empathic actually reduces burnout. And how does this work? We found in another systematic review that I haven't covered here, that the practitioners who engage in empathy training they get back in touch with the reasons why they got involved in the healthcare profession. It's basically to help people, make them feel better, and they feel rewarded by this when they see the patients engage with them. Also, empathy can reduce medical legal complaints. If you talk about removing a big stressor, medical legal complaints (being sued and so on, especially in the US) is a major source not just of loss of money, but you can lose your own profession. The fear of being sued is very high and good communication in general, empathic communication specifically, has been shown to reduce medical legal complaints because one of the main causes of complaints is poor communication. It seems that patients, even if they suffer some harm due to a mistake, when they believe with good reason that the doctor was doing their best, that the doctor cared about them, and that the care was tangible, they're less likely to launch a complaint against a health care practitioner. In addition, as I said earlier, because an empathic practitioner is able to make a more

accurate diagnosis and give more personalised treatment, they're less likely to make an error, to give the wrong treatment, which is more likely to happen if they don't listen to the patient. So, to recap, empathy works. It's good for patients and practitioners. Empathy can be taught. If it were a drug, it would be a blockbuster drug. The question though is, can robots do it? Can robots be empathic? And now I'm tying this into the beginning of the talk, back to robots, because I've discussed the problem, the background. Why empathy is important? It's very important to be empathic. Now, why is it doubly important? Back to robots now. Let's look here. Robots versus humans. What do robots do better than humans? Well, they can probably lift heavy things better than humans, they can probably carry patients for longer than humans can, they might not get as tired as a human, as even a strong human might have trouble carrying a heavy patient. Robots, as long as you plug them in at night, might not get as tired. Robots might be better at technical tasks. They might be better, and they actually do some, for now, simple surgical tasks. But what do humans do better? I put it to you that the main advantage of being human in the face of growing technology, which is, whether we like it or not, care bots, robots and chat bots are taking over the role of human beings everywhere, including in health care. But humans, this picture here (it's a mother holding her baby), it's hard to imagine, at least in the near future and the foreseeable future, in fact, it's hard to imagine a robot doing that as well as a human.

I don't think they will ever be able to do so, but there are some people who are believers, that's what we call them. But even the believers that robots can do everything will admit that it's not that time, it's not now. My thesis here is that one of the most important things that humans do absolutely, unequivocally, certainly better than robots is empathic communication, which includes physical communication, and nonverbal and verbal communication. Revisiting the question I asked you at the beginning of this talk, to what extent do you think that care bots will replace human practitioners? Well, the answer I think is that we don't know right now. However, the last thing they will be able to do as well as humans is empathic communication. And if you accept this argument, this conclusion, there is a paradox. The paradox is that right now the way doctors are being treated by this system, let's call it in very broad terms, humans are being treated like robots. Here's an example, that red line there. You can't see the other one, but the red line in the graph is the percentage of change in NHS rules. NHS is the National Health Service in the UK, but it's similar elsewhere. There are more and more managers compared to doctors. And what do managers do? Well, they give the doctors targets. These targets have to fulfil processes, these mechanical processes they must go through to reach certain outcomes. In the UK it's called the quality and outcomes framework (QOF) or something similar. Meanwhile, doctors are spending over 2/3 of their time (that might be an exaggeration), but half their time on paperwork. So, doctors are being managed and being forced to behave like robots by following prescribed protocols, prescribed processes, achieving certain targets, filling out forms. Paradoxically, all these things can be done by robots better than, let's say, having a 20-minute conversation with your patient. So, the fact that doctors are being treated like robots means it'll be easier for doctors, for their health care profession, managers, to replace humans with robot doctors. Let me give you a real example. When I was young, I had a paediatrician. His name was Doctor Elder. We saw him every year. I knew he walked up my street on the way home. Now I'll go to the GP surgery. I see a different doctor every time. Now, how can they replace them? Why did they do that? Why did they? They think it's OK to change my doctor whenever I see him. It's because they believe that the processes are more important than the person. As long as the person sitting in the doctor's chair follows certain processes, they're doing a good job. This means that once the processes are set up and formalised even more, there's a big chance that they can replace the person with the robot. I think this is a paradox and I think that if humans in healthcare want to survive and so on, they must focus on empathic communication and stop allowing this to happen. Here's the manifesto I have. Let's focus on care bots and chat bots, on what they can do better than humans. They can maybe lift heavy things better, do some technical tasks better. And then when they are replacing humans, training the care bots to be empathic insofar as they are communicating. Empathy is important but ensure that the care bots make the system more efficient. Humans have more time for what humans are good at, namely the empathy.

And before I come to a close of this talk at this important conference, I want to talk about some other results we found. Paradoxically, you think that in medical school that the students get more

and more empathic over time. In fact, empathy goes down over time. We've looked into the reasons for this in a major review that's coming out for publication in the BMC medical education in a few weeks. We found that the reasons are what's called the hidden curriculum. When these medical students, mostly young, mostly healthy, and so on, mostly young, certainly younger than the average patient, certainly smarter than the average person, when they're in their pre-clinical years, learning about pathophysiology, they are not exposed in general. There are exceptions to the complexity of different patients. Then they hit the clinical phase. Years three, four or five, patients are more complex. They might see a smoker who doesn't want to smoke in the hospital, who has liver disease caused by alcoholism that they could prevent, they should have just stopped drinking... And these students are relatively inexperienced. This leads to adaptations such as desensitisation, professional distancing, and so on. To exacerbate this, the pressure they feel as medical students to perform, to pass tests, to not fail, to finish in the top of their class, etc, can lead to stress and stress leads to reduced empathy. So, we are as part of the important work of the Stoney Gate Centre for Empathic Healthcare, designing intervention to reverse this decline in empathy, to make sure that the students come out of medical school more empathic, not less empathic.

As I come to a close, the takeaways are: care bots and chat bots are here to stay. And their use is increasing. But the last thing they'll be able to do is empathic communication. So, we need to collaborate with the technological developers of care bots and chat bots to ensure that patients end up with their best technical care and the best empathic communication.

Thank you very much for your attention and time. I would be delighted to take as many questions as you have.

# INVITED SPEAKERS

## UNIVERSAL HEALTH COVERAGE IN LOW INCOME SETTING

**Sonia Ehrlich Sachs**, Research Scholar  
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The idea of universal health coverage is just simply the idea that every person in the world, especially those in low income situations, should have the right to access healthcare, basic rudimentary healthcare, which I sort of define as care good enough to prevent premature deaths, especially of mothers and children under the age of five. Without getting into financial hardship. It sounds like a very simple idea, but it is an idea that has yet to be fulfilled. You might believe that this idea is still just an aspiration because we've been talking about it for 75 years. As a matter of fact, this year is the 75th anniversary of the UN Universal Declaration of Human Rights. Which I'm sure you're all aware of. What you may not be aware of, and I wasn't until I got into the business 20 years ago, is that since as long ago as 1948, the UN has promulgated human rights, including access to healthcare. And, of course, the WHO maintains that access to healthcare is a human right. That was within its Constitution, in 1948, but nothing happened until 1970, when the UN General Assembly passed a resolution calling for 0.7, so less than 1 % of the rich world's economy, 0.7 % of the rich world's economy, to be dedicated to Official Development Assistance, ODA. That was promised in 1972. So that's 53 years, and it has not yet happened. It was less than half of that in 1978, and frustration for there not being any health coverage, especially in the low income setting. In 1978, after the famous declaration of public health practitioners, the Declaration of Alma-Ata, it was declared that there should be health for all. They went one step further to give it a little bit more of a practical feel, saying that there should be access to primary care. So, nobody's talking here about tertiary hospital speciality care. We're talking about primary healthcare. Basically, in terms of keeping mothers and children alive. 1980 was both a good year and a bad year. It was a good year in that UNICEF famously started a series of campaigns that were really effective and impactful, measurably saving children's lives by doing campaigns for distributing oral rehydration using ORS (oral rehydration solution).

The campaigns for the distribution of oral rehydration solutions for children with diarrhoea, immunisations, and deworming, are things that could be done by campaigns. In other words, you can have a series of health workers, community health workers, or whatever, basically parachute into a village a couple of times a year to distribute immunisation packages of the special salt for diarrhoea, etc. And although that was very impactful, it's not a system, but it was very useful. 1980 was also the year when the IMF famously demanded what it called politely structural adjustment, which is basically the privatisation of healthcare. A major setback is requesting that even poor families who have almost no money pay at the point of service.

The year 2000 is important because the movement started in the year 2000. The first thing was the WHO Commission of Macroeconomics and Health, which actually was led by my husband, Jeffrey Sachs, which was important in this respect, in that it was an economist and a group of Ministers of finance and public health practitioners meeting together to ascertain that there had been no development, economic development in the absence of proper basic health care. In the year 2000 were the triple epidemics of HIV, malaria, and TB (tuberculosis). And people, even economists, realise that you can't have developed, thriving economies when your population is decimated by these pandemics. And the WHO Commission really made a difference in that they requested much-increased financing. And importantly, it was multilaterally funded financing. It wasn't the US giving to one country the money for childcare and another country giving to yet another. You know it wasn't bilateral. There was a multilateral funding mechanism, like the Global Fund for AIDS, TB and malaria, and also Gavi for immunisations. And PEPFAR (President's Emergency Plan for AIDS Relief), which is the

American equivalent for funding for AIDS relief. And that was a huge step up in funding and things really started to change a little bit. Then, as you all know, the Millennium Development Goals were also set.

This was a major improvement in that there were specific goal-oriented and time-bound decisions to improve certain things like maternal mortality, child mortality, etc.

So, the fact was that there were goals, targets, and metrics.

This was relatively new. The UN Millennium Project, which was also led by Jeff, was just developing pathways systems for each of the Millennium Development Goals (MDG).

How could you, if you wanted to, really decrease maternal mortality or child mortality or improve the health of patients with HIV, etc. What would be the system equivalent of food production, etc. That was kind of a recipe for how we then took it a step further in that in 2005, for 10 years, we did a Millennium Village project, which was a proof of concept. What would it look like to apply these pathways? For health, education, infrastructure, business development, and gender equality, what would it look like in the lowest-income setting? We chose 10 countries in sub-Saharan Africa. Within each of those countries, we chose the poorest, most remote rural areas and built, along with the community, a health system, education system, rudimentary infrastructure, etc., to show that if indeed the 0.7 % of the Official Development Assistance was available. You could actually build out these health systems and improve the situation. And then finally, in 2015, there were the Sustainable Development Goals (SDG). And the G3 is for health, and Target 3.8. is that we should strive to achieve universal health coverage for all, which they define as access to quality essential healthcare services, safe, effective, affordable, essential medicines and vaccines without financial risk. So, SDGs, I say, are sort of our generation's human rights. It's comprehensive. It's systems based. It's time-bound and accepted by most of the world.

The stark fact is that there's a huge inequality in health outcomes and life expectancy throughout the world, although of course, this is not purely a reflection of health because, as we all know, there are also social determinants of health. You don't just need a good healthcare system; you need to have adequate nutrition and transportation to get to a clinic, etc. So, it's not just health services per se, but it's a good proxy. And it's still shocking, too, in 2021 is the difference in regional averages of life expectancy for a generation. In Africa, it's about the life expectancy of about 60, and there are parts of the world where it's 80. A shockingly stark difference. There still are 300,000 women who die during pregnancy or in giving birth. A timeline of 17 years, and it continues until today, shows you a couple of things that are important. One is again the discrepancy in sub-Saharan Africa, in Southeast Asia. So, the biggest bulk of this premature, unacceptable life-defining death is because when a woman dies in pregnancy, it usually kills her child. And it also leaves orphans at home. As you can see in Southeast Asia, there was some decrease. Of course, in the rest of the world, there was quite a lot of decrease in deaths, but almost none in sub-Saharan Africa. That's one point of the slide. The other point is the fact that you do see a decrease, it shows you that the death of a woman who's about to give birth is preventable. Again, it's not something that requires very fancy health systems. It's preventable and it's not available in low income settings. Same thing for children under the age of five. If we look MDG line from 1990 is up to 2020 the same thing. The bulk of the death is in sub-Saharan Africa, and Southeast Asia and again this brings me to the same point, which is that the problem is in poor countries and the fact that there is improvement in the rich countries shows you that it's absolutely preventable and treatable. What do children under the age of five die of? Diarrhoea, pneumonia, birth, neonatal diseases, malaria, AIDS, and, of course, malnutrition, which underpins all of these causes, because if you're malnourished, you're more likely to succumb to pneumonia, more likely to succumb to malaria. The point is that mortality is not an unusual esoteric disease. It is purely simple, preventable and treatable conditions. Same thing with maternal mortality. The bulk of it results from haemorrhage, with hypertension, abortion related issues and all of this, most maternal mortality could be avoided if there was access to reproductive health, so that the woman can choose whether or not she wants to be pregnant and can have antenatal care to prepare for the delivery, and institutional delivery.

So, the good news is that it's ordinary diseases that are preventable and addressable. Even better than that is the following realisation, which those of you who are working in public health in low

income settings might be familiar with. It's called the first thousand days. It turns out that the pregnancy, maternal mortality and child mortality, most of it happens during the 1000 days that start from pregnancy up to two years of life. So, from the day that the woman becomes pregnant until her child is two years old. That's 1000 days. Most of the deaths that I was showing you concerning the 5.2 million children and 300,000 women happen during the 1000 days. Which means that if you can focus on that, you can really make a difference even better than that. Most of the deaths during the 1000 days actually happen in during one month. Even better than that, better meaning an opportunity presenting itself for a solution, most of those deaths happen on the day of delivery, and if that wasn't enough, most of those deaths happen during the first minute of birth, which is why paediatricians call it the golden minute. Because once the baby is born, that's the risk for the mother to bleed out. If the baby isn't helped with his or her first breath, the baby can die right at birth. So the opportunity is that if you can get that one minute or the one day, and certainly the one month right, you can prevent most maternal-child mortality. This is the clincher. In order to get that correctly addressed, you need a health system. That's not something you can do campaign style. You can't fly in once in a while with a skilled birth attendant, you actually need a system, you need antenatal care available, you need telephony so that the woman can call that she is in labour. You need roads, you need to be able to get to the clinic. The clinic needs to be there. The clinic needs to be open 24/7. You need to have a skilled birth attendant there 24/7. You need a second pair of hands, as we paediatricians call it. Somebody to catch the baby and take care of that first lifesaving breath for the newborn baby. And then you need antenatal care and an outreach referral hospital for those women who actually need more than the regular emergency or regular vaginal delivery. Those where there's obstruction and you actually need a referral hospital.

So even though it's a short amount of time, 1000 days or you can even shorten it to one month, you could even shorten it to one day to save a huge number of lives, it needs a health system. It's gotten to the point where if you give me the maternal mortality rate of a country and if you give me the newborn rate, I can tell you pretty much what their health system looks like because the maternal mortality newborn care is basically a proxy. It tells you what the health system is because you need one for that to go well. Well, as I mentioned before, we did a proof of concept starting 2005 to 2015 and then published it, and it was quite successful. We did the Millennium Villages project to show that it integrated rural development, paying attention to health, delivery, education, infrastructure, business development, and food production. If you do a holistic approach and you put in the equivalent of 0.7 % of ODA, Official Development Assistance. We learned along with the community what it would look like and in health, which is what I was in charge of, we set up a health system in ten countries in very remote rural areas, ten countries in sub-Saharan Africa, East and West. That I schematise here. So, first of all, it's an integrated approach.

So, the health system lives within a system where there's also education being addressed, food production, business development, etc. But then, within the health system itself, is what I call, what is called close to the client, which is where you start with one community health worker being in charge of about 100 households that that community health worker knows well.

And the community health worker goes from household to household, checking on the pregnant women, checking on the children, making sure that the woman goes to the antenatal clinic, that the child is immunised, etc. The community health workers are called when a child has diarrhoea. There is a close connection of the community health worker to the household. The community health worker then has access to the health system, which has to have one clinic for at least 5000 people. The basic requirement is to be able to address EMCOR, which is emergency obstetric care, meaning that there has to be a skilled birth attendant. And then there has to be emergency transport. Transportation of any type frequently, it's just a motorcycle with a bed attached to it to go from the household, if necessary, to the clinic and to a referral hospital. The point is that for what we did for \$30 per person per year at this point, 15 years later, the WHO and others have decided it's about \$100 per year because there are now new technologies and rapid diagnostic tests. We use telephony etc., but we did it for \$30 per person per year. Being free at the point of service is crucial. The minute you start charging for a patient to be seen at a clinic, the poor people don't get seen. Close to the client continuum of care task shifting down to the community health workers or whatever it is that the community health workers can do that they should be in charge of, and crucial to the system is the



real-time data. When we started in 2005, we used just the regular flip phones, where you couldn't really do much, but we still managed and then very quickly switched, as soon as they become available, to smartphones, and it made all the difference.

In 2013, we started a campaign, Jeff and I and a couple of colleagues called Professional Community Health Workers. Because these community health workers exist all throughout Africa, but they were volunteers, which sounds nice. I volunteer. In my local community, but that's because I have a perfectly nice lifestyle, so I can afford to volunteer. But these community health workers that volunteer, they were just as poor as the villagers next to them, but they did it because it gives them a little bit of prestige, so they get an umbrella once a year or whatever.

If you want to have a proper health system with community health workers, who have been shown over and over again to be lifesaving, they need to be properly remunerated, properly managed, provisioned with drugs, with diagnostic tests, with treatments and be managed and supervised and held accountable. I don't want to go, it looks busy, but I just wanted to show that having the cell phone, the smartphone with an app that we've started already in 2008 and many other people have done since makes all the difference. Because the community health worker, with a hundred households that they're responsible for, they can click on their phone, who they're supposed to see, who is in their panel... What are they supposed to do in each household? It's what I call sort of decision support. What do they do on the left? What is the community health worker supposed to do? At the household, at the point of care, what are the danger signs? What are they supposed to do? And so, it helps them. It's like a peripheral brain. It helps them. They can see what they're supposed to do by virtue of the community health worker (CHW) clicking that they're in household X and that they're seeing the pregnant woman and attending to the two-year-old child. Just by taking that information, it provides automatically the middle column, which is management supervision. That's how the manager can track what the CHW does. They can see how many households they visited and they can use the GPS to make sure that the community health worker isn't cheating, isn't sitting under a tree somewhere saying I've seen ten households today. The GPS tells the manager, no, they were sitting under a tree.

So, you can see how many households the community health worker visited and what the person did. Basically, you can hold the community health worker accountable, and then the third column gives very rich data that helps you pretty much in real time or almost real time adapt the implementation because you can see oh, wow, that's too many households for that community health worker. There's no way they can do it. Or you can adjust the ratio of community health workers to households, or you can see why. Oh, there were 15 cases of diarrhoea in that one day. Usually, we only see one or two. What's going on? And I'm absolutely convinced we were very much involved in Ebola and Gavi, and I'm absolutely convinced if they had these professionalized community health workers, which we help them institute, well into the epidemic, the community health workers would have been able to notice, or the managers would, that there have been many more cases of bloody diarrhoea and they would be able to catch it at the very earliest indication rather than how it was, as you all know, in Sierra Leone and Guinea, when it wasn't really noticed until dead bodies were piling up in the clinic. With the community health worker right at the clinic getting this information, which they do just in the process of doing their daily work, could really alert the managers that there is an epidemic starting.

So, we started this professionally as a community health worker campaign. The first to adopt it was actually UNA, and then the African Union counted on it. They changed it from 1,000,000 to 2,000,000 community health workers. And now you know the WHO has accepted it. It's accepted. There's no more discussion, believe it or not, we have to fight for it, just like we have to fight for malaria. But it needs to be given out for free. I could tell you many stories. We had to really fight because we were told, I was told, that I'm destroying the volunteer spirit of Africa and that got me very angry because I keep saying I can volunteer because I can afford it, but these despondently poor people, they can't. So professional community health workers, it's accepted. The only problem now is that it's under resourced. There's no funding for it and the community has workers, of course, but especially in a system where there are no doctors or nurses. Or not enough doctors and nurses. But I argue, and many have argued since, that even in rich countries, a community health worker, a worker who actually comes to the household and checks on the person, has huge benefits. So, actually, there have been, even in my neighbourhood of

Mount Sinai, cases when they don't call it community health workers, but they use people who, after a patient is discharged, they have somebody go check on them because if you discharge a patient with diabetes, it's actually helpful to go look at them in their house. Work with them. Check, do they have a refrigerator? Do they have insulin? Are they eating the right food? How come there's nothing in your refrigerator? Oh, you don't have enough money to eat. It's actually very helpful to have somebody know the patient's insights, too. I want to make a quick note about the insufficient number of doctors and nurses most African countries actually educate. A lot of doctors and nurses, but their brains drain out because once you have a medical degree or nursing degree, you've got a global commodity, and why not come to Slovenia and work, you know, in better conditions? So, the community health workers, once professionalised, in other words, once they have been empowered with rapid diagnostic tests like that for malaria, which is now a simple diagnostic test, or a pregnancy test, or they can do blood pressures readings once they are empowered with diagnostic tests and treatments, they can be unbelievably lifesaving. And the advantages? They're much less expensive than doctors and nurses. They're unlikely to migrate, or if they migrate, it's the good kind of migration. They migrate from their rural area, their village, where they could do nothing other than being farmers. So that gives them a leg up, and we've noticed in our programme that within two years, they went on to be lab technicians and other things. So, it was a way of fulfilling their potential. Initiating their ascension in the market system, which is why on the bottom, I say it actually is great job creation for people living in the lowest income setting, but they're lower cost, and they work within their community. So that means that they know their community, which we learned during Ebola too, because there were cases where these people went in with hazmat and came to a community to help them with the Ebola, and they were killed because the villagers, mistook them for something else. And there was this horrific epidemic going on. Whereas if you're using local community health workers who have the trust of their villagers, you have a much better outcome.

So, the community health workers are quickly deployed. They link the families to the clinic, and they're very impactful. Anyway, what you need to build a health system is actually very basic. You need to know the epidemiology. You know what the burden of disease is. It's different in different parts of the world. What are the causes of death? You need to define the basic package. There's a specific number of things that you do to keep a mother alive and a specific number of things you have to know to keep a child alive. So those are the technical well-known interventions, core services, and you have to define them and then, the design and delivery system, both clinic and outreach. Implementation, meaning training, supervision, and accountability. The usual things you do when you're running a system. It's all been made doable with smartphone technology. We started telemedicine. Ghana in 2008, first in the Millennium Village, then in the district, then in the region. Now it's a national programme that is hugely under-resourced and under-potentiated, but it's a national telemedicine programme, and there are other technologies, of course. The malaria bed nets, which is another long story which we have to fight like hell for, but it's a no-brainer. Rapid diagnostics and then, as I said, real-time data with real-time feedback is crucial so that you get the information of what's going on in the community and you can react to it in real-time. This makes a huge difference, and, of course, health has to collaborate with other sectors. There's no such thing as just health without paying attention to education, infrastructure, transportation, and its costs. We did it for \$30, but it costs \$100 per person per year. Can a poor country cover the cost of a health system, even as rudimentary for \$100 per person? I asked my in-house economist, and the numbers he gave me regarding the average income for a low-income country such as Chad, Niger, or whatever is about \$800 per year. The government, at best, can collect in taxes 20 % of revenue. So that's about \$160, but the \$160 is for all government functions. Health, education, roads, airports, police.

For all government functions, some of you may know the Abuja target (Abuja Declaration), which was set in 2001. The African Union, remarkably, set a target. They determined that at least 15 % of their budget should be for health, and that again was an aspiration. But it remains that they are attempting to reach that. So, in this country, for \$800, which is the average for low-income settings, the government could hope to collect \$24 per person per year, when in fact, you need \$100. So, the financing gap is \$100 per person per year for about 600 million people living in extreme poverty. And 60 billion sounds like a huge amount of money, but I want to put it in perspective for you. For that, I also asked my in-house economist. It's 0.06 % of donors, you know which countries, GDP.

Where do you think we should get it from? This is where we should get it from. The world's annual income is about 100 trillion. So, the world poverty gap, it says 400 billion, which is 0.4 % of that hundred trillion. But since 1971, we, the rich countries, have promised 0.7 %, which would be 700 billion, but we're nowhere near that. But anyway, the UHC for 600 million, would save 6 million lives of children. Mothers would be the 60 billion.

I didn't highlight it in red, but 2,000,000 community health workers for just what I spent ten years of my life fighting for would be 0.05 %. And it's not materialised, etc. To put that in perspective, what we're clamouring is universal health coverage of 60 billion. To put it in perspective, look at the annual military spending in the world: 2 trillion. 2 % money in tax havens. Shame on us. 20 to 30 trillion, 30 % of the total world GDP. The global wealth of billionaires is 7 trillion, 7%

So that's just to put it in perspective, the \$60 billion, which we're constantly told that's pie in the sky - It's not, it's just a question of priorities. So just the recommendations are that we should honour the Official Development Assistance, which we're not.

Jeff has been advocating for a new global Health fund for systems delivery because although the Global Fund for AIDS, TB, and malaria has been hugely lifesaving, has saved millions of lives from HIV, malaria, and TB. But it's disease-driven fund. It does not cover what it takes to deliver the services, so it doesn't. You can't apply to the health fund for community health workers or for nurses, etc. So, it's wonderful, but it's a disease driven and many of us have been clamouring for expanding the Global Fund. To be also a health system or a separate fund. And then the reform for international financial architecture of multilateral development banks is something that Jeff and a few others have been clamouring for. Given that the official development aid is not up to snuff and what he and others are arguing for is that the international multilateral development banks like the World Bank or the African Development Bank, or the other regional banks, the Asia Development Bank, first of all, should have much larger flows and work with the African Development Bank, and it's a wonderfully run bank, but they have \$12 billion per year.

That's their flow for 1.2 billion people. So, it's just not enough. If you really want to invest in a proper health education infrastructure to get the countries out of the poverty trap, they need to have larger flows, which is what he's working on, and loan maturities at low interest. That's very important. Which countries can borrow for 40 years of projects, because some projects are long-term projects, but nobody will lend to Ghana or Chad for more than three or four years. And so, it's a vicious cycle. The government borrows for three years. Of course, they can't deliver because you can't really show anything in three years at huge interest rates, the interest rates are often 12 % worse for the US and others, it's 1, 2, 3 %. And so, it's a vicious cycle, and people are advocating for these multilateral development banks to be reformed and in terms of the countries, they should really have public financing for health free at the point of service and not rely on private insurance, which, you know, leaves poor people out for sure. It should be publicly financed health. Which I know is also a discussion at a different level here in Slovenia. So, long story short, universal health coverage in low-income settings is way overdue. I showed you we've been talking about it for 75 years. It's achievable. We've shown it in the most remote and poor settings.

We have the systems, strategies and pathways, we have the intervention, the tools, the technology, and the ICT using the smartphone has revolutionised everything. We have the funds. The 60 billion is a pittance. All we don't have and all we really need is the political will to reduce the unacceptable inequality.

Thank you.

# PLENARY SESSION 3

## INVITED SPEAKERS

### THE IMPORTANCE OF RELIGION FOR THE PEACE AND DEVELOPMENT OF CENTRAL EUROPE

**Vinko Puljić**, H.E., Cardinal, Archbishop of Vrhbosna, Sarajevo, Roman Catholic Church

We live in an area that has experienced many turbulent times with severe consequences. Various ideologies, mythologies, and aggressive politics have destroyed or disrupted numerous cultural, scientific, and religious achievements. The worst thing has happened to mankind in all dimensions. It is normal to ask ourselves how to make a man truly the benchmark for building the future and to build the future according to man's standards.

However, it is indicated that, in the meantime, it has gone beyond the troubled borders of the Western Balkans and is increasingly becoming a reality for the rest of the world. We are witnessing the severe consequences of the Coronavirus pandemic, which has accelerated the expansion of all those invisible social cracks that ultimately show this world as divided and fundamentally closed. This problem is discussed in detail in the first chapter of Pope Francis' social encyclical *Fratelli Tutti*, somewhat pessimistically titled „Shadows of a Closed World“ (Nos. 9-55).

Already in the introductory part of the indicated encyclical (Nos. 1-8), it is emphasized that during the pandemic, „despite our strong networking, there was a split that makes it difficult to solve the problems that affect us all“ (No. 7). So, contemporary digital communications have yet to succeed in giving the world and man that one new essential and idyllic community. However, in the beginning, they had much promise. And in all this, according to the Pope, neither the world in general, nor the European Union, nor that „history“ in the sense of „teacher of life“ has succeeded (No. 10). And not only have they not succeeded, but in our time we are witnessing a specific regression in that field. There is talk about reviving old conflicts and divisions and „new forms of selfishness“ (No. 11). This does not mean only the current political and military conflicts but a broader one, too. In Nos. 12-13, the Pope talks about the problem of the one-way expansion of globalization, which thus benefits only the strongest and most prosperous. No. 15 speaks of a malicious spread of hopelessness and despair, often for some alleged higher values and interests. Furthermore, in No. 21, the Pope talks about the problem of economic rules that prove highly effective for economic growth but not for complete human development. In fact, in the relentless market competition that pits „all against all,“ the first person to suffer is the man, and I guess he should always be in first place.

In Nos. 27 and 45, Pope Francis talks about a kind of „culture of walls“ that modern digital communications have not succeeded in overcoming ; if anything, they have deepened it further . Until recently, the Internet solemnly paraded with the phrase „knowledge society“ seems to have given birth to an uncritical gathering of like-minded people who often have a wholly hostile and barbaric attitude toward everything that deviates from their immanent opinion and worldview. In the following number (No. 46), the Pope admits that such a (dis)feeling can be found today even in some Catholic media: „Slander and gossip are tolerated, and all ethical standards and respect for the good name and others seem to be cast aside.“

Let's go back a bit to No. 28, which talks about the insecurity and fear that become fertile ground for various mafias and criminal groups that almost traditionally like to present themselves falsely as protectors of the poor and the vulnerable . In Nos. 37-41, Pope Francis also speaks about what, as we know, mainly affects him, which is the current attitude of Europe toward migrants. Migration is something that visibly arouses fear among Europeans. The Pope points out that this is, on the one

hand, admittedly natural, but that, on the other hand, today we should all work to integrate our openness toward others „within ourselves.“ Despite all this negativity, the Pope notes that we could witness extraordinary human kindness during the pandemic, representing a pledge of great hope. And hope is what tells us not only about the „thirst“ for a „successful life“ but also about the „longing for fullness“ and the „desire to achieve great things“ (No. 54). Hope is also courageous because „it knows how to look above personal comfort, beyond small security and small pleasures that narrow the horizon, to open ourselves to great ideals that make life more beautiful and dignified“ (No. 55). Finally, we will go back a bit to No. 34. where the Pope tries to answer the intriguing question of some believers as to whether the coronavirus pandemic really represents a form of God’s punishment for human sins. Here, the Pope points out rationally that reality treats us as we treat reality. Therefore, he considers the pandemic a particular form of hope if it encourages us to think about our human nature’s essence and to work together to better the world and the human race.



Vinko Puljić, H.E., Cardinal, Archbishop of Vrhbosna      Foto: Archives of the Archbishop of Vrhbosna

## **FAITH AND HOPE: A PERMANENT CHALLENGE FOR EVERYONE, AND PERHAPS MOST OF ALL FOR THE BELIEVERS THEMSELVES**

Some would probably say today, especially learned people from the intellectual world, that faith in Europe had more than an excellent chance to do something good and intelligent with our world and life for more than a thousand years and that now it would be better for it to finally step aside a little , to make room for the values of the secularized and emancipated world. And even some Christian theologians believe that Christian believers should come to terms with the fact that the modern world, whatever it was, arose precisely on Christian foundations. Admittedly, according to this, even contemporary non-believers should accept that Christianity will never be able to exclude itself from the nonexistent unity of this world entirely. Therefore, here I want to talk about faith and hope primarily as a permanent challenge for those who feel and declare themselves believers, and that under the guise of what is possible, and should have already been realized but has yet to be, i.e., is not entirely realized.

The great Catholic theologian of the 20th century Karl Rahner believed in the indicated sense that Christianity must keep the scale of hope as high as possible: Only if it hopes radically and is not afraid to think „to the end“ will the Christian faith turn out to not oppose „this“ or „that,“ and to have no reason to be afraid of any „uninvented possibility of man“ that could come in the future. For the latter premise to be understood correctly, it is necessary to first look at the short forms of Christian faith and hope, according to Rahner. Here, he primarily talks about a „petty-bourgeois Christianity“ that „places its hope cheaply.“ On the other hand, there is also a related problem - both Christian and global - of „skeptical resignation“ and „relativism“ ; having become despondent in the meantime and losing the momentum of hope, the only thing left is to „follow their instincts like shrewd animals,“ seeking ever more „refined consumption,“ as well as „egoistic struggle“ for mutual supremacy. Rahner, therefore, contrasts with these ultimately narrowed and simple forms of faith and hope that have „invincible hope“ in the „absolute future,“ which is called „God.“ The one who is not opposed to this or that. That hope is incomprehensibly great for us, but at least we sense that it is big enough to cover and encompass us all in our differences.

Some might say this sounds very nice, but it is impossible, given this kind of man and world. However, we are not talking here about a well-established reality but precisely about the hope that this kind of reality, despite everything, can and should be incomparably better than it is. From the Pope's perspective, we just heard that we must hope things can and should be better in these challenging times. They could ask an additional question: Has there been a single significant achievement or progress in the history of humanity without the bearers of that achievement and progress not radically hoping that things could and should be better?

Regarding Rahner's objections about proper participation in the Christian faith, Pope Benedict had a similar opinion. In his epoch-making „Introduction to Christianity,“ he talks, among other things, about the established historical phenomenon of the existence of „a multitude of automated followers“ versus a relatively small number of those „who entered into the inner movement of faith.“ Therefore, if we were to be painfully honest now, we could say that Christians did not make the best use of their historical chances. However, today the same could be said, if not even more truthfully, about the modern world, about which one can hear more and more often that it stands on the very edge of self-destruction, not only because of Europe's current political and war circumstances but also because of the desperate ecological and demographic picture. This is precisely why, today, no one has the right to call out the other for his historical mistakes. Still, only that joint effort for the general betterment is the real and meaningful solution and attitude.



Vinko Puljić, H.E., Cardinal, Archbishop of Vrhbosna

Foto: Archives of the Archbishop of Vrhbosna

## COMMUNITY AND PHILANTHROPY AS LIVING SIGNS OF HOPE

The Catholic Church reached the latter position already during the II Vatican Parliament (1962-1965). Humanity and the world are seen here as a single whole, against which the Church sees its role as being in keeping with the continuation of Christ's saving work: „to bear witness to the truth (cf. Jn 18:37), to save, not to judge; to serve, not to be served by others.“

The program of the current Pope Francis is marked with the same view. He believes that today's world needs witnesses of faith, not its theoreticians. Accordingly, he sometimes talks about the spirituality of the „new wave.“ „This is the spirituality of the new Church ... and it is the Church of love and mercy. It is a Church for everyone, not just for the chosen ones. It is the Church of sinners and converts, not of false saints and officials. Such a Church was announced by Pope Benedict XVI when he said that the Church of the future would exist as a small community of true believers that would be the ‚salt of the earth‘ and the ‚light of the world.‘“

However, both popes certainly had something to say to the world. As we have already heard, Pope Francis often speaks out against unjust solutions, docility, selfishness, closed-mindedness, and religious or secular elitism. Pope Benedict, on the other hand, defined the reality of today's Western world as a kind of „totalitarianism in the name of liberalism.“ I would like to end this reflection with one thought from the current Pope, who points out that a solution involving killing someone is not progressive. Namely, many of today's habits, often presented with the prefixes of modern and advanced, are ancient archaisms of the darkest human past. Therefore, in contrast to such a history and humanity, what would be genuinely stylish and progressive would be a new sincere community and philanthropy that will neither hurt nor abandon, let alone execute, a single person.

# THE CURSE OF „DEVELOPMENT“: THE VULNERABLE HUMAN RIGHTS HINTERLAND

**Rok Svetlič**, Professor, Principal Research Associate, ZRS Koper; Judge, Constitutional Court of the Republic of Slovenia

The thesis with which I begin this presentation is the following: we witness daily violations of the most important concept from the Universal Declaration of Human Rights. But this concept is not freedom, equality, solidarity, etc., but the first word of the first article of the Universal Declaration, „all“: „All people are born free and have equal dignity and rights.“ Human rights have become a partial concept, focused on a narrow circle of problems, social groups, and situations. This is in contradiction with the very nature of human rights, with their universality or generality already highlighted in the title of the General Declaration.

This state of affairs was brought about by a process that stems from the very nature of human rights, from their abstractness. If it is characteristic of law to break down and define individual concepts in more detail, the rhetoric of human rights declarations remains the most abstract. For example, „every human being has equal rights“ - what does that mean? If an uneducated person tries to interpret such a provision, he risks getting caught up in insoluble problems. It is necessary to know the conceptual structure of legal concepts, their dialectic, which points out that each concept is inevitably connected to its opposite. Equality makes sense only as long as it is irreducibly linked to inequality. If we want to ensure equal protection of property, for example, we have to assume the unequal position of the owner and not the owner. At the conceptual level, law already carries a distinction in its very foundation: between the holder of a certain title and the non-holder, between a citizen and a foreigner, etc.

If a layman begins to interpret human rights, he will recognize the violation of egalitarianism not only in segregation or apartheid, but also in the distinction between foreigner and citizen, between man and woman, between man and animal. Everywhere. He will associate the bare existence of the state with the violation of the human rights of migrants who lose their lives trying to cross the border. It will recognize the mere existence of traditional marriage based on the ability to procreate as discriminatory and demand equalization with other forms of community through access to the adoption of children. The mere existence of the male and female sexes will point to measures to eliminate this difference, such as rearranging toilets, inventing a new language, etc. Even the bare existence of man and his distinction from other creatures is beginning to be condemned like you. speciesism.

But in this way the criteria for violation of human rights have completely changed. We no longer talk about actions, but about facts. We are no longer talking about operational guilt, but about existential guilt or original sin. The mere existence of certain phenomena: „the West,“ „the white man,“ and „the nation“, became morally weighted. With this, the discourse of human rights passed from the horizon of law to the horizon of religion. The operational concept of human rights is no longer the protection of rights, but penance. A good illustration of this shift is the gesture of kneeling with the head bowed, widespread in sports competitions in the United States, performed as a sign of respect for human rights.

Human rights thus ceased to be an institution that protects the dignity of all people but rather an institution for articulating the hereditary guilt of some. This is the defined majority in one way or another in relation to the respective minority. Even the institutions that play a dominant role in judging human rights violations follow this shift. These are not state institutions, but institutions that occupied the vacant structural position previously occupied by the Church: called „non-governmental organizations“. These are institutions that do not have democratic legitimacy, they are not elected or given a mandate in any other way, they do not speak to anyone, nor are they subject to any control. At the same time, they have become a necessary partner of the secular state in all discussions on the topic of human rights, the government must de facto take a stance on their views, the media must provide them with a representation of their opinions, etc. Their special position should come from privileged contact with the real interests of the people, untainted by the interests of politics.



L. Feuerbach taught that if you want to know religion, study man. K. Marx taught that if you want to know a person, study economics. It seems that the relation of the dominant discourse of human rights today requires the study of religion. All the fundamental notions of the latter - the sinfulness of the world, hereditary guilt, penance, resistance to politics, and the role of parastatal institutions in fundamental social issues, are re-engaged within the discourse of human rights.

This has devastating consequences, the most fatal of which is that human rights no longer concern all but some. The human rights of some, however, are wooden iron. This leads to the erosion of human rights, thereby losing the only instrument that can limit those in power today. Without human rights, we return to a situation similar to that of the 20s and 30s of the twentieth century, which is beautifully illustrated by Kelsen's maxim, „Every content can be a law!“

Therefore, let me conclude with a call for a professional approach to the human rights concert. An approach that will match their deceptive nature: at first glance, they seem like a childishly simple concept, understandable to everyone, but in fact, they hide an extremely complex structure, extremely demanding to interpret.



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# **EDUCATION AND MENTAL HEALTH**

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# SCHOLARLY PANEL

## CHALLENGES OF PARTICIPATION OF CHILDREN AND ADOLESCENTS IN THE DIGITAL ENVIRONMENT

**Nataša Demšar Pečak, PhD, Expert**

Ministry of Labour, Family, Social Affairs and Equal Opportunities of the Republic of Slovenia

### **ABSTRACT**

*The contribution addresses the challenges of participation of children and adolescents in the digital environment. Children's participation refers to active participation in matters that concern them, whether at home, school, local community, or national level. The article focuses on the use of the digital environment, which is an important tool in the lives of children in achieving education, socialization, and inclusion, but at the same time its use can expose them to risky behaviours. By comparing research on children's participation in the digital environment, the purpose of the paper was to determine the analysis of the state of realization of children's right to participation in the digital environment. To monitor the data, a combination of qualitative and quantitative data analysis was used, as well as the Laundry model combined with the findings of the 2018 „Recommendations of the Committee of Ministers to Member States on Guidelines on the Respect, Protection and Fulfilment of Children's Rights in the Digital Environment“. Because children have the right to participate in the digital environment, they must also know the risks that the use of digital technology can bring, so they must also be provided with adequate security and protection. Children are a very vulnerable group of the population and often lack the experience and knowledge to be able to assess the risk and consequences of the digital environment, so they must be made aware and trained in the safe use of the digital environment, and they must also be provided with psychosocial assistance if necessary.*

**Keywords:** participation, safety, non-chemical addiction, digital environment, children, addiction

# CONSTANTLY CONNECTED TO THE WEB: DISTRACTION, DEMOTIVATION AND THE PROBLEM OF SOCIAL INCLUSION

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## ABSTRACT

*Global survey indicators in 2022 point to a significant decline in interest and trust in social media since COVID-19. The number of TikTok users has increased. At the same time, research confirms the negative impact of the Internet on young people, who are constantly connected to the World Wide Web, always responding to messages. This affects their concentration, their social networking and their motivation in life. Our survey, conducted in November 2022 among young people in their final year at Catholic secondary schools, confirms that there is a significant proportion of young people who are more exposed to the media, who find it more difficult to make contact with their classmates and who are socially inactive.*

**Keywords:** internet, distraction, young people, social engagement

# DESIGN IN EDUCATION

**Polonca Pangrčič**, PhD, Researcher  
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## **ABSTRACT**

*Design thinking is a method, that is based on problem solving. Some literature states that it involves the interweaving of skills, processes and mindsets that help people create new solutions to problems. It is an iterative process where the designers try to understand the users, challenge assumptions, redefine problems and create innovative solutions that can be prototyped and tested. The process usually involves five stages of action or ways of thinking – empathize, define, ideate, prototype, and test. The stages are intertwining, and they can be repeated if necessary. The process of empathy is very important part, and it does not only place us in human-centred design, just as complex problems are not only technical in nature but have equally complex social and real-world dimensions. Both designers and design educators strive to transform classrooms and lecture halls into centres of student-led inquiry and teachers into designers of innovative learning experiences. As a learning approach, design-based strategies are well suited to developing 21st century thinking, competence and problem-solving skills. In today's environment of constant change these qualities are required. An important factor in design thinking is human-centred approach. Some authors state that all definitions come from the term itself - the centre of learning is the student (the learning subject). Thus, it is about: taking into account hers/his needs and interests, learning outcomes, responsibility for learning, enabling active learning, participation in curriculum design, independent and self-directed learning, student cooperation and interaction, different styles and methods of teaching.*

**Keywords:** design thinking, student centered approach, educational design, human-centered approach

# SOCIAL MEDIA CRUSH SELF-ESTEEM OF ADOLESCENTS

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**Sebastjan Kristovič**, PhD, Associate Professor

Alma Mater Europaea – ECM, Slovenia

## ABSTRACT

*With the development of screen technology and the increasing number of social networks, which could be said to have become the focal point of young people's lives, there has also been a decline in social interaction and communication, which is not limited to the young population. Young people lack critical insight into the use of social networks, which often leads to social comparisons. The consequences of this can be traced in terms of poorer well-being, increased depression and anxiety, and lower self-image among young people. In our study, we identified the relationship between social networking sites, their frequency and purpose of use, and the self-image of their young users. At the beginning of the study, we hypothesized that young people use social networks mainly for social interaction, which has moved from the real world to the virtual world. We also assumed that more frequent use of social networks leads to lower self-image among young people. For the purposes of the study, we conducted an online survey and relied on a self-image questionnaire designed by Sorensen. The results showed that young people spend most of their time on social networks communicating with others and that frequent users have on average a lower self-image than occasional or infrequent users. Young people need to be made aware of the dangerous pitfalls of frequent social network use and taught to be critical when they go online.*

**Keywords:** social networks, self-image, young people, frequent use of social networks, impact of social networks



# TESTING MINDFULNESS IN SECOND LANGUAGE LEARNING

**Maja Cergolj**, PhD, Librarian, Italian Language Teacher  
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## **ABSTRACT**

*Repetition is the most important part of language learning in order to memorize words and build a new vocabulary. In an experiment done in a primary school in the bilingual area of Slovenian Istria, where students, by law, in primary and secondary schools, must learn Italian as a second language, the teacher uses mindfulness to help this memorization. This experiment started in November 2022. Four students took part in the experiment. The students are eight, nine and eleven years, old and they never studied Italian before. They study Italian outside the classroom, individually. The teacher starts the lesson with a minute of mindfulness to present the learning objective and finishes the lesson with five minutes of mindfulness repeating the content of the past 35 minutes. Before every lesson the teacher asks the students if they remember what they did the last time and write down the answers, every week, until the end of February 2023. This way of language teaching encourages the students to be focused and aware on what they learn. At the end of the testing period, the teacher writes the observations and makes conclusions for the future use of mindfulness in language learning.*

**Keywords:** mindfulness, primary school, second language, Italian

# YOUNG ADULTS AND THEIR PERCEPTION OF THE MEANING OF LIFE

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**Jasmina Kristovič**, PhD Candidate, Research Assistant

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## ABSTRACT

*Introduction: We aimed to find out to what extent young adults perceive their lives as meaningful and to what extent the presence of an existential vacuum or existential crisis is already evident. Methods: The survey sample consisted of 30 random respondents aged 20 – 25. In the empirical part of the study, we used the initial part of a life goals scale (PIL-test, purpose in life). Results: A large proportion of the young adults who participated in the survey (67 %) are in a living void. This indicates a lack of meaning and clear goals in life. 20 % of the respondents are in a zone of residential deprivation, which is mainly manifested by boredom, aimlessness and lack of motivation. 13 % have clear life goals and a sense of meaning in their lives and are therefore in a zone of residential security. Conclusion: Young adults today are struggling with a lack of meaning in their lives which is reflected in mental health, one of the most vulnerable areas of our time. Family, relationships and upbringing are the most important protective factors for mental health and form the foundation for all other relationships – with ourselves, others and the world.*

**Keywords:** meaning in life, existential vacuum, young adults, life purpose, PIL-test

# CASE STUDY: THE LEAVNIG PROCESS OF WOMAN FROM AN ABUSING RELATIONSHIP

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## **ABSTRACT**

*A woman leaving an abusive relationship is not a one-time event, but a process that can take place over a long period of time. It includes temporary terminations and departure attempts and preparatory phases or strategies. The leaving process is also systemic and no just individual, as women face the loss of a relationship and a change in the entire family system. The termination of abusing relationship is not only physical, but also psychological/emotional. In order to make it easier for researchers to clarify how women manage to navigate through the process, in various studies used the transtheoretical model of behavior change, which says that a woman goes through 6 stages in the process of leaving. The pre-contemplation phase (not acknowledging the abuse), the contemplation phase (recognizing the abuse), the preparation phase, the action phase (departure), the state repetition phase, and the state maintenance phase. In the paper, we will present a case study (woman, 26 years old), who was included in psychotherapy treatment for 14 months, in the contemplation phase, and although the client went through all 6 phases of leaving process, during the maintenance phase she entered into a partnership relationship, which after 5 months, turned out to be an abusing relationship again. Despite the assumption that, according to the transtheoretical model, termination of abusing relationship should be completed but based on the case, we can conclude that the final departure from abusive relationships will be completed when the body is also cleansed of violence and no longer engages in abuse. Limitations of the research and suggestions for further research for the therapeutic treatment of abusive relationships will also be presented.*

**Keywords:** women, violence, transtheoretical model, abusing relationships, the leaving process

# EMOTION REGULATION AND PSYCHOSOCIAL FUNCTIONING OF ADULT CHILDREN OF ALCOHOLICS

Barbara Simonič, PhD, Professor  
Faculty of Theology, University of Ljubljana, Slovenia

## ABSTRACT

*Growing up in a family affected by alcohol addiction in one or both parents has consequences for the child that can persist into the child's adulthood. The so-called „adult children of alcoholics“ (ACoA), who grew up for part or all of their childhood in a dysfunctional family where the biggest problem was alcohol addiction of one or both parents, are more sensitive to life stressors and have more adjustment problems. They carry many unresolved issues from childhood, repressed and unresolved content, which co-shape their functioning in adulthood, which often turns out to be emotionally and socially immature. The paper will present the results of a study showing the characteristics of emotional regulation and psychosocial functioning of ACOAs compared to persons who did not grow up in families with alcoholism. Vulnerability in the field of emotional regulation at ACOAs will be shown as important background variable correlated with difficulties of psychosocial functioning. The study included 563 participants, 229 of whom were ACOAs. The Mann-Whitney U-test results show that ACOAs, compared to non-ACoAs, have more difficulties in emotion regulation, experience more individual problems and less strengths, rate their current family life as less functional, and are less satisfied with their partner relationship. Difficulties in their emotional regulation are correlated with more difficulties in their psychosocial functioning.*

**Keywords:** alcoholism, addiction, family, relationships, children, development.

# OBSERVATION WITH REFLECTIVE DISCUSSION AS A MODEL FOR THE REALISATION OF METHODS OF ACTIVE LEARNING AND DEVELOPING GLOBAL COMPETENCIES OF STUDENTS

Jerneja Jager, PhD, Assistant Professor

Mateja Režek, PhD, Researcher

Janja Žmavc, PhD, Assistant Professor

Sabina Autor, PhD, Research Assistant

Urška Štremfel, PhD, Scientific Associate  
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## ABSTRACT

*The aim of the observation and reflective discussion is to design, discuss, reflect and evaluate one's own and others' approaches to the implementation of the learning process and, in cooperation with others, to develop and improve teaching skills. As part of the project Designing for increased competence through active participation in higher education, the Educational Research Institute's research group designed an Instrument for observing active learning and developing global competencies in higher education. The Instrument was created for the specific situation of identifying teaching characteristics that promote active learning in students and the development of global competencies, as defined by the OECD. The Instrument contains a set of indicators that have been identified as relevant to this specific situation. The information obtained with the help of the Instrument allows the observer, together with the reflective discussion, which is conducted after the observation, to gain a deeper insight into the practice of the professor, who, based on the results of the panel, can reflect on their practice and introduce identified changes into it. Guidelines for observation and reflective discussion, which define protocols for conducting observation and reflective discussion, were also developed. In the presentation, possible ways of introducing this model into higher education practice will be discussed.*

**Keywords:** observation, reflective discussion, active learning, global competencies, higher education

# PSYCHOLOGICAL SAFETY AND CLOSE RELATIONSHIPS

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Edina Šifrar, Lecturer

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## ABSTRACT

*Psychological safety research has primarily been considered within organizational and group contexts. Recently, however, Morton et al (2022) proposed a new measure of feeling safe, informed by Polyvagal Theory. The new measure combines psychological, physiological and social components of safety. Humans are born with a need to form a close emotional bond with a caregiver and secure attachment is characterized by feelings of trust and safety in relationships. Hence, we were interested in whether the social aspect of psychological safety is associated with adult attachment style. We used the Neuroception of Psychological Safety Scale (NPSS), and the Revised Adult Attachment Scale - Close Relationships Version. The sample (N=61) was derived from a small-scale pilot study testing the translation of the NPSS. Participants were in the age group of 30 to 44 years, most were in a relationship (66.3%) and the sample was predominantly female (83.7%). The results of our study show that there is a statistically significant correlation between the social aspects of safety and all attachment subscales: a strong positive correlation ( $r = .529, p < .001$ ) with the »close« subscale which measures the extent to which a person is comfortable with closeness and intimacy; a strong positive correlation ( $r = .619, p < .001$ ) with the »depend« scale which measures the extent to which a person feels he/she can depend on others to be available when needed; and a strong negative correlation ( $r = -.502, p < .001$ ) with the »anxiety« subscale which measures the extent to which a person is worried about being abandoned or unloved.*

**Keywords:** *psychological safety, polyvagal theory, attachment styles, social aspect of safety*

# REGULATION OF DIFFERENTIATION OF SELF AS A KEY INTERVENTION IN MARRIED COUPLES WHERE THERE IS A HIGH LEVEL OF CODEPENDENCY AND ONE SPOUSE IS A TREATED ALCOHOLIC

**Drago Jerebic, PhD, Assistant Professor**  
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## **ABSTRACT**

*In couples where one of the spouses is a treated alcoholic, they found that the degree of codependency was higher than in the control group of couples where there were no problems with alcohol. They also found that there is no significant difference in the level of codependency and dysfunction in the family of origin in the treated alcoholic compared to the spouses. Regarding codependency in a partner relationship, studies have shown that codependency is strongly associated with inadequate differentiation of the self, which includes emotional reactivity and emotional detachment and fusion with the other spouse. The case study will present a couple where the husband is a treated alcoholic and where inappropriate differentiation of the self was present in both of them. Therapeutic interventions aimed at more adequate regulation of emotional reactivity and mutual demarcation will be presented. This goal is achieved through relational family therapy and approaches based on attachment theory.*

**Keywords:** codependency, alcoholism, differentiation of the self, marriage therapy, relational family therapy

# SOCIAL NETWORKS - HARMFUL PLAYGROUNDS FOR GROWING UP

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## ABSTRACT

*Mental health is an important prerequisite for the normal psychosocial and cognitive development of children and adolescents. Due to the consequences of excessive and premature use of social networks, problems in mental and physical health have been increasing in children and adolescents every year. Research shows that addiction to social networks among children and adolescents is increasing every year. Social networks are often locations of cyberbullying which, leads to depression, loneliness and suicide. The most often used social networks are YouTube, TikTok, Instagram, Snapchat and Facebook. Teenagers switch social networks every 19 seconds during use. Changing of content triggers dopamine in the brain which causes increasingly faster movement through the content and less satisfaction. Consequences lead to addiction, isolation, insomnia, anxiety, they increase depression and narcissism, affect interpersonal relationships, self-confidence and self-esteem, reduce productivity, and promote the development of eating disorders. We used a systematic literature review. We formulated a research question, criteria for inclusion of studies, literature search and review, selection of studies, and critical assessment to prepare the literature. We examined the differences, practices and results of the studies in question with the help of existing research through a systematic review of articles. This paper presents the current situation regarding the use and harmfulness of social networks among children and adolescents. Findings arising from the discussed results contribute to awareness and creation of knowledge that can contribute to greater recognition of the harmful consequences of using social networks.*

**Keywords:** mental health, social networks, meaning of life, addiction, children and adolescents.



# STRATEGIC PLAN AND GUIDELINES FOR THE RENOVATION OF THE EDUCATIONAL SYSTEM IN THE REPUBLIC OF SLOVENIA

Sebastjan Kristovič, PhD, Associate Professor  
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## ABSTRACT

*The entire educational process in Slovenia has been reduced to a cognitive/rational level. The strategic plan represents a formulated strategy for a comprehensive, permanent and effective renovation of the educational system in the Republic of Slovenia. It contains 12 strategic goals which also represent the vision, the plan and the very content of the comprehensive renovation. At its core, the strategy includes strategic recommendations and directions of UNESCO and the European Commission. A strategy with such design and based on a holistic approach avoids dangerous traps of reductionism, determinism and partial solutions.*

*An increasing number of young people complain about feelings of meaninglessness, anxiety, depression, behavioural issues, lack of will and motivation, and feelings of inner emptiness in life. The amount of mental hardships and mental illnesses is increasing. There are entire generations of children and teenagers who are addicted to screens. Paying special attention to mental health throughout the entire educational process is not only a recommendation, but an urgent and fundamental responsibility.*

*At the same time, one of the key tasks and challenges in the renovation of the educational system is the comprehensive development of personality and the development of meaning, joy and passion for learning. These are the direction and goal that we must pursue in education in the 21st century. Perhaps now more than ever before in history. The objective is not about what and how much we will know and not about what and how much we will work or what and how much we will have, but how we will live and coexist above all. The goal of education and the entire educational process should be a fully „functioning“, autonomous, integrated, thoughtful and satisfied person in accordance with current development characteristics. The ancient philosopher Plato expressed this well: „A young person is not an empty pot that needs to be filled with knowledge, but a fire that needs to be lit.“*

**Keywords:** logopedagogy, education, upbringing, renovation, strategic plan.

# TRACKING THERAPEUTIC INTERVENTIONS IN ADDICTION TREATMENT USING TAR CODING SYSTEM

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## ABSTRACT

*Therapeutic treatment of addiction requires a focused and goal-oriented therapeutic process. Treatment in Relational Family Therapy is tailored to the klient and his/her family relationships, focusing on maintaining abstinence, transforming family balance and relationships, understanding the importance of emotional experience in relationships, integrating intrapsychic experience and the meaning of early experiences, and achieving mindful behaviour, thinking and feeling, and integrating a new way of experiencing self, others and relationships into all relevant current intimate relationships. In the course of developing the TAR coding system (In-therapy affect regulation coding system), we have developed a three-stage model of therapeutic interventions (1. identification, 2. affective awareness, 3. implementation). The three-stage model of interventions was developed based on a review of previous research on therapeutic interventions, the theoretical basis of affective regulation according to Gross, and validation of the coding system (assessing agreement of multiple raters). In identification interventions, the therapist focuses on the present and promotes affective awareness. Interventions that promote the affective awareness are predominantly focused on the past. At this stage in the therapy, all previous ways of regulating affect are identified and affective awareness or implicit relational awareness is promoted. Implementation in family therapy means transferring the new way of affective awareness to current relationships. In these interventions, the therapist is also future-focused, designing opportunities to transfer the new experience of experiencing self, others and relationships into his or her future affective responses. The paper will present each level of therapeutic interventions using the example of addiction treatment, highlighting the starting points for further development of the coding system and the limitations of the research presented.*

**Keywords:** addiction, relational family therapy, coding system, affect regulation

# IDENTIFYING THE PROBLEMS ASSOCIATED WITH THE IMPLEMENTATION OF THE ICT SUBJECT IN PRE-UNIVERSITY EDUCATION

**Edra Fresku**, Lecturer

**Seida Daija**, Lecturer

**Suada Veka**, Lecturer

University of Shkodra „Luigj Gurakuqi“, Faculty of Natural Sciences, Mathematics Department, Albania

**Arlinda Ramaj**, Specialist at epidemiological and environmental health department

Tirana health care unit, Albania

## ABSTRACT

*The purpose of this study is to highlight the problems encountered in the implementation of the ICT subject in the pre-university education system, among students who study at the University of Shkodra „Luigj Gurakuqi“, based on their referrals. Methodology: The transverse method, or cross-sectional method as it is otherwise known, was used, following a quantitative approach. During the study, the following components were evaluated: the relevant education that the teacher of the ICT subject had, the available infrastructure that the schools had for the implementation of the ICT subject and the seriousness of the realization of the hours set in the curriculum by the teachers of the ICT subject. The people who participated in this study were first-year students of the University of Shkodra „Luigj Gurakuqi“. All data were obtained during the period March - April 2022. Data collection was done using a questionnaire, which focuses on three main aspects: the relevant education that the teacher of the ICT subject had, the available infrastructure that the schools had for the realization of the ICT subject and the seriousness of the realization of the hours set in the curriculum by the teachers of the ICT subject. Discussions and conclusions: The problems that are evident are related to the lack of importance that should be given to the ICT subject in pre-university education, such as the development of the subject by non-professional teachers, the lack of classes, the lack of laboratories.*

**Keywords:** ICT, pre-university education, student.

# INTEGRATING WEB3D TECHNOLOGIES IN K-12 CURRICULUM AS A POSSIBILITY OF BROADENING SOCIO-ECONOMIC DEVELOPMENT AND CHANGE WITH INNOVATION

**Jorge Ferreira Franco**, PhD, Professor  
University of São Paulo, Universidade Estadual Paulista, Brazil

## ABSTRACT

*Cyberspace technologies, as Web3D-based virtual reality (Web3DVR) information production and visualization (IPV) techniques and spatial computing communication concept and practices, including transdisciplinary scientific knowledge, have been integrated and used by the industry worldwide. So, there has been the challenge of integrating such technologies and transdisciplinary knowledge on individuals' education trajectories. This work has contributed for decreasing such challenge. It has inspired lifelong educational practices carried out based on utilizing Web3DVR technologies. Outcomes have indicated that such educative computing practices (ECP) have instigated citizens' socio-economic development and change with support of learning and applying technological innovation at K-12 education levels and beyond. Subjects have direct manipulated Web3D VR technologies, as the Extensible 3D (X3D) language/format and the X3dom platform, for integrating real-time 3D computer graphics programming, IPV techniques and learning/teaching transdisciplinary sciences concepts. ECP have enhanced individuals' cognitive and technical skills for dealing with computer science principles. Educational adoption and diffusion of Web3DVR has resulted in developing use cases and embracing digital transformation for a sustainable and ethical future. Hence, amplifying individuals' skills for participating, actively, in society changes based on learning to think in multidimensional and complex forms with accuracy, impacting in inspiring ones' lifelong learning and professional achievements.*

**Keywords:** coding literacy, lifelong learning, Web3DVR technology, cognitive and technical development

# PROJECT ATTEND: EXAMPLE OF A MULTIDISCIPLINARY APPROACH IN THE USE OF ASSISTIVE TECHNOLOGY

Ivana Vinceković, Lecturer

Ivana Rašan, Lecturer

Renata Pinjatela, PhD, Professor

Faculty of Education and Rehabilitation Sciences, University of Zagreb, Croatia

## ABSTRACT

*Despite the need for assistive technologies, educational centres (CUE) in the Republic of Croatia still lack them. Instead of explaining the reasons for this situation, it is more important to show how a multidisciplinary approach based on project collaboration (Enhanced Tools for Creating Equal Opportunities in Education for Pupils with Disabilities) can lead to a better future and improve the quality of work by ensuring AT and better services for end users. The aim of this paper is to present an example of a multidisciplinary approach by using the concept of universal design in teaching and the usage of AT in education and rehabilitation treatment. Our goal is to emphasize the importance of applying the multidisciplinary approach in the field of educations for educators based on collected and statistically processed data related to the one set of project workshops named „Effective communication as a prerequisite for building effective relationships“. Data were collected using questionnaires to evaluate training by participants (N=700) and processed through descriptive analysis. The element that is recognised as the most important in the context of ensuring the quality of actions and improvements is the human factor and awareness of the importance in determining the appropriate explanatory methodology.*

**Keywords:** assistive technology, multidisciplinary approach, methodology, human factor

# RELATIONSHIP BETWEEN INTERNET ADDICTION, LONELINESS, DEPRESSION, ANXIETY AND STRESS AMONG STUDENTS OF THE UNIVERSITY OF SHKODRA, ALBANIA

Elona Hasmujaj, Lecturer  
University of Shkoder, Albania

## ABSTRACT

*The main purpose of this study was to investigate the relationship between internet addiction and loneliness, depression, anxiety and stress as well as with other demographic variables among University of Shkodra students. A quantitative study was undertaken in order to test the hypothesis of the study and to answer to the research questions. Data was collected from assessment measures, including the Internet Addiction Test (IAT), Loneliness Scale (UCLA), Depression, Anxiety and Stress Scale (DASS 21). 360 university students, were selected through a statistical random sampling, from various faculties of University of Shkodra. The results showed that there is a positive and significant relationship between internet addiction and anxiety, depression and stress. There appears to be a very weak correlation with loneliness. The regression results also indicated that in general, internet addiction can predict all these variables, except loneliness. T-test analysis indicated that there is no significant differences between the means of the two genders and the prevalence rate of heavy internet addiction is about 1.1%. The findings from the current study will help to inform future researches.*

**Keywords:** internet addiction, loneliness, depression, anxiety, stress, students

# THE LEVEL OF CONFIDENCE IN NON-NATIVE SPEAKERS OF ENGLISH

Dajana Rakić, Lecturer  
PAR University College, Croatia

## ABSTRACT

*The paper is conducted to look into students' level of comfort in using English and their overall confidence in English. The research is focusing on using English language as a second language, in a non-native English speaking environment. The respondents are all non-native speakers of English and students at higher education institution. Relating psychological confidence in one's abilities and confidence while using English, we will see how the prior affects, if at all, the latter. Moreover, a link between confidence using English and being successful is investigated and proven.*

**Keywords:** english, non-native speakers, education, confidence.

# THE USE OF DIGITAL TECHNOLOGY FOR SOCIAL INCLUSION AMONG PEOPLE WITH ID

Lea Masnjak Šušković, PhD Candidate

Daniela Bratković, PhD, Professor

Ana-Marija Bohaček, PhD Candidate

Alisa Fabris, Educational Rehabilitator

Faculty of Education and Rehabilitation Sciences, University of Zagreb, Croatia

## ABSTRACT

*To the greatest extent we use digital technology in everyday life to establish social connections. Challenges we faced during the time of COVID-19 further emphasized the importance of knowledge and skills in using digital technologies. Research shows that people with intellectual disabilities (ID) are at greater risk of social exclusion because of the lack of education for digital skills and specially adapted tools and programs. The aim of this research is to investigate how people with ID use digital technologies for social involvement and connecting with others. This paper presents part of the 1st phase results of the study conducted in Croatia as part of the multidisciplinary EU "Digi-ID Plus" project granted by EIT Health and lead by Trinity College Dublin. Both quantitative and qualitative analyses were applied aiming to detect the level of digital inclusion of people with ID. Focus groups served to gain a deeper insight into personal experiences in using technology for social contacts and better social inclusion. Results indicate available opportunities, as well as obstacles and the need for support in using digital technology for social connecting, involvement and participation in the society. Better accessibility of digital technology tools and educational support for people with ID is needed as well. The results will be used as guidelines for co-creation of innovative digital education program and application.*

**Keywords:** social inclusion, digital technology, people with ID



# EXPERT PANEL

## EMOTIONAL DIFFICULTIES OF ADOLESCENTS AND WAYS TO HELP

**Anja Žavbi**, Teacher  
Primary school Toma Brejca, Kamnik, Slovenia

### **ABSTRACT**

*Over the past two years, there has been a marked increase in emotional distress among adolescents. Some distress is resolvable without major consequences, while others manifest themselves in eating disorders, self-injurious behaviour and depressive and anxiety disorders. Experts in various fields often raise these issues in public. The ways of dealing with hardship, problems and support plans vary according to the individuality of each person. It is impossible to identify strategies that work for specific problems or behaviours, because the feelings, experiences and responses are unique for each adolescent. The root of the problem often lies in the family or with peers. Social networks are an additional source and a threatening factor for the development of certain distresses and behaviours. Distance communication, which has been much more prominent in recent years, has become the primary means of communication for adolescents. The paper presents the adolescents' difficulties and the ways of helping them that have been useful in the hearings. Each of the cases presented offers specific solutions that can be one of the factors that contribute to personal growth and improved mental health.*

**Keywords:** emotional distress, adolescents, help, mental health

# PHYSICAL FITNESS OF TEACHERS

**Maša Čmer**, Teacher  
Center Janeza Levca, Slovenia

## ABSTRACT

*Recently, there has been a lot of talk about the general negative trend of children and the decline of their general physical parameters. As teachers, we are in almost daily in contact with students, and we can influence them by example. Good physical fitness of teachers means greater productivity, creativity, and above all reduced absence from the workplace. In our research, we were interested in the physical fitness of teachers from the central Slovenian region. In the research, we analyzed the movement activities of 56 special educators. We obtained the data via an online survey. We have noticed good physical fitness of respondents before the coronavirus pandemic, which declined during education moved on line. During this period, special educators chose walking or cycling as a form of physical activity. The frequency of performing physical activities during classes was further reduced from 2-3 times a week, to once a week for 30 minutes. Upon returning to school, the teachers were less fit and often overweight, but with great interest and motivation to improve their general physical condition. With the findings, we want to draw attention to the general current problem of poor physical fitness of teachers, which is unjustifiably neglected in the flood of alarming data concentrated on students.*

**Keywords:** physical fitness, movement activity analysis, teachers, distance education, promotion of health

# TEACHER'S METAPHORICAL CONCEPTIONS OF TEACHING STUDENTS WITH SPECIFIC LEARNING DIFFICULTIES AND SOME NEUROMYTHS

Teja Vernik Trofenik, Teacher  
Primary school Velika Nedelja, Slovenia

## ABSTRACT:

*In our survey, we are interested in what teachers consider to be their own role in teaching pupils with learning difficulties, by using the metaphors technique. Teachers' personal beliefs about competences for teaching pupils with learning difficulties are identified through metaphorical analysis. Survey approach is a combination of quantitative and qualitative research. The pilot survey was carried out among 113 teachers in Slovenian Elementary schools. The first part covers the general demographic questionnaire. In the second part we are interested in teachers' perception of their own roles in teaching pupils with learning disabilities, using a written metaphor. Metaphors enable an insight into perceptions that can not be obtained with concrete questions. Data on metaphors are processed by a thematic analysis. The third part comprises a structural questionnaire with claims about the brain, as neuromyths, important for the field of education. Neuromyths, connected to brain function, are taken from the questionnaire on neuroscience literacy, translated and adapted by Simona Tancig, from authors Herculano-Houzel, Howard-Jones and Dekker with colleagues. The research findings can be situated in the international area in this field. The findings can also be used in practice, in opening debates about teachers' roles in teaching pupils with learning difficulties and in analysing all the factors hindering or fostering to meet their role.*

**Keywords:** neuromyths, metaphor analysis, learning disabilities, teaching, teachers

# THE INFLUENCE OF PHYSICAL EDUCATION TEACHERS ON THE HABITS OF STUDENTS

Janez Čmer, Teacher  
Center Janeza Levca, Slovenia

## ABSTRACT

*The implementation of the pedagogical process in sports lessons in primary schools is very different from lessons in classrooms. Interactions between physical education teachers and students in the gym or on the school playground are consequently more specific and unique. For students who are just getting used to the outside world, the period in primary school can be an excellent guideline to the period of adolescence. In order for their journey and direction to be complete and fulfill, we must educate physical education teachers on a daily basis in the direction of good habits and positive thinking. We were interested in the attitudes and opinions of physical education teachers about the importance of their influence on students in acquiring positive habits in students. We chose a qualitative and descriptive research approach as the research method. We selected the data from a semi-structured interview in which 10 sports teachers from the Janez Levec Center in Ljubljana participated.*

**Keywords:** physical education teacher, students habits, social responsibility, healthy, education, lifestyle

# STUDENT PANEL

## RESEARCH AND DEVELOPMENT OF SENSORY PRODUCT HOUSENSYS5

**Dora Ernoic, Student**  
University of Zagreb, Croatia

### **ABSTRACT**

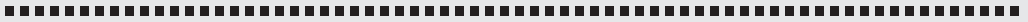
*As a result of examining the needs of children with disabilities and their educational rehabilitators in educational groups, I've created a product that combines sensory activities that children need for their development and progress. It covers 5 of the 7 sensory areas (sight, sound, touch, balance and proprioception) through various games that stimulate the sensory system. The games are located on circular elements that are placed on the sides of this house a like construction. By subtracting and adding elements, more or less light is brought into the space itself, which resembles a tent. By closing it, we get a soothing hiding place. The product is easy to assemble and it is portable.*

**Keywords:** sensory integration, children, education, mental health, autism, disabilities, special needs, sensory activities, design, inclusive design





# PHYSIOTHERAPY







# SCHOLARLY PANEL

## ANALYSIS OF QUADRICEPS/HAMSTRINGS FATIGUE INDEX AS A PREDICTOR OF INJURY OCCURRENCE IN FOOTBALL PLAYERS

**Matija Brentin**, Physiotherapist

**Nenad Petrc**, PhD Candidate

Thalassotherapia, Opatija and Faculty of Health Studies, University of Rijeka, Croatia

**Ivana Žgrablić**, Physiotherapist

Thalassotherapia, Opatija, Croatia

**Mirela Vučković**, Lecturer

Faculty of Health Studies, University of Rijeka, Croatia

### ABSTRACT

*Introduction: The fatigue index determined by the thigh muscle isokinetic test is one of the most important predictors of injury in athletes. As endurance decreases, i.e., as fatigue sets in, the elasticity of muscle fibers decreases, increasing the likelihood of a sprain or muscle rupture. Objective: The aim of this study was to compare the quadriceps/ hamstrings fatigue index of the nondominant leg and the total quadriceps/hamstrings fatigue index of the nondominant leg in relation to the dominant leg in professional football players. Methods: The study analyzed the test results of 62 professional soccer players over a 5-year period. Respondents were tested on a Cybex isokinetic system in standardized concentric mode at speeds of 60°/s over 5 repetitions to determine strength and 240°/s over 15 repetitions to determine endurance. Results: Statistical analysis of the results showed that there was no statistically significant difference in the quadriceps/hamstrings fatigue index of the nondominant leg and the difference of the total quadriceps/hamstrings index dominant compared to the nondominant. Conclusion: Fatigue and lack of endurance may indicate an increased risk of muscle injury, and there is a significant need for further analysis and research to prevent them.*

**Keywords:** fatigue index, football, injury prevention, isokinetic testing, quadriceps/hamstrings.

# DAIRY PRODUCTS AND HEALTH: RECENT INSIGHTS IN PHYSIOTHERAPY

**Vittorio Zanello**, PhD, Professor  
University of Parma, Italy

**Enrico De Pecol**, Student  
University of Udine, Italy

**Michele Zanello**, Assistant  
University La Sapienza Rome, Italy

## **ABSTRACT**

*Physiotherapy can be positively or negatively influenced by the patient's diet. The study presents a brief characterization of the therapies which can be combined with a healthy and balanced diet that includes a reduction in FODMAP foods and a reduction in foods containing milk constituents. Most milk proteins are in fact potential allergens responsible for IgE cross-reactivity with corresponding milk proteins of other mammals, including humans. The study and proposes the guidelines for physiotherapists to be used in the clinical practice.*

**Keywords:** dairy, health, nutrition, physiotherapy, FODMAP, milk, intolerance

# REHABILITATION OF ANKLE DISTORTION

**Elda Latollari**, Lecturer  
„FanS.Noli“ University, Albania

**Alketa Caushi**, PhD, Professor  
Sports University of Tirana, Albania

## **ABSTRACT**

*Distortion of the ankle is encountered as a result of a wrong position of the foot in the fall from a dance or in the placement of the sole on an irregular surface in a violent way. In the Skanderbag football academy, 10 children were observed who suffered ankle distortion during a period of 10 months. The children were divided into two groups (5 children in the exercise group and 5 children in the combined therapy group). The first group was given ice and ankle mobilization in the acute phase, rest and then exercises were applied, while the second group was given ice and mobilization in the acute phase, then TENS for 5 sessions of 30 min each. Finally, the exercises were applied. The rehabilitation lasted 3 weeks and it was observed that the second group had better improvements and the children returned to the playing field faster.*

**Keywords:** *dstortion, ankle, exercise, mobilization*

# RESPIRATORY MUSCLES TRAINING IN PULMONARY REHABILITATION

**Paweł Janus**, Associate Lecturer  
Andrzej Frycz Modrzewski Krakow University, Poland

## ABSTRACT

*Respiratory muscle training (RMT) includes resistance exercises based on external resistors with a given load and frequency. Exercises can affect inspiration or expiration and influence on the respiratory muscle strength or endurance. The selection of the training load is based on the values of the maximum inspiratory or expiratory pressures (Pimax and Pemax) that patient is able to generate. This training can be performed several times a week, for about 10 minutes a day, with initial load of at least 30% Pi/emax, for a period of 6-8 weeks with weekly loaded progression. Potential benefits of RMT for asthma patients include: increasing strength of the respiratory muscles, reducing self-reported dyspnea, reducing frequency of inhaled beta2-agonists, and improving physical performance. For patients with chronic obstructive pulmonary disease, RMT may be associated with improvement in health-related quality of life, an increase in physical capacity, and a decrease in the feeling of breathlessness. Cystic fibrosis patients enrolled in RMT can improve peak cough flow, which is helpful for pulmonary hygiene. Including respiratory muscle training in rehabilitation programs appears to be a beneficial practice, but more research is needed to understand the impact of RMT and set the standards on patients with chronic respiratory disease.*

**Keywords:** pulmonary rehabilitation, respiratory muscle training, asthma, COPD, CF

# THE EFFECT OF THERAPEUTIC EXERCISE ON CHRONIC NECK PAIN

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Alma Mater Europaea – ECM, Slovenia

**Tine Kovačič**, PhD, Assistant Professor  
University of Ljubljana, The Faculty of Health Sciences, Slovenia

## ABSTRACT

*Chronic neck pain is a quite common symptom in the overall population, which is often considered simple neck pain with or without a specific cause, found in the lateral and posterior neck. The most common causes that are considered contributing factors in neck pain are poor body posture, office work, activities of daily living, biomechanical changes in the spine, stress, anxiety, and depression. The purpose of this study was to observe the effect of isometric exercise on chronic neck pain. This study was conducted at the center for physical therapy and rehabilitation in "Banja e Klllokotit", Klllokot, Kosovo. The total number of patients included in the study was 30 people of both sexes, who were randomly divided into two groups (group A, n=15; group B, n=15) and received ten sessions of physical therapy. Group A was treated with thermotherapy, electrotherapy, isometric exercises for the muscles of the cervical region, and stretching; while group B was treated with thermotherapy, electrotherapy, dynamic exercises, and stretching. The level of pain was estimated by the visual analog scale of pain (VAS). Evaluation of patients was done on day 1, and day 10 of the treatment. According to our results, we can say that there are significant differences between the groups, which proves that group B showed better results on pain, the average difference is 3.067 ( $p=0.000$ ). We can conclude that isometric exercises are less effective on pain compared to dynamic exercises.*

**Keywords:** neck pain, isometric exercise, dynamic exercise, chronic stage, electrotherapy

# EARLY PHYSIOTHERAPY AFTER ANTERIOR CRUCIATE LIGAMENT RECONSTRUCTION

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**Samo Karl Fokter**, PhD, Orthopedic Specialist

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## ABSTRACT

*The anterior cruciate ligament is one of the most commonly damaged ligaments of the knee joint. Nowadays, reconstruction of the latter has become very common. More and more people are choosing a conservative path of treatment. The aim of the thesis was to determine the effects of physiotherapy methods and techniques on pain intensity and the value of measurements. The study involved 10 patients, where in the first half on the patients we performed measurements at the first and last treatment and in the second half at the first, middle and last treatment. To obtain data, we used a visual analog scale (VAS) to assess pain intensity, a goniometer to obtain data on knee flexion and extension, and a laser water scale to make the measurement as objective as possible, and a centimeter suture tape to assess thigh muscle function and atrophy. The results showed that the P-value of the VAS was 0.0069, indicating a statistically significant difference in pain intensity between the first and last treatment. When measuring thigh circumference and mobility, the P-value of the difference is 0.031, which also indicates that there has been an improvement. Furthermore, the P-value of the correlation test was 0.220, from the latter we were unable to establish a statistically significant correlation between pain intensity and range of motion results.*

**Keywords:** anterior cruciate ligament reconstruction, anterior cruciate ligament injury, rehabilitation, physiotherapy.

# THE EFFECT OF PERSONALISED VESTIBULAR TRAINING ON FALL RISK REDUCTION IN PATIENTS AFTER SURGICAL REMOVAL OF ACOUSTIC NEUROMAS

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## ABSTRACT

*Background: Patients after surgical removal of acoustic neuromas often have problems with balance, which significantly increases the risk of falls. Objective: The purpose of this study was to determine fall risk factors in acute hospital care using the Functional Gait Assessment (FGA) scale and create a personalised vestibular training regimen for patients to follow at home. Scores lower than 22/30 are a reliable predictor for falls. Methods: Fifty patients were included in this pilot study and randomly assigned to a control and treatment group. All patients were included in standard vestibular rehabilitation protocol during hospital stay, while only the treatment group continued with a personalised vestibular training regimen based on the limitations they showed with the FGA scale. Testing was done twice; on the day of discharge and three months later. Results: At the time of discharge, all fifty patients received FGA scores of less than 22, making them at risk for falls. Three months later all patients improved their scores, but only 35% of patients in the treatment group were at risk for falls, compared to the 65% of the control group. Conclusion: Personalised vestibular training regimen reduces the risk of falls in patients after discharge.*

**Keywords:** *acoustic neuromas, acute care, FGA scale, fall risk factors, vestibular training*

# THE INFLUENCE OF PSYCHOLOGICAL FACTORS ON THE OUTCOME OF PHYSIOTHERAPY TREATMENT OF PATIENTS WITH LOW BACK PAIN

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**Helena Blažun Vošner**, PhD, Associate Professor  
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## ABSTRACT

*Back pain, inability to work and an ever-increasing number of physiotherapy treatments are increasing year by year. In addition to leading problems with the spine, accompanying pain diseases are frequent headaches, gastrointestinal symptoms, allergies and respiratory, dermatological and other conditions that are a matter of everyday life. Pain syndromes, especially back pain, actually look very „physical“, so the fact that they were probably caused by psychological factors is particularly difficult to accept. The method of physiotherapy rehabilitation is definitely easier to explain if we rely on structural explanations (with regard to the human structure and the structural mechanism of the injury). The physical part of the therapy includes irradiation with deep heat (with high-frequency waves), deep massage and active exercise of painful muscles. These therapies increase local blood circulation, so it would be logical to conclude that the cause of the symptoms is reduced blood flow in the muscles. Blood circulation is regulated by a subsystem of the central nervous system known as the autonomic nervous system. So some cause in the brain triggers a process in which the centers in the autonomic nervous system are activated, so the blood flow in the involved body areas is reduced. As a result, tissues are deprived of oxygen. If this theory is correct, then it would make sense to focus on the root organ that causes the problems - the brain. The modern treatment of pain syndrome is directed only at the target, pain-affected organs and/or tissues, i.e. at the back muscles and tendons and spinal vertebrae. The article investigates the influence of psychological and emotional factors on back pain and the resulting response to physiotherapy treatment.*

**Keywords:** predictors, psychological factors, chronic low back pain, physiotherapy, outcome



# EXPERT PANEL

## PHYSIOTHERAPEUTIC TREATMENT AND MOTIVATION FOR SENIORS WITH DEMENTIA

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### ABSTRACT

*Mental changes that accompany dementia cause insecurity, passivity, loss of social contacts and lead into isolation. Despite the changes, some abilities remain, and these should be recognized and maintained for as long as possible. Through a longer and varied physiotherapeutic activity and different types of motivation, we can influence the quality of life with dementia and at the same time maintain and strengthen individual health. Through activity we promote independence and self-esteem as well as improve their quality of life. Patients are received and treated holistically, so teamwork and collaboration with family members is essential. We should be clear about where the focus should be for people with dementia, how these people benefit from the experience and how to approach the task. Example exercises and their connection with the desired effect illustrate our approach and our way of working.*

**Keywords:** physiotherapy, motivation, dementia

# QUALITY OF LIFE AFTER TOTAL HIP ARTHROPLASTY WITH DIFFERENT APPROACHES

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## ABSTRACT

*Introduction: The increasing frequency of orthopedic procedures, especially hip arthroplasty requires a need for improvement of surgical techniques and in accordance with that also rehabilitation protocol. The aim of research: to determine differences in quality of life and incidence of limping 8 years after total hip arthroplasty with a minimally invasive or a classical approach. Methods: A cross-sectional study included 68 patients; 32 were operated with the classic approach and 36 with the minimally invasive approach (MIS) during 2011. We studied anthropometric measurements, history of comorbidity, subjective assessment of limping and completing the SF-36 questionnaire (Short Form Survey Instrument). Results: SF-36 testing, which consists of 8 domains, showed that 5 domains of quality of life were statistically significantly better in minimally invasive group (level of significance  $p < 0,05$ ) and these domains are: role limitation due to physical health ( $p = 0,01$ ), energy ( $p = 0,02$ ), social functioning ( $p = 0,02$ ), pain ( $p = 0,02$ ) and general health ( $p = 0,00$ ). In the minimally invasive group was a statistically significant lower incidence of limping ( $p = 0,032$ ). Discussion: Quality of life after hip replacement could be the determining factor in choosing type of orthopaedic procedure. The higher number of limping patients in classical approach group may contribute to the differences in quality of life. Conclusion: Minimally invasive approach enable a long-term quality of life and a better functional recovery.*

**Keywords:** arthroplasty, osteoarthritis, quality of life, replacement hip, transgluteal approach

# SARCOPENIA: RESISTANCE EXERCISE AS A METHOD OF TREATMENT - A LITERATURE REVIEW

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## ABSTRACT

*Background: Getting old is an inevitable process in human life. One of the main health problems is definitely sarcopenia, which presents increasingly bigger problem in the elderly population. Sarcopenia is accelerated loss of muscle mass and strength, which is associated with falls, obesity, weakness, frequent hospitalizations and death. That is why it is very important to prevent and control sarcopenia. The premise of this thesis was, based on existing literature, to present the results and findings of studies, and based on these, to find out what the impact of resistance exercises is on the course and prevention of sarcopenia in elderly. Methods: For research it was used the Keywords »sarcopenia«, »resistance exercise«, »resistance exercises«, »strength exercises«, »old«, »elderly«. Into my thesis I included studies of European and American population, which were published in English, between the years 2011–2021. Results: Research included 15 studies into the analysis of the empiric part. It was formed one category and three subcategories in which was arranged 39 codes. Resistance exercises turned out to be an effective strategy to control sarcopenia in elderly. Discussion: Resistance exercises had positive influence on improvement in muscle mass, muscle strength and functional abilities. The most disagreements among studies were about the effects of resistance exercises. Despite that, this form of exercises is effective and crucial in preventing and controlling sarcopenia.*

**Keywords:** sarcopenia, resistance exercises, elderly

# STUDENT PANEL

## ANALYSIS OF THE INFLUENCE OF RECREATIONAL RHYTHMIC GYMNASTICS ON MOTOR DEVELOPMENT IN GIRLS AGED 6 TO 9 YEARS

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### ABSTRACT

*Movement in children has a significant impact on their motor development, while the sport of rhythmic gymnastics combines all gross motor skills. For this reason, the purpose of the research is to analyze its level of influence on the motor skills of girls from 6 to 9 years old. Methodology: Using a descriptive, quantitative and comparative research method and a sample of 12 girls, with an average age of 7 years, we performed a comparative analysis of the results of functional tests to assess motor skills between two groups: a test group of recreational rhythmic gymnasts and a control group of non-regularly physically active girls. The tests included: long jumps, backward walking, bench bend, static and dynamic balance test, and T-test. The analysis was performed using the SPSS 22 program, with the parametric T-test of independent samples. Results: In our sample, we found that rhythmic gymnastics has a positive effect on motor skills. The test group performed better on average in all tests compared to the control group, with the largest difference in the static balance assessment test. Differences between groups were not statistically significant. Discussion: The research did not find any statistically significant differences between our groups, we found differences only in the descriptive analysis of the results. On the basis of a comparison with professional literature, we can still confirm that rhythmic gymnastics has a distinctive influence on the development of a child's motor ability.*

**Keywords:** motor development, mobility, balance, rhythmic gymnastics, motor skills

# FIND PHYSIO - PORTAL FOR FINDING PHYSIOTHERAPY CLINICS AND PHYSIOTHERAPISTS

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## ABSTRACT

*Find Physio is an online database of physiotherapy clinics in Slovenia. It is intended for patients to find a suitable physiotherapist and physiotherapy field of treatment faster and easier. We help physiotherapy clinics to spread their visibility and highlight their special skills. The Find Physio portal combines a list of physiotherapy clinics in Slovenia with different treatment areas. It provides a quick and easy way to find a suitable physiotherapy area and a practitioner specializing in your area of treatment. The portal is intended for patients to search for physiotherapists and for physiotherapists to publish their clinics on the portal.*

**Keywords:** portal, physiotherapists, clinics, fast, easy, search

# KNOWLEDGE OF THE IMPORTANCE OF PLACING AWARE FOR OCCUPANTS AFTER A STROKE IN THE CORRECT POSITIONS AMONG EMPLOYEES IN THE HOME FOR THE ELDERLY

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## ABSTRACT

*By placing occupants after a stroke in the correct positions, we influence their health and well-being. Rehabilitation must therefore be a 24-hour treatment or a way of life. Knowing this fact, our purpose was to investigate whether the interviewed employees of the home for the elderly know the importance of positioning the occupants after a stroke in the correct positions, which positions are correct in their opinion, what consequences may occur due to incorrect positioning of the occupants after a stroke, we also wanted to investigate what the desire is on the part of employees for additional training in the field of appropriate positions after a stroke, both in bed and in a wheelchair. We studied possible solutions for additional training of employees. In theoretical part of the thesis, we used a descriptive research method, in the empirical, part we used a quantitative method with the help of a survey questionnaire. The sample consisted of 88 employees in the home for the elderly aged 20 to 63. The results of the research show that the correct positioning of occupants after a stroke is fairly well known; that the knowledge of the consequences that arise due to the improper placement of care recipients is only partially known; that the majority of employees in the home for the elderly want to acquire additional knowledge and include this in their regular practice; that, as a solution, workshops could be organized on employee ergonomics and the correct placement of patients in bed and on wheelchairs.*

**Keywords:** stroke, placing, hemiplegia, neglect, consequences after stroke.

# PHYSIOTHERAPY TREATMENT IN THE CHILDREN WITH CYSTIC FIBROSIS

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## ABSTRACT

*Theoretical framework: Cystic fibrosis is a hereditary disease that affects several body organs, most often leading to progressive impairment of the respiratory system. The treatment is symptomatic and an important part of it is also respiratory physiotherapy and physical activity. The purpose of our research work is to find out which physiotherapy methods have proven to be the most effective in the treatment of children with cystic fibrosis. Methodology: We used a descriptive method of work. We carried out a systematic review and analysis of technical and scientific literature in Slovenian and English. We searched Medline, Science Direct and SAGE Knowledge databases. The search process was shown using the PRISMA diagram, and the evidence hierarchy pyramid was used for the critical evaluation of the articles. To be included in the detailed analysis, studies had to be fully accessible, less than 10 years of age and focused on the procedures and effectiveness of physiotherapy treatment of cystic fibrosis in children. Results: We analyzed 5 articles in detail. According to the hierarchy of evidence, single descriptive studies and systematic reviews of randomized clinical trials predominate. Discussion: Expiratory huffing techniques, use of PEP and Acapella, use of manual techniques and inhalation therapy proved to be the most frequently used physiotherapy techniques in children with cystic fibrosis. Regular daily physical activity also helped improve lung function. In the process of doing therapies at home with children, it is also necessary to include parents, for whom we have found that a lot of new information in a short time represents enormous stress and overload.*

**Keywords:** cystic fibrosis, respiratory physiotherapy, physical activity, children, parental education

# SHORT-TERM IMPACT OF AN INTENSIVE PHYSIOTHERAPY PROGRAM ON FUNCTIONAL MOVEMENT AND MUSCLE STRENGTH OF LOWER EXTREMITY IN THE DIAGNOSIS OF THORACOLUMBAR SINISTROCONVEX SCOLIOSIS WITH BLUE RUBBER BLEB NEVUS SYNDROME: CASE STUDY

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## ABSTRACT

*Blue rubber bleb nevus syndrome is a rare syndrome, with current statistics showing that only about 200 people worldwide have it. Blue rubber bleb nevus syndrome, or Bean syndrome, affects the internal organs and affects how people function and carry out their daily activities. In some cases, it also affects the musculoskeletal system in the form of congenital abnormalities that occur at birth. The aim of the thesis was to determine the effect of an intensive short-term physiotherapy programme on functional movement and muscle strength of lower extremity in the diagnosis of sinistroconvex thoracolumbar scoliosis in the presence of blue rubber bleb nevus syndrome in the postoperative period of time. Methods: we used a quantitative research method. The study included a 10-meter walk test, Romberg balance test, timed get-up-and-go test and manual muscle strength test (MTM). The study was limited to one patient who underwent physiotherapy treatment under the guidance of an expert, physiotherapy included stabilization exercises, balance, hip and thigh muscle strengthening and HiTop therapy (HTEMS muscle stimulation). Results: The final results showed an improvement in all tests performed on the patient. The best results were obtained with the Romberg balance test, where the patient improved by twice the measurement performed at the initial treatments. Discussion: In our study, we found that performing stabilization, balance and muscle strength exercises had a positive effect on the patient treated in our study, but we cannot draw conclusions about the whole population here, as the study included one patient with a specific diagnosis.*

**Keywords:** blue rubber bleb nevus syndrome, congenital scoliosis, body stabilization, HiTop therapy, functional movement.



# THE EFFECT OF ELECTRICAL STIMULATION ON THE REDUCTION OF SPASTICITY IN PATIENTS AFTER A STROKE

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**Tadeja Hernja Rumpf**, PhD  
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## ABSTRACT

*Introduction: Spasticity is a disorder that can occur in patients after a stroke and hinders the patient's functional functioning in several areas. Treatment methods and techniques are numerous, both physical and pharmacological. One of them is electrical stimulation, which affects the reduction of spasticity, which is crucial for improving the patients functioning. Methods: The methods are based on the review and analysis of professional and scientific articles. Articles were found using databases such as PubMed, Google Scholar, PEDro and Science Direct. Results: Nine studies were included based on the inclusion criteria. In the included research, the authors investigated the effect of electrical stimulation on the reduction of spasticity after a stroke. In all nine studies, a positive effect of electrical stimulation on the reduction of spasticity was found. Of these, six authors found a statistically significant reduction in spasticity in correlation with physical treatment methods. Two other authors found in the research that there is a statistically significant reduction in spasticity in correlation with pharmacological treatment method. Discussion: The results show that functional electrical stimulation, neuromuscular electrical stimulation, and transcutaneous electrical stimulation are among the electrical stimulations that affect the reduction of spasticity. Reduction of spasticity when using electrical stimulation can occur both in correlation with physical methods of treatment as well as with a pharmacological method of treating spasticity.*

**Keywords:** electrical stimulation, stroke, spasticity.



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# **NEUROSCIENCE OF MOVEMENT**

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# STUDENT PANEL

## EXPLORING THE EFFECTIVENESS OF ENRICHED ENVIRONMENTS AS A TOOL FOR ENHANCING THE DEVELOPMENT OF PRESCHOOL CHILDREN IN SLOVENIA

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### ABSTRACT

*Introduction: During the COVID pandemic, there was a significant decline in the motor skills of school-aged children. In the preschool environment, restrictions affected the development of sensory integration, which is most intense in this period. Children in the home environment were exposed to simple stimuli and stimuli that prevent children from receiving and learning through multisensory pathways: auditory, visual, and tactile pathways, and also with the help of smell and taste. Multisensory integration can be achieved with the help of enriched environments to which children can be exposed during games. The purpose of the study is to review the use of enriched environments in preschools in Slovenia, which through multisensory integration improve learning performance, work efficiency, memory, cognitive abilities, and the acquisition of invaluable motor experiences.*

*Methods: PubMed was used to search for articles and research in English. Additionally, we have included articles published in Slovenian. Some data were collected from the collections of lectures in Slovenian and foreign languages. Results: „Gibanje za zdrave možgane“: a curriculum was designed based on daily continuous movement activity to stimulate the brain. The already existing external surfaces want to be prepared in a brain-stimulating playground and in this way give the child access to stimulating movement. „Eko šola“: through activities that take place in nature and in connection with it, teaches children and young people respect and appreciation of natural resources and enriches children's emotional ties with nature. „Mali sonček“: the emphasis is on the enrichment of modern content in the field of movement and sports and the included games. The program includes creation with rhythm and movements, gymnastic alphabets, water games, the inclusion of natural forms of movement, etc Conclusion: Playing in an enriched environment allows the child to gain important experiences, which are related to the effective motor-cognitive development of the child. Implemented programs for Slovenian children enable them to discover, explore and fulfill their movement possibilities. Due to the successful effects of the enriched environment, it is necessarily included in the everyday life of preschool children.*

**Keywords:** enriched environment, sensorimotor integration, motor-cognitive development

## EXPERT PANEL

### BENEFITS OF USING THE SPORTS CLUB AS AN ENRICHED ENVIRONMENT FOR PEOPLE WITH DISABILITIES: THE EXAMPLE OF THE SPORTS CLUB "AETOI THESSALONIKIS"

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**Paraskevas Alvanos**, PhD, Researcher  
Aetoi Thessalonikis, Greece

#### ABSTRACT

*Introduction: Enriched environments provide stimulating activities, social interactions, and learning opportunities. They enhance brain connections by up to 25%. Multisensory environments promote sensory balance. This study explores the importance of multisensory stimulation in enriched environments for individuals with disabilities, focusing on sports clubs. Methodology: Numerous studies demonstrate the importance of multisensory stimulation in neurodevelopmental disabilities, indicating that enhancing the quality and intensity of environmental care has profound effects on the central nervous system and brain plasticity. Participation in sports activities within a sports club can provide an enriched environment that combines multisensory and cognitive stimulation, increased physical activity, and enhanced social interactions, encouraging natural exploratory behaviors. Results: Involvement in enriched environments yields diverse benefits for individuals with disabilities, encompassing perceptual-motor, cognitive, and social aspects. A sports club like "AETOI of Thessaloniki" can serve as an enriched environment by offering opportunities for physical activity, social interaction, and skill development. Participation in collective actions can enhance cognitive functioning, physical well-being, and social skills. Interacting with others in such environments fosters improved social skills, reduced isolation, and cultivates independence, self-esteem, and confidence. Moreover, AETOI Thessalonikis provides specialized programs ensuring the full participation of individuals with disabilities, while promoting positive interactions with those without disabilities, challenging preconceptions. Conclusion: Engaging in sports within sports clubs as multisensory environments benefit individuals with disabilities. Physical activity is crucial for health and well-being. Enriched environments can be an alternative to medication. Future research should examine factors influencing the effectiveness of sports activities for individuals with disabilities in enriched environments.*

**Keywords:** enriched environment, sensorimotor integration, motor-cognitive development

# HEALTH & ACADEMIC PERFORMANCE WITH HAPPY CHILDREN (HAPCH): INTRODUCING THE HAPCH PROJECT RESEARCH PROTOCOL

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## ABSTRACT

*Introduction* The HAPCH study aims to enhance both academic achievement and children's health by incorporating physical activity into regular curricula through internationally and transculturally transferable materials and practices developed as part of the project. By introducing a school-based physical activity program as part of the curriculum (PAAC) instead of theoretical activities, children will engage in physical activity while learning. This intervention will be implemented in schools across all socioeconomic strata to reduce health inequalities. The project will assess the impact of a large-scale longitudinal intervention on several topics, including learning and cognition, nutrition and growth, physical activity and health (both physical and mental), and quality of life. Male and female children will complete the same PAAC learning program that empowers them to be physically active regardless of socioeconomic, cultural, or health status. *Methods* We conducted a pre- and post-assessment experimental study that lasted for 6 months. To measure the impact of physical activity on academic achievement and health, we used a variety of assessments, including an activity questionnaire, academic achievement test, reaction time test, flanker test, 10x5m shuttle run, blood pressure, stand and reach, and body composition measurement. The intervention involved providing 45 minutes of moderate to vigorous physical activity each day, while simultaneously integrating academic lessons through physical activity. We compared the differences between four primary schools that received the intervention and two primary schools that did not (control schools). *Discussion* The prevalence of overweight and obesity among children, as well as other non-communicable diseases, is on the rise globally, highlighting the need for public efforts to address this issue. This study aims to bring attention to the issue among policy makers, media, teachers, parents, and children in Europe with the goal of improving and promoting better health among children in the region.

**Keywords:** curriculum reform, health education, academic achievement.

# IMPLEMENTATION OF HAPHÇ PROJECT AT PRIMARY SCHOOL ORMOŽ

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## ABSTRACT

*Introduction: The teaching staff at Primary School Ormož observes that the change in the lifestyle of children with increasing use of modern technology and lack of movement affects the development of fine motor skills, flexibility, coordination, attention and concentration of students. The purpose of including Health and Academic Performance with Happy Children project is to raise the quality of teaching by using modern teaching methods based on the principle of active learning, to raise awareness among students, parents and the community about the importance of movement for learning and everyday life. Methods: Methods of active learning include movement of various intensities, achieved for example through relay games, fast response games, exercises for strength, speed and coordination of movement. Students in the 2nd, 3rd and 4th-grade conduct at least 45 minutes of class time (Slovenian, mathematics, science, crafts and technology) daily through active forms of movement. The teacher carries out activities in 15 to 20-minute intervals or in a 45-minute active learning class. The teacher adapts the educational material and tools according to the selected movement activity. Results: By using active learning methods, we observe increased motivation, and improved attention and concentration among students. Conclusion: Active learning allows students to acquire knowledge in a different way. Increased movement makes them happier and more successful.*

**Keywords:** HAPHÇ, active learning, movement, play, education



# PROMOTING PHYSICAL LITERACY IN GREEK PRESCHOOLERS: ASSESSMENT AND RECOMMENDATIONS

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## ABSTRACT

*Introduction: While it is generally agreed that engaging in motor skills is a fundamental factor for preschoolers' physical wellness, there is limited knowledge about Greek preschoolers, including typical children and children with disabilities with regard to their assessment of motor skills. Methodology: The aim of this report was the review of research published in databases like PubMed, PsycINFO, EBSCOhost, and JSTOR regarding physical fitness and the development of motor skills across typically developed preschool children and preschool children with disabilities. Furthermore, the report aimed to review the assessment tools used and offer recommendations regarding interventions for preschool children that fall behind their motor skill levels. More than 180 articles were reviewed. Results: Unfortunately, there is no standard approach for evaluating motor skills in children. Selecting an appropriate tool for assessing the movement capabilities of preschoolers should be based on its intended purpose -whether it's medical assessment, measuring the impact of the intervention, or research conducted within a certain community. It is essential to consider which type of test best suits the purpose and if a general measure or an individual component of motor performance should be measured. Assessing specific delays in children's motor abilities can uncover other issues that can then be addressed accordingly. Conclusion: Although there may not be universal agreement regarding what constitutes successful intervention for preschoolers, it remains an important part of their development process. Specifically in Greece, very little is done regarding a governmental approach to this issue, and as such further research is needed regarding effective intervention,s even if this is based on small research projects. For example, more research regarding the use of gesture interactive game-based learning may be promising.*

**Keywords:** enriched environment, sensorimotor integration, motor-cognitive development

# SCHOLARLY PANEL

## CORTICAL CONTRIBUTIONS DURING DIFFERENT TYPES AND INTENSITIES OF MOVEMENT

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### ABSTRACT

*Body adaptations during exercise at the cardiovascular, metabolic, muscular, and respiratory levels are well documented, but less is known about the changes in the central nervous system. A tight relationship exists between the nervous and musculoskeletal system during movement but the exact mechanisms underlying brain dynamics remain unknown. This is because traditional brain imaging approaches do not allow subjects to move during measurements, and methods have focused primarily on static conditions and assessment of brain activity pre- and post-exercise. More recently, technological advances have enabled the study of brain activation during movement using portable devices such as mobile electroencephalography (EEG). The main limitation of EEG has been its low spatial resolution; however, the use of source localization has allowed spatial localization of the signal based on high-density data. Thus, high-density mobile EEG provides excellent temporal resolution and sufficient spatial resolution to record electrocortical activity during exercise and localises sources that contribute to sport performance. Exercise has been mainly shown to alter brain activity in the alpha and beta frequency bands. Studies report decreased beta spectral power in frontal regions during high-intensity aerobic exercise and event-related desynchronization of alpha and beta band oscillations during voluntary muscle contractions. The purpose of this narrative literature review is to provide an overview of the existing literature that has used EEG-based recordings and analysis during various types of movements/exercises to identify the underlying brain fluctuations and sources responsible for such movements.*

**Keywords:** source localization, exercise, brain dynamics, cortical activation

# UNDERSTANDING COGNITION THROUGH NEUROPHYSIOLOGICAL MEASURES OF BRAIN ACTIVITY UNDER IMPROVED ECOLOGICAL VALIDITY CONDITIONS

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## ABSTRACT

*Investigating cognition during natural locomotion essentially embarks on investigating cognition in ecologically valid environments. The manipulation of complexity levels in the cognitive or motor domain in dual-task paradigms additionally offers an insight into how the limited attentional resources are being allocated to each of the domains and what the priority allocation ruleset might be. The purpose of the present article is to first present the pioneering study together with the advancements in technology and data analysis approaches that demonstrated the feasibility of recording human cognition while in motion using neurophysiological measures. In the main section, the present paper introduces selected studies that, by making an effort in increasing ecological validity, offer insights into the biomarkers of cognitive task performance while in locomotion, such as event-related potentials (ERPs) and oscillatory spectral power. Here, we particularly discuss (i) the P3 component of ERP, which has a strong association with the process of focusing attention and indexing the availability of attentional resources, and (ii) the spectral power of theta oscillations, which is thought to reflect mental effort or engagement during task performance.*

**Keywords:** mobile brain/body imaging (MoBI), cognitive function, event-related potentials (ERP), ecological validity

# CORTICAL BIOMARKERS IN PARKINSON'S DISEASE

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## ABSTRACT

*People affected by Parkinson's disease (PD) may experience significant impairment in their quality of life and basic abilities due to this chronic neurodegenerative disorder. The disease has various causes and a wide range of possible symptomatic phenotypes. Symptoms of the disease are typically divided into pre-motor, non-motor and motor symptoms. The accuracy of diagnosis is highly dependent on observation of the course of symptoms and their severity. Therefore, clinical diagnostic procedures require a considerable amount of time before a definitive diagnosis of PD is made, often ranging from 3 to 10 years. Some symptoms in the early stages of the disease bear a strong resemblance to those of aging, further complicating the diagnostic process. Research suggests that the observed degeneration of neurons in the substantia nigra and nigrostriatal pathway, accompanied by some pre-motor and non-motor symptoms, may precede the onset of motor symptoms by up to 10 years. Since early intervention has been shown to have a major impact on treatment, a more accurate diagnostic tool for PD is needed. There is sound research evidence to suggest that EEG-determined cortical biomarkers have great potential for distinguishing between individuals who show early signs of developing PD and healthy individuals. Further research indicates that cortical biomarkers can be used to indicate the presence and/or severity of several pre-motor, non-motor and motor symptoms in patients. The aim of this review is to summarize the current literature on EEG biomarkers in PD. If a clear consensus is reached on diagnostic procedures for EEG-detectable cortical biomarkers of PD, implementation of the procedure in clinical diagnostic processes could help improve patient treatment and slow the progression of symptoms in patients caused by late diagnoses.*

**Keywords:** parkinson's disease, electroencephalogram (EEG), cortical biomarkers, diagnostic techniques





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# **SOCIAL GERONTOLOGY**

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# SCHOLARLY PANEL

## COMMUNICATING WITH OLDER ADULTS USING DIMINUTIVES: LITERATURE REVIEW

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### ABSTRACT

*Theoretical framework: Nurses learn how to communicate with older adults in a respectful, open, relaxed, clear, and proactive manner. While this confident communication style builds good and lasting relationships, too often we see condescending conversations, elderspeak, and last but not least, the use of diminutives when speaking with older adults. Research shows that young, middle-aged, and even older adults have negative stereotypes about older adults that are strongly embedded in society and affect intergenerational communication. Early social scientists were the first to identify the elderspeak, estimating that 20% of communication in nursing homes is actually elderspeak. Methodology: A literature search was performed, the search was limited to the period between 2012 and 2022 (Sage Journals), and research articles were included. 3 databases were searched: PubMed, Web of Science, and Sage Journals. We included 4 studies. Results: From the included studies we defined: elderspeak is prevalent in nurse-patient communication (including chiropractic); implementation of evidence-based communication strategies in nursing education programs improves communication with older adults; this demonstrates the need for continued reinforcement of staff training in appropriate communication; a brief training program can improve person-centered communication and reduce elderspeak. Conclusion: Future research in nursing education and social gerontology is needed, especially in the area of communication. Both should review and revise their conceptions of the dignity of older adults. It is inappropriate to speak to older adults, even if they need help from health care providers with activities of daily living, as we do to children, using diminutives.*

**Keywords:** communication, nurse, diminutive, older adults

# IS CULTURAL COMPETENCE REQUIRED IN THE FIELD OF (SOCIAL) GERONTOLOGY?

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Helena Blažun Vošner, PhD, Professor

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## ABSTRACT

*Purpose: Cultural competence includes behaviors, attitudes and policies that ensure a system, agency, or an individual to function effectively and appropriately in a variety of diverse interactions and environments. This paper aims to explore the need for cultural competence in the field of gerontology. Methods: A systemic literature review using PRISMA model was performed. Article search was performed in the SCOPUS database of the gerontology field, using cultural competence and social gerontology as keywords, in the time period from 2017 to 2022. Results: From initial 92 articles we have limited the number to 41 by choosing open access articles only. We have further eliminated 30 articles reading the abstract, which were not applicable to our purpose. 15 relevant articles were finally identified, all addressing the need for cultural competence when dealing with older adults. Most articles pointed out the necessity for cultural competence when dealing with older adults with dementia, especially members of minority communities. Other addressed needs for cultural competence when dealing with underserved older adults, older adults from ethnic minorities, and older members of LGBT communities. Several articles explored the general need for cultural competence in gerontology and gerontology education, stipulating cultural competence as one of the key competencies in healthcare and social workers, working with older adults. Conclusion: Cultural competencies are widely recognized in today's diverse society as key competencies in health and social care. To address the needs of older adults, which are as diverse as the rest of society, cultural competencies need to be trained and acquired also in the field of gerontology.*

**Keywords:** diversity, older adults, culture, competence

# TECHNOSTRESS IN LATER LIFE

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## **ABSTRACT**

*Today, the use of digital technology is among the strategic priorities of most countries with the aim of increasing the efficiency of employees at their workplaces and on the other hand making people's lives easier, safer, and better. Most digital solutions that are or will be used outside of businesses are concentrated in the service sector. The use of digital technology has both positive and negative consequences on the older citizens. Among the important problems related to the use of digital technology is the digital inequality of people, which is strongly influenced by socioeconomic factors (low income, level of digital literacy, lack of appropriate skills and competences of people). Due to the importance that digitalization has on the company success and on employees, many studies have investigated the negative impact of digitalization - technostress - its dimensions and their consequences on employees work and private life. However, extremely few studies deal with the problem of technostress and its consequences for elderly citizens, who are especially vulnerable due to socioeconomic factors in a situation when digitalization spreads to all areas of their lives. Therefore, the purpose of this research is to develop a conceptual research model which, in the later phase of empirical verification, would shed light on the impact of technostressors on the quality of life of elderly people. In creating this model, we will rely on stress theory and the findings of numerous research on the consequences of technostressors, which can be tested empirically. In addition, an overview of theoretical and empirical findings will be given and the possibilities of further research in this area will be indicated.*

**Keywords:** digital transformation, technostress, elderly people

# THE ASSOCIATION OF SOCIETIES FOR SOCIAL GERONTOLOGY OF SLOVENIA IN THE LIGHT OF CONNECTING AND INCLUDING OLDER PEOPLE

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## ABSTRACT

*The Association of Societies for Social Gerontology of Slovenia (ZDSGS) started 30 years ago with the unique social welfare program of the Group of Old People for Self-Help, which today represents the most important program in the field of social welfare in strengthening the mental and physical health of older people. Discussion groups, which are held throughout Slovenia, promote understanding of differences, contribute to breaking stereotypes about aging, enable the non-material needs of older people to be met, promote self-help, mutual solidarity and good interpersonal relations. The implementation of the program is entirely based on voluntary work and enables volunteers of all generations to prepare for their own age or active aging. Older people in the 3rd and 4th stages of life maintain social inclusion with the program, connect, cooperate and satisfy the need for human proximity, safety and acceptance. More than 750 volunteers - group leaders join the discussion groups, who strengthen intergenerational cooperation among more than 4,000 group members and promote integration, solidarity, coexistence, informal learning and fun. The ZDSGS represents an important meeting point for both the development and learning of gerontological knowledge, experience, transfer of good practices, a learning base, as well as for the inclusion of older people and the promotion of volunteer work and intergenerational cooperation, which is important for each individual, the local community, and society as a whole. In this way, it makes a constructive contribution to a high-quality, long-lived society that is responsible until old age and inclusive and respectful of older people. Such an inclusive society ensures a balance in intergenerational coexistence and a dignified and secure old age.*

**Keywords:** association of societies for social gerontology of Slovenia, self-help groups, active aging, volunteers, social inclusion, intergenerational cooperation

# THE IMPORTANCE OF THE INTERGENERATIONAL CONNECTION BETWEEN ELDERLY PEOPLE AND CHILDREN

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## ABSTRACT

*Elderly people face numerous difficulties that are interconnected and affect their quality of life. Loss of functional abilities, reduced financial possibilities, and loneliness are just some of the difficulties that lead to the loss of the status of an elderly person in society. Modern society is oriented towards younger, working people, which very often leads to negative attitudes and a deepening of the intergenerational gap. To reduce this gap, the interaction between elderly people and children is very important. Pettigrew (1998) states that close positive relationships that are realized through mutual interaction contribute to better understanding, tolerance, and the formation of positive attitudes towards older people. Research also shows that when growing up, children should have four to six close adults with them, that is, in addition to their parents, they should grow up with their grandparents. Living together with grandparents contributes to growing up without stereotypes towards older people and an easier understanding of growing up and aging, which leads to a reduction in the risk of depression in older people and consequently results in a satisfied and fulfilled life.*

**Keywords:** elderly people, intergenerational gap, children

# DIGITAL ERA OPPORTUNITIES OF ELDERLY IN NURSING HOMES

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## ABSTRACT

*Digital technology can promote healthier and more independent living for the elderly. It can also provide them with effective healthcare solutions. Digital health technologies help health care providers deliver high quality, personalized support remotely. They also assist in the delivery of social services and medical treatment that helps the elderly stay healthy, happy and socially engaged as they age. The United Nations Economic Commission for Europe (UNECE) observed that only one in four older adults in Europe have the essential digital skills to utilize technology efficiently. More efforts are needed to ensure the elderly can take full advantage of digital technologies. Nursing homes house numerous older people, meaning there is potential for large-scale education and digital technology inclusion among this age group. The main challenge of implementing digital technologies in nursing homes is financial, as it requires investment in internet connection, smart devices, software, IT infrastructure, and auxiliary equipment. Furthermore, the facility must have trained and competent personnel to manage this technology and educate the elderly to use it. With successful implementation, digital technologies could potentially be the new standard in nursing homes and provide numerous benefits for the elderly.*

**Keywords:** technology, nursing homes, nursing, elderly, digital era

# EFFECTIVENESS OF PLANNING THE DISCHARGE OF ELDERLY ADULTS FROM HOSPITAL TO HOME ENVIRONMENT AFTER ACUTE TREATMENT

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## ABSTRACT

*Introduction: Many older adults ( $\geq 65$  years) face worsening health conditions, longer-term care, readmission to hospital, death or institutional care after hospital discharge, making it worthwhile to examine the effectiveness of planned discharges from hospitals to the home environment. from the point of view of reintegration, after discharge, and reduction of health fund costs. Methods: A systematic literature review was conducted in the PubMed and ScienceDirect databases. The PICO method was used in the review, the review consisted of qualitative and quantitative research. Results: Out of 1797 articles in both databases, 10 articles were relevant according to the exclusion criteria. 4 review articles, 3 descriptive analyzes and 3 randomized controlled trials were included in the analysis. Measurements and analyzes took place with various validated questionnaires, interviews, protocol studies and literature review. Discussion and conclusion: The literature review confirms that discharge planning contributes to the independence of older adults, minimizing re-admissions and reducing health fund costs, taking into account the phase before and after discharge, the active involvement of the user and relatives, education, communication and the sufficient transfer of information of all involved in the discharge process.*

**Keywords:** *planned discharges, hospital, older adults over 65, home care, long-term care, interventions*

# ELDERLY IN THE INNOVATIVE SUSTAINABLE SOCIALLY RESPONSIBLE SOCIETY

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## ABSTRACT

*The first official international document on social responsibility, ISO 26000, was published along with UNO documents addressing the topic of human and organizational relations, exposing honesty and reliability based on interdependence, aiming at holistic approach and accepting one's responsibility for one's influences on society, including the natural and man-made preconditions of humankind's survival. The timing – 2010 – was a very clear sign that the point has to do with the global social-economic crisis that stopped being hidden in 2008. They talked about the corporate social responsibility and reduced this corporate obligation to a free will and market pressure with no legal obligation.*

*In 18 years of IRDO's working on this topic we found the necessity to overcome the forgetting about the individual and societal social responsibility. Thus, since 2019 we started speaking about the innovative sustainable socially responsible society (ISSRS). A segment of it tackles elderly. They are not mentioned in ISO 26000. Our most recent book, in Slovene, is not out yet, but more or less finished. In 12 chapters it collects experiences in the current Slovene (and Serbian) practice that provide the message that relations of care for elderly are closer to the ISSR than business relations and international relations, although not perfect or needing any improvement.*

*The first chapter reports about an empirical research about the attitudes of employees in public services, on who the practice depends, e.g. in Serbia. The second chapter summarizes the given legal framework in European Union and Slovenia about the care for elderly. Then, chapters 3 – 7 provide information on activities supporting elderly with a variety of programs and activities filling in the free time of elderly, living either at home or in institutions aimed at caring for them, in Slovenia. They provide contents making sense rather than boredom. The chapters 8 – 12 report on human behavior toward elderly in the last phases of their lives. Several more aspects could also be added, but they are waiting for another research.*

**Keywords:** elderly, innovative sustainable socially responsible society, Slovenia



# FINANCIAL SAFETY OF THE ELDERLY WHO RECEIVE PENSION

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## **ABSTRACT**

*The principles of intergenerational solidarity and reciprocity are the foundations of the Slovenian pension scheme. This type of insurance is not exclusively based on actuarial and insurance principles, but applies a combination of certain insurance law rules and social solidarity principles. The introduction of minimum and maximum pension bases into the pension scheme is the result of the direct implementation of the two basic principles of the compulsory insurance system. A pension calculation from the minimum pension base is the most important element of solidarity in the pension scheme. Other significant elements of solidarity in the pension scheme are the maximum pension base, minimum pension, guaranteed pension, the payment of disability pension in a guaranteed amount, safeguards used in the calculation of disability, widow's or widower's and survivor's pension and disability insurance allowances, annual allowances as well as, most recently, the amount of old-age pension for farmers with a full number of pension qualifying years. It is important that in the compulsory insurance scheme, the right proportion of the amount of contributions paid and the level of solidarity is established. The last two years saw inappropriate interventions by partial amendments to the pension and disability legislation in an attempt to devalue the importance of the amount of contributions paid and the length of the insurance period. The social protection policy should thus be addressed beyond the compulsory pension and disability insurance scheme.*

**Keywords:** *solidarity, reciprocity, minimum pension base, contributions paid*

# INCLUDING ELDERLY ADULTS IN THE SAFE DIGITAL SPACE: THE CASE OF ISRAEL'S RURAL, NORTHERN PERIPHERY

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## ABSTRACT

*Information Technology (IT) has become an inseparable part of our lives. However, besides its many benefits, it also bears the danger of excluding certain groups, amongst them older people. Data reveal that only about 60 % of those aged 65 and above use a computer or the internet. Furthermore, only about a quarter of all senior citizens actively participate in social networks, use government online services, or make payments or appointments via the internet (26 %). The proportion of older adults who shop online is even lower (15 %) as can be seen from the records of the Israeli official Central Bureau of Statistics for 2020.*

*Our research aimed to understand the reasons for this avoidance, in order to promote the inclusion of older people in policy considerations, with respect to their preferences and capabilities. The research was conducted in the northern rural periphery of Israel. This region is very diverse in many parameters. Ethnically (Jewish and Arabs), Religion (Jewish, Muslim and Christians), veterans vs. emigrants, as well as different socioeconomic statuses. The study included semi-structured interviews with forty older people, ages 65 to 93, in day centers.*

*The findings indicate that older people tend to have an ambivalent attitude towards the use of IT: Most of the interviewees acknowledge its potential benefits, but feel that it is too difficult, or not worthwhile, for them to learn how to use it. Many complained that the lack of digital literacy tends to marginalize them and distance them from their families and communities. It also makes them dependent on younger relatives, which in many cases are far away, due to the preference of younger people to move to metropolitan areas.*

*We recommend that a pro-active policy is taken, incorporating older people in its formation, by means of qualitative research. The policy should consider the diversity of rural communities, respect their values, and offer their older members tangible, relevant advantages of IT.*

**Keywords:** continuity theory, digital discourse, information technology, older people, digital divide, qualitative method

# THE IMPORTANCE OF INTERVENTION MEASURES IN ENSURING INTERGENERATIONAL COOPERATION

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## ABSTRACT

*Good communication and understanding between different generations are one of the most important topics of modern society. We note that in recent times, modern families and, consequently, the relationships between family members of different generations have undergone major changes, which they are unable to resolve on their own due to major challenges. The article focuses on changing different behavioural patterns of family members and explores the factors that play an important role in intergenerational cooperation. The aim of the intervention measures is to make family members of different generations aware of the importance of changing their behaviour for good and successful intergenerational cooperation. The article also presents two researches on intervention measures in which we identified factors that influence the resolution of intergenerational transmission of behavioural patterns. The aim of the first research was to find out whether intervention measures are an important factor in raising awareness and solving interpersonal symptomatic family interactions, and with the second research we wanted to find out, based on implemented programs, whether intervention measures are important in ensuring intergenerational cooperation. The results of both studies confirmed that intervention measures are an important factor in raising awareness among family members about solving deeply rooted ways of behaving, thinking, and feeling, as well as in the successful implementation of intergenerational cooperation.*

**Keywords:** intergenerational cooperation, behavioural patterns, family, intervention measures, older adults

# AGEISM - SYSTEMATIC DISCRIMINATION OF OLDER PEOPLE

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## ABSTRACT

*Ageism consists of systematic discrimination, stereotyping and prejudice based on an individual's age group. Ageism is age discrimination, defined as a negative attitude towards people because of their age. It can be seen in the media in the way older people are portrayed, in the workplace, when providing health care and in general in social interactions. Ageism, like any other form of discrimination, impairs the quality of life of individuals, affects social relations, the quality of health care, employment and social policy. Attitudes are being created that the aging of society is something that is a bad indicator for the future of the nation, that the elderly are a burden on society, unproductive, sick, depressed, with weaker cognitive abilities. In the past, elderly people had a significant place in society, they were considered teachers and advisors. In the family, the elders also had their significant place as people who made decisions, took care of the descendants. The development of modern society has brought about changes that are visible both in the community and in the family. Some authors state that five key historical changes contributed to the weakening of the status of the elderly and the development of ageism, namely: media development, the industrial and technological revolution, retirement age regardless of working ability, the development of medicine and the social age division. In addition to life expectancy, working life is getting longer and longer, and it is known that older workers' physical and psychological abilities for work, as well as the psychosocial conditions in which they live, can change. They are at greater risk of work-related injuries, work-related illnesses and discrimination.*

**Keywords:** ageism, older people, systematic discrimination

# GUIDED AUTOBIOGRAPHY AS AN EXAMPLE OF GERONTOLOGICAL INTERVENTION AND ITS APPLICATION AREAS

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## ABSTRACT

*Guided Autobiography (GAB) is a method developed by Gerontology Professor James Emmet Birren and consists of autobiography writing on specific themes, stimulating exercises related to writing assignments, reading, and small discussions about what has been written weekly within a group environment led by an experienced facilitator. During Guided Autobiography sessions, while the participants acquire roles such as listener, reader, and writer; the facilitator has roles such as mentor and listener. In addition, it provides opportunities for participants to see themselves through others' life stories. Since it includes various techniques and sharing as an application, it also includes a lot of learning and allows developmental exchange. Some of the outcomes of GAB sessions are increasing self-acceptance, self-confidence, energy, connectedness, and positive views of others, as well as decreases in anxiety and tension. In addition, studies show that although GAB is not a therapy, it has a healing effect on participants. In this review, it was aimed to thematize the literature on Guided Autobiography as Gerontological Intervention strategies and answer the question of in which gerontological fields has it been applied? According to the literature, GAB has a variety of areas in order to be used as an intervention such as counseling tools, lifelong learning activities, activities for residents of nursing and residential homes, activities under the retirement preparation programs, and intergenerational activity tools. Thus, considering the biographical dimension of aging, it can be said that it provides diversity to Gerontological Practices and contributes to the understanding of aging individuals and their subjective environments not only by themselves but also professionals working with aging individuals.*

**Keywords:** *guided autobiography, life review, gerontology, gerontological interventions, biographical aging*

# SAFETY OF THE ELDERLY RESIDENTS IN THE INSTITUTIONAL CARE IN A NEW CONTEXT

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## ABSTRACT

*The safety of elderly residents in institutional care can be overrated. Overprotection of the elderly in institutional care can lead to the loss of their ability to recognize the danger in their environment and to manage the possibilities to stay safe. Overcaution can lead to institutional or structural violence against the elderly residents. Where are the limits and what are the alternatives for managers in institutions for long-term care of the elderly? What can we learn from the concept of Hogeweyk dementia village*

**Keywords:** *safety of the elderly residents, institutional care of the elderly, institutional violence, Hogeweyk dementia village*

# SUPPORTING AND INFORMING THE ELDERLY IN ARRANGING MORTIS CAUSA CASES

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## ABSTRACT

*Today's society, especially in Europe and thus also in Slovenia, is becoming long-lived. On average, people are living longer than in the past. Ageing and advancing age raise questions for the elderly and their descendants as regards the arrangement of property matters during lifetime and, in particular, in the event of mortis causa. As life and life expectancy increase, the onset of inheritance is also delayed. It is therefore not surprising that the pressure on elderly parents has increased in recent years. This has also led to an increase in violence, particularly economic. Some adult children are becoming 'inheritance-impatient' and are willing to do many things, including legally impermissible acts, to exercise their 'right to inherit' from their parents.*

**Keywords:** inheritance impatience, inheritance, economic abuse on elderly, longevity

# THE INFLUENCE OF SPELEOTHERAPY COMBINED WITH PULMONARY REHABILITATION ON THE FUNCTION OF RESPIRATORY MUSCLES IN OLDER ADULTS WITH CHRONIC RESPIRATORY DISEASES

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## ABSTRACT

*Backgrounds: Respiratory muscles training is an important part of pulmonary rehabilitation. The aim of the study was to evaluate the function of respiratory muscles of older adults before and after rehabilitation and treatment stay in underground salt mine chambers.*

*Methods: 50 patients of age  $\geq 65$  years with chronic respiratory conditions were enrolled to the study and participated in a 3-week subterranean pulmonary program (PR) in the "Wieliczka" Salt Mine. Before and after the outpatient PR program conducted 135 meters underground the levels of sniff nasal inspiratory pressure (SNIP), maximum inspiratory pressure (MIP) and maximum expiratory pressure (MEP) were measured using the Mikro RPM. Results: 44 patients with mean age  $68.8 \pm 2.9$  years who completed the PR program and tests were included in the analysis. The mean SNIP difference before and after PR was  $11.3 \text{ cm H}_2\text{O}$ ,  $p=0.0039$ . In the results of the levels of respiratory pressures the age groups of the patients were taken into account: for individuals aged 65–69 years the mean MIP difference before and after PR was  $9.3 \text{ cmH}_2\text{O}$   $p=0.0322$  and for MEP was  $5.5 \text{ cmH}_2\text{O}$   $p=0.0247$ ; for individuals aged  $\geq 70$  years the statistically significant mean difference was observed only for MEP  $9.3 \text{ cmH}_2\text{O}$   $p=0.0071$ . Conclusions: SNIF and MEP increased significantly after PR combined with speleotherapy in older adults with chronic respiratory diseases however MIP improvement was noticed only in the elderly aged 65–69 years. Respiratory muscle training should be considered important for healthy aging.*

**Keywords:** the elderly, maximum inspiratory pressure, maximum expiratory pressure, sniff nasal inspiratory pressure, subterranean therapy



# THE INTEGRATION OF PALLIATIVE CARE IN THE SOCIAL WELFARE INSTITUTION COINCIDES WITH SOCIAL AND TECHNOLOGICAL DEVELOPMENT

Suzana Koštomaj, PhD Candidate  
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## ABSTRACT

*The integration of palliative care into the social welfare institution is essential from the point of view of ensuring the quality of life of older adults with incurable disease. By clearly observing the principle of palliative care, as well as by carefully implementing a psychosocial approach, palliative care represents an exceptional additional value for the individual, the family, and employees of the local community at the primary level of health care. The implementation of holistic palliative care with the included structures of advance planning, ensuring safety and maintaining dignity, both in the world and in our country, represents an extremely important socially responsible task. The purpose of the paper is to professionally present the concept of palliative care in a social welfare institution, which is based on a psychosocial approach, and to define the integration of palliative care in social welfare institution, which coincides with social and technological development. In addition to the professional definition of examples of good practice as a method of description, we will support our findings by reviewing the literature of selected databases. Based on the content analysis, two concepts will be presented: social and technologically advanced palliative care in a social welfare institution and the concept of empowering older adults with incurable disease.*

**Keywords:** palliative care, the psychosocial concept of work, social and technological development, dignity, security

# ASSESSMENT OF BILINGUALISM IN ELDERLY INDIVIDUALS WITHIN THE CONTEXT OF ACCESS TO SOCIAL SERVICES AND HEALTH CARE SERVICES

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## ABSTRACT

*„Active aging“ policies should be adopted in order to maintain healthy aging. Support for active aging will be possible by focusing on social services and health care services to be offered to elderly individuals, as well as protecting them from diseases. The communication problems of individuals in the need of a second language in addition to their mother tongue due to wars and climate-induced global migrations, as well as the policies for the use of a single language in many states with the understanding of the nation-state, have brought about the inability to access social services and health care services. It is also the biggest obstacle in the way of social and healthcare services being high quality, integrated, egalitarian, and efficient. The study was prepared as a review based on the relevant literature. The aim of the study is to evaluate the communication problems caused by bilingualism in elderly individuals in terms of access to and participation in social and healthcare services. The problem of the research is to discuss the disadvantages of bilingualism in ensuring equal access and participation of elderly individuals in social services and healthcare services and to offer solutions. As a result of the study, it was concluded that bilingual elderly individuals have problems in terms of accessing and participating in both social and healthcare services. Considering the language intensity used in order to best meet the unmet social and health needs of the elderly individuals who are bilingual and can receive services using a language other than their mother tongue, and to minimize the problems experienced by these individuals, it is recommended to establish translation units with translators with geriatrics and medical knowledge in social services and healthcare organizations.*

**Keywords:** active aging, bilingualism, need for social service, need for health care, access and participation.

# POSSIBILITY OF A COUNTRYSIDE DAILY RESIDENCE FOR OLDER PERSONS

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## ABSTRACT

*Since 2018, the all-day stay of older persons who do not depend on assistance is one of the legal options for diversifying farm activities in Slovenia. The pilot project: To the farm! explored how this supplementary activity can be implemented in practice and at the same time contribute to the improvement of housing options for older persons. The project partnership was very diverse, with the lead partner being Anton Trstenjak Institute for Gerontology (IAT) from Ljubljana, others include AvarK, Matk and Pribinovina farm. They all share a common interest in the development of housing for older persons, as a possibility to expand activities on farms and care for the quality of housing for older persons. To achieve our goals we organized visits of groups of older persons to partner farms and assessed their suitability and potential using the focus group method. We also conducted a survey among the participants on the willingness to live on a farm permanently or occasionally. We also used relevant expert opinions of a lawyer, an architect, and a consultant from Davča, a farm which successfully introduced a housing community for older people. All our findings and recommendations were presented in a form of a handbook. We concluded that in theory there is a lot of interest in this type of service, from the farms and older persons, but several concerns need to be addressed. From the farms' perspective, certain investments in appropriate infrastructure are needed, legislation needs to be amended and farmers and their employees need training. As for the potential users, they support the idea and like it as another housing option, but they do not wish to leave their homes while they are still active and independent. Last, but not least, there were no care options planned on the farms.*

**Keywords:** *older persons, countryside, housing, full day care*

# PROMOTING PHYSICAL ACTIVITY IN THE ELDERLY USING EXERCISE APPLICATIONS

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## **ABSTRACT**

*Physical activity is very important at any age due to its beneficial effect on health, but in old age it is essential for healthy aging. Disorders of the musculoskeletal system and other chronic conditions in the elderly lead to mobility problems, dependence on others and a higher risk of falling. The loss of muscle fibers and motor neurons with aging cannot be replaced, but systems such as musculoskeletal can be improved with exercise. Advances in digital technology and the development of health applications are creating greater opportunities to promote physical activity in the elderly. Today, health applications are increasingly available and provide better access to information that can influence physical activity and behavior modification in the elderly. The variety of these applications allows older people an alternative approach to exercise with individual programs in their homes. This article will describe findings from the field of promoting physical activity through the use of health applications for exercise, i.e. whether the use of health applications has an impact on increasing physical activity in the elderly.*

**Keywords:** older people, physical activity, health application

# ROAD TRAFFIC SAFETY IN ELDERLY ADULTS WITH DEMENTIA

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## ABSTRACT

*Independent driving enables an individual to be independent, grow old in place, and actively participate in society. Driving represents a rather complex activity that requires the use of the driver's cognitive, sensory and motor skills. Although the elderly cause relatively few traffic accidents, this is most likely related to the low frequency of their participation in traffic. Taking into account the number of kilometers driven, the elderly are one of the age groups that cause the most traffic accidents. The growing proportion of elderly people in Slovenia, as in other parts of the developed world, means that in the near future the number of patients with the most common neurodegenerative diseases - Alzheimer's disease and Parkinson's disease - will also increase significantly. In patients with advanced dementia, however, driving skills are further impaired, and the effectiveness of driving compensation strategies (eg, avoiding driving at night and driving on the highway) is questionable. Research on the driving performance of individuals in the initial phase of dementia is not entirely clear-cut, so decisions about driving ability should not be made solely on the basis of the diagnosis. A careful individual analysis of the clinical condition and additional data obtained through neuropsychological tests and a test drive is recommended. Therefore, when assessing driving ability, it is crucial to take into account not only specific diseases, but also age-related perceptual and cognitive declines, as well as neurological and other disease-related impairments, as well as the possibility of compensating impaired abilities.*

**Keywords:** cognitive aging, dementia, driving, Alzheimer's disease, Parkinson's disease

# SENQUALITY – PREPARATION FOR LATER LIFE: AN ONLINE LATER LIFE PLANNING TOOL

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**Voyko Kavcic**, PhD, Associate Professor  
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**Nikolaj Lipič**, PhD, Assistant Professor  
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## ABSTRACT

*Introduction: Preparation for later life encompasses various areas, aspects, legal basis and the individual's personal characteristics, interests and wishes. Successful preparation for later life must therefore include planning that concretizes the desired state of the individual in the future. Later life planning and self-reflection of age transitions have a positive effect on well-being in old age. The purpose of the paper is to present the main result of the SenQuality project – preparation for later life, which is related to the online tool for later life planning. Methods: The paper presents theoretical backgrounds in the field of preparation and planning for later life. A methodological framework is also presented as a basis for self-reflection, assessment and an action plan for later life planning. Based on the methodological framework, an online later life planning tool was created, which enables an individual to plan their own age in nine different areas. Results: The online later life planning tool is a comprehensive tool that takes into account various areas of life and enables the user to take concrete actions based on self-reflection and evaluation. The user can plan their later life in nine different areas: finances, emergencies and exceptional circumstances, mental and physical fitness, housing, look and appearance, social relationships, health, leisure activities and lifestyle, and work and employment. Discussion and conclusions: The results of the SenQuality project follow the recognition that preparing for later life is a lifelong and multidimensional process. Also, the results of the project follow the basic goal of the project, which refers to raising awareness among people, especially those in adulthood and at the transition to old age, about the importance of later life planning.*

**Keywords:** old age, preparation, planning, online tool, project

# SPECIFICS OF COMMUNICATION WITH ELDERLY PEOPLE

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## ABSTRACT

*Age is the last development period in the lifetime of an individual that can be defined according to chronological age. Aging leads to numerous sensory and cognitive impairments and changes in visual, auditory, and speech functions. All mentioned changes have an impact on the quality level of communication. It is important to emphasize that not all the elderly have some cognitive damage, and therefore the approach to communication with the elderly should be individual. Communication difficulties affect people of all ages but are most often present in elderly people. According to Cushing (2013), successful communication is a process in which all participants interpret content transferred equally. To make communication with an elderly person as successful and high quality as possible, it is crucial to assess sensory abilities. Good communication requires knowledge and skills. Lučanin and Despot Lucanin (2010) say that we achieve good communication by developing basic communication skills. It depends on the skill of transferring their ideas and feelings to others and whether they will understand us in the right way, while the skills of listening and observing others allow us to understand their messages.*

**Keywords:** elderly, communication, sensory damage, aging

# EXPERT PANEL

## BENEFITS OF PROACTIVE TELECARE AMONG THE ELDERLY POPULATION

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**Donna Henderson, PhD**

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### ABSTRACT

*Traditional telecare has been designed and deployed as a response to emergency situations. These reactive services support the allocation and mobilization of resources to solve situations in which the users (mainly elderly people) need a rapid and effective solution. However, a new approach of a proactive telecare is proving to yield multiple benefits on top of those related to the reactive approach, especially among vulnerable populations living in isolation, population living in remote areas of difficult access, or by supporting the carers of people in a dependency situation. The benefits of this proactive approach vary in scope and measurability but the main focus is to provide the conditions in which users and carers strengthen their feeling of safety, companionship and security at home on a regular basis. Two AHA Reference Sites, Andalusia and Scotland have been engaged in sharing their experience and knowledge on proactive telecare with very positive outcomes. The proactive approach takes into account the events and particularities of their users to derive selective interventions in which follow ups are provided based on the user preferences and profile. This particular approach runs specific courses of action attending to their need for social interaction, preventive campaigns, coordination with health services, reminders and information-referrals to relevant services where required. The underlying principle is that many of the health related conditions that are developed over time by those users living in these particular situations could be prevented or at least diminished by undertaking a more proactive approach. The proactive telecare service does not only provide a direct benefit on the users living in their own home environment and the unpaid carers (family/friend/carer (especially for the people with dementia)), but it also decreases the workload and costs on different health related services.*

**Keywords:** digital solutions, knowledge transfer, telecare, social interaction, vulnerable population



# STUDENT PANEL

## A LOOK AT THE ORGANIZATIONAL CLIMATE, CULTURE, STRUCTURE, FUNCTIONS AND MANAGEMENT IN THE SPECIAL SOCIAL WELFARE INSTITUTION DOM NINE POKORN - GRMOVJE

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### ABSTRACT

*The article presents the 1st year Social Gerontology student excursion who visited the special social welfare institution Dom Nine Pokorn - Grmovje as part of the Organization and Social Management course. We were welcomed by the director Tomaž Lenart Phd. and his deputy, Veronika Falant Msc. The excursion was focused on the perception of the organizational climate, culture, mission, vision, management structure and many organizational functions. A positive and pleasant organizational climate was felt throughout the inspiring institution. The culture is also at a high level. Employees internalize management's goals. The vision tends towards the advancement of each individual according to his capabilities, which leads in the direction of deinstitutionalisation, to which they strive by establishing numerous more or less independent and autonomous units. One of the main goals is the establishment of good mutual relations and thus greater satisfaction for everyone - employees and care recipients. The management structure is a matrix, as professional services are equal to the line manager. Partly, the structure is also project-based, as several new projects are being introduced at Dom Nine Pokorn. It is difficult to clearly divide the functions in the institution, as they are closely intertwined and interdependent. Management performs decision-making, managerial and HR functions. The director organizes, monitors, motivates, leads, encourages and evaluates his employees with respect and openness. He enjoys support of professional services, he relies on when making decisions. We detected and observed the investment, financial, development-research, procurement, production, security, technical control function and the general function, which includes legal and founding documents and connecting with the public. The latter is extremely important in the light of deinstitutionalisation and bringing daily life closer to the residents. The satisfaction and familiarity that we felt during our visit is certainly a reflection of professional, friendly, empathetic, charismatic and open management.*

**Keywords:** organizational climate, culture, functions, structures, management

# EMOTIONAL SAFETY FOR OLDER ADULTS

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## ABSTRACT

*Introduction: We start talking about aging from birth and it lasts until the end of the individual's life. Aging is experienced differently by each person. Some people in old age frequently face a feeling of loneliness for various reasons. Various fears also appear, most commonly due to fear of incapacity, death, loneliness and other conditions. Various emotional stresses can also appear, which manifest in different ways. Methods: We used the descriptive method of work and the quantitative method of research. A survey was conducted that contained 9 open and closed-ended questions. The data was processed and presented using Excell. Results: The study involved 17 people, of which 12 were older women and 5 were older men. From the age of 65 and above. More than half of the people said they felt lonely, including 5 who did not live alone. 8 out of 17 said that they were facing fears. They highlighted immobility, fear of death, fear of loneliness, fear of being unable to live independently, and fear of being left alone. Discussion and conclusions: The study has shown that older adults frequently encounter feelings of loneliness and isolation. Feelings of fear are also more common, for various reasons. Among the most common reasons are fear of incapacity, loneliness, and death. Due to aging processes, feelings arise that younger people do not encounter so frequently. Loneliness also occurs among those who do not live alone.*

**Keywords:** *older adults, loneliness, fears, acceptance of disability, emotional responses*

# FOOD SAFETY AND OLDER ADULTS

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Tjaša Cehnar, Student

Tanja Strajnšak, Student

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## ABSTRACT

*The article presents a study on the dietary habits of older adults. The methods used were an interview and a survey, in which both men and women were involved. Relatives, friends and acquaintances were included in the study. The research is based on the dietary habits of older adults, and the result of the research was not surprising, in other words, it was expected except for the third question, where the answers were surprising. The study provides valuable insights, especially for those who lack knowledge about the health of older adults and are interested in learning more. Older adults sometimes neglect their health in all areas, even though they would benefit most from taking care of their health. The reasons for this are often related to depression and comfort zone. The problem is that they are not so motivated, as evidenced by the results of our survey. Encouraging a healthy diet would (maybe) help to solve this problem. Older adults often do not follow the recommendations and advice of healthcare professionals because they are young and think they are more experienced. They also quickly think that advice is actually criticism, which is far from the truth, as these professions are designed to provide appropriate help and support. Therefore, it is necessary to create an environment for them in which they feel safe and heard. Therefore, we treat older adults not as a health problem, but holistically. It is also important to consider that they have the right to autonomy, which we respect, but still encourage them to live a healthy lifestyle in all areas. It is important to provide them with the opportunity to lead a healthy lifestyle and to support them.*

**Keywords:** nutrition safety, elderly

# HEALTH SAFETY FOR OLDER ADULTS

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**Ana Menhard**, Student

**Maša Simonič**, Student

**Benjamin Ritlop**, Student

**Jana Goriup**, PhD, Emeritus Professor

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## **ABSTRACT**

*Introduction: Ageing is a process that lasts from birth to death and cannot be avoided. As the population ages faster and faster, the proportion of people who are unable to care for themselves is increasing. Older people must not be forgotten, as age brings with it many health problems. A completely different attitude is needed towards those who have serious illnesses. Older adults face many problems and risks that affect their health. How healthcare staff and social gerontologists help them to feel safe is very important. Methods: In the theoretical part, we used a research method with the help of online sources and literature. In the empirical part we used the survey method. The method of analysis was used to analyse the collected data and the results were presented descriptively using graphs. The sample included 20 respondents. Results: The main finding from the questionnaire are presented in the results. The findings show that health care is not well taken care of and that older adults are not comfortable with new technologies. Discussion and conclusions: Based on the results, we confirmed two hypotheses. Most older adults have difficulty managing new technologies, so it is important to provide as much help as possible to help them understand. It is important to give older people a sense of security, trust and importance, which is gained through the first step - appropriate communication. We have received much more information on ageing, the health system and insurance.*

**Keywords:** older adults, ageing, health security, health, age-related changes

# NATURAL SPAS FOR HEALTHY AGING AND LONGEVITY

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## ABSTRACT

*Starting points: With the support of both national and international research, we recognise that using natural healing properties significantly helps to maintain the health and general well-being of the individual, which is reflected in a better quality of life and a longer lifespan for seniors. The primary research question discussed in this paper is „To what extent do older people know about natural healing properties and what is the current consumption of such services in Slovenian natural health spas?“ Methods: We used the survey method for the empirical part of the study. The sample consisted of 456 Slovenians aged 55 and up. The sample was approximately regulated based on the statistical region of residence. In the theoretical part, we used the deductive method, descriptive statistics method, compilation method, and comparison method. Results: We discovered that elderly Slovenians choose to visit natural spas at least once or more frequently each year and are aware of their benefits. They understand that thermal water is good for their health, immune system, and overall well-being. The main reasons people choose to go to natural spas are for their own comfort and well-being, with health-related reasons like physiotherapy or rehabilitation coming in third. This demonstrates how people are becoming more aware of the value of active ageing and longevity, as well as how these activities can significantly improve their quality of life as they age. Conclusion: Various agencies, institutions, organizations, and so on should invest more time and money in trying to present and educate older people about the knowledge of natural spas and their broader offer related to natural healing factors.*

**Keywords:** natural spas, longevity, healthy ageing, quality ageing, natural healing properties

# PERCEPTION OF SAFETY IN OLDER ADULTS: IMPORTANCE FOR THEIR ACTIVITY AND SUCCESSFUL AGING

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Voyko Kavcic, PhD, Associate Professor  
Julija Kovačič, Student  
Tara Marega, Student  
Lana Kropf, Student  
Katja Urankar, Student  
Nina Urek, Student  
Ula Gider, Student  
Boštjan Mohar, Student  
Marjanca Gaberšek, Student  
Brigita Benčič, Student  
Nina Fajfar, Student  
Alja Horvat, Student  
Jerneja Lipič, Student  
Ljubica Marincic, Student  
Jana Maučec, Student  
Alina Ribič, Student  
Jana Sever, Student  
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## ABSTRACT

*Introduction: The perception of safety in the environment in which older adults live is important for their health and the creation of social capital, which in turn has implications for their daily activity and successful aging. The purpose of the research was to find out how older adults know about safety in the environment they live in and what significance their sense of safety has on activity and successful aging. Methods: The research was based on a quantitative methodological research approach, in which we used the survey method. The data were obtained with our own survey questionnaire, which was partly based on theoretical starting points, and partly we used the structured questionnaire SAI - Successful Aging Inventory (Troutman et al. 2011). We conducted the survey in the months of December 2022 and January and February 2023. We obtained data from 325 people over the age of 65. In the research, we used the methods of descriptive and inferential statistics, while the hypotheses were checked with the methods of correlation and regression analysis. Results: The results of the research show that that older adults perceive the environment in which they live as safe. However, we found that there are statistically significant differences between the sexes. We also found that older adults are active. Older adults view their aging as successful, with functional performance mechanisms and intrapsychic factors dominating. Discussion and conclusions: Based on the results of the research, we can conclude that older adults are active and positively perceive their safety and successful aging. We point out that there is a positive connection between the perception of security and successful aging.*

**Keywords:** older adults, safety, activity, successful aging

# PITCH AND PUTT AS A NEW SPORTS TREND FOR ACTIVE AGING OF OLDER ADULTS

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## ABSTRACT

*The elderly population is growing as the age limit rises. To avoid the highest possible costs of care for older adults, they need to be regularly involved in a range of psycho-physical activities, as this is the only way to enable them to age actively or with quality. Pitch and Putt is a short golf game where the aim is to hit a ball with a golf club and put it in a hole on the green surface. Walking in the fresh air, swinging the golf club, thinking, picking up balls and other factors make this sport good for their body and health. Firstly we wanted to know what older adults who already play Pitch and Putt think about whether they find the game safe, whether it has a positive impact on mental health and intergenerational relationships. Next, why they switched from golf to Pitch and Putt and what is most important to them when they are playing on the course. Our research is purposively sampled and cross-sectional. A total of 23 older adults aged 55 years or older participated in the 1KA online survey, which is both qualitative and quantitative. Semi-structured interviews were conducted in the field with six different actors, whose mean age was 74.2 years. The hypotheses were supported by qualitative data obtained through interviews. With observation method, we learned about the design of the courts and the atmosphere of the competition. Quantitative analyses to test the hypotheses were carried out using the SPSS program. Pitch and Putt has only been around in Slovenia for a few years so there has been no research yet and among other things we found that the elderly feel safe during the game, as there are not many injuries, except by their own carelessness.*

**Keywords:** pitch and putt, golf, older adults, active ageing

# PRESENTATION OF A NEW FORM OF INSTITUTIONAL CARE FOR THE ELDERLY IN SLOVENIA

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## **ABSTRACT**

*I will first present an overview of the existing forms of care for the elderly in Slovenia (homes for the elderly, day care, help at home, projects). In the continuation, I will present a new form of institutional care, which will be intended for couples. Spatially, it will be designed as a connected settlement of small houses for two people, with its own terrace and small garden. All units will be connected to a common space, which will be used by all residents for socializing, joint activities, events, intergenerational bonding and space for staff. Residents of these units will have social and medical care according to their needs and wishes.*

**Keywords:** *old people, couples, new form of care, institutional care, intergenerational cooperation*



# SAFETY OF OLDER ADULTS IN TRAFFIC

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Maj Drakšič, Student

Petra Rus, Student

Nika Tisel, Student

Jana Goriup, PhD, Emeritus Professor

Alma Mater Europaea – ECM

## ABSTRACT

*Introduction: Today's society is becoming long-lived, life expectancy is increasing and the proportion of people over 65 is growing rapidly. In the future decades, this trend will be even more prominent and more and more old adults are actively involved in traffic. The research is focused on the safety of older adults in traffic. The purpose is to determine how aging and the deficiencies it brings with it affect the safe participation in traffic of older adults. The aim of the research is to identify these deficits and provide recommendations for the safe mobility of older adults and the introduction of preventive activities in this area. Methods: A survey questionnaire, a quantitative research method, was used for the research. It was based on theoretical thinking about the topic. The sample included 21 respondents. In addition to demographic data, the questionnaire also contained 7 questions regarding the type of participation in traffic, risk factors, forms of mobility and preventive actions. The questionnaire is not standardized, it was created and used only in this research and the obtained results cannot be generalized. The sample was also too small to make any generalizations. The results were descriptively processed and analyzed and displayed with graphs. Results: The research problem assumed that traffic safety in older adults' decreases with age. It has been established that traffic safety declines with age. However, older adults are more active in the field of mobility; they are aware of their shortcomings and are ready to deal with them constructively. Discussion and conclusions: The research found that older adults are aware of their shortcomings and do not feel safe in traffic due to all the factors beyond their control. They are ready to participate in preventive campaigns, workshops and refresh their skills. It is important to focus on this topic, as the elderly people stay actively mobile longer and longer.*

**Keywords:** traffic safety, older adults, aging changes, mobility, prevention

# WIDOWHOOD AND SOCIAL SAFETY OF OLDER ADULTS

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Katja Lešnik, Student

Erna Perviĉ, Student

Jana Goriup, PhD, Emeritus Professor  
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## ABSTRACT

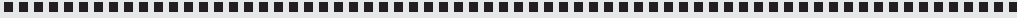
Human are social beings. For our existence, we need genuine human relationships, which reduce during the period of old age due to the death of members of the social network. In our paper, we consider the social security of older adults, the impact of the loss of a partner on it and the change in life after this experience. In the theoretical part, we explain the topic from the point of view of legal and formal bases, needs, partner life, dying, mourning and compensation for acquisition. In the empirical part, we conducted semi-structured interviews with 6 older adults. We asked them 10 questions. We wanted to find out with them what problems widowed people face and how their lives changed after losing their life partner. In the interviews, we also focus on the interviewees' view of death, their loneliness, sense of security, frequency of social contacts, leisure activities and the need for support and help that they needed when losing their partner.

We hypothesized that after experiencing the loss of such an important person as a partner, the sense of social security decreases. The results of interviewing six older adults did not confirm our hypothesis.

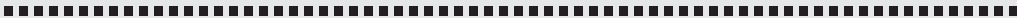
**Keywords:** social security, widowhood, older people, loss of a partner, death







# MEDICINE





# INDIVIDUALISED MEDICAL TREATMENT AND ASSISTIVE TECHNOLOGY

## SCHOLARLY PANEL

### COBALT CHROMIUM 3D PRINTED PATIENT SPECIFIC BONE IMPLANTS

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#### **ABSTRACT**

*Patient specific implants made by additive manufacturing are thought to be a way forward in the coming decade. The objective is to improve safety, accuracy, operative efficiency and expand treatment indications. Of the 400 patients annually requiring 3D printing services in our point-of-care 3D printing laboratory, custom implant requests currently only consist of less than 5% of the total demand. Using examples over the past few years with implants for complex upper, lower limb, pelvic, spinal and craniomaxillofacial indications, we highlight some of the key elements regarding their design and manufacturing. We will discuss common concerns regarding material selection, safety and conformity to regulations. We also present a review of the current literature with many interesting use examples worldwide.*

**Keywords;** patient specific implants, 3D printing, design, material selection

# METALS IN BIOMEDICAL APPLICATIONS: PROCESSING AND CHARACTERIZATION

Igor Drstvenšek, PhD, Professor

Snehashis Pal, PhD, Researcher

Tomaž Brajljih, PhD, Lecturer

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## ABSTRACT

*In the last decade, the use of alloys for implants, especially orthopedic implants, has increased dramatically. The metal materials currently used for orthopedic implants in major joint surgery are mostly bioinert and therefore lack adequate osseointegration. Good osseointegration should ensure the mechanical stability of the implant and its functionality. The difference in stiffness between the metal implant and the bone leads to an effect called stress shielding, i.e., a reduction in bone density (osteopenia) due to the lower stress placed on the bone by the implant. Bone remodeling is very sensitive to small changes in alternating stress. Changes in the alternating load of the bone of less than 1% of its strength can cause measurable differences in bone remodeling within a few months. New development of materials for metal implants and their processing is mainly focused on solving the problems of osseointegration, stress protection and biodegradation using new technologies such as 3D printing and metallurgical or chemical solutions such as in-situ alloys and bioactive or biomimetic coatings.*

**Keywords:** alloys, implants, osseointegration, stress shielding, stress protection and biodegradation



# NEUROSURGICAL APPROACHES TO SKULL RECONSTRUCTION

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## ABSTRACT

*The treatment of cranial bone defects is an ongoing issue in current neurosurgical practice. Decompressive craniectomies, tumoral pathology, multi-fragmentary fractures of the skull, infection, bone re-absorption and rejection of the graft all lead to the need for cranioplasty. Decompressive craniectomies are increasingly used not only in treatment of posttraumatic cerebral oedema but also for relieving raised intracranial pressure in catastrophic cerebrovascular incidents. As a result, a considerable number of patients are left with a surgical bone defect to be corrected after surviving those events. Using the patient's own bone flap is not an appropriate solution due to the problems of conservations. The available materials for reconstruction include polymethylmethacrylate (PMMA), titanium, ceramics and other resin and alloy types. The ideal material for cranioplasty should be viable, inert, malleable, available, radiolucent, sterilizable, stable, biocompatible, and inexpensive. Unfortunately, no artificial material fulfils all the stated requirements. The aim of our work is to demonstrate our experiences and evolution of surgical techniques. From free hand modelling of the implant used in early days – patient's own bone, to patient specific custom-made implants created by processing the CT images and using new technologies such as 3D printing, computer assisted design/computer assisted manufacturing (CAD/CAM). Illustrative clinical cases will be presented and discussed.*

**Keywords:** *cranial defect, skull reconstruction, custom-made implants, 3D printing*

# OUR EXPERIENCES WITH PATIENT SPECIFIC IMPLANTS FOR FACIAL RECONSTRUCTION

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**Igor Drstvenšek**, PhD, Professor  
Faculty of Mechanical Engineering, University of Maribor, Slovenia

## ABSTRACT

*Dentofacial deformities are severe skeletal changes of the face which are connected with the functional and esthetic problems. They are corrected with surgical procedures known as orthognathic surgery. With merging cone beam CT, 3D facial and intraoral scan we are able to create virtual (digital) patient with all possibilities to make exact diagnosis and treatment plan. To transfer this plan to real world we need different templates, custom implants, etc. The contemporary orthognathic surgery means the surgical reconstruction of changed facial bones (both jaws) in optimal position and shape to achieve the normoocclusion of teeth and proper jaw relationship, to achieve the anatomical conditions for normal facial functions as chewing, biting, swallowing, speaking and breathing etc. But also the corrections of other bones as nose, chin and cheek area with soft tissues augmentations are necessary because of aesthetic demands for harmonious face. The golden standard for these procedures are different surgical techniques with autologous bone, but there are the severe deformities as pronounced facial asymmetries where these traditional techniques are not sufficient. At this point, the process can be completed with additive technologies, which offers a new possibilities and some advantages over traditional methods with patient specific implants. Patient specific implants are constructed through computer assisted design/computer assisted manufacturing (CAD/CAM). Nowadays a combination of 3D print and computer-numeric-control milling is used. A patient matched implant ensures a closer fit to patients' anatomy as it is constructed to fit the individual anatomy perfectly which reduces the risk for micro-movement and results in more stability and longevity. Our experiences with patient specific implants for facial reconstruction, especially mandibular angular implants for severe facial asymmetries as Goldenhar syndrome will be presented. This work is example of contemporary interdisciplinary collaboration.*

**Keywords:** dentofacial deformities, custom implants, computer assisted design/computer assisted manufacturing (CAD/CAM)

# RECONSTRUCTION OF A MAJOR STERNAL DESTRUCTION AFTER OPEN-HEART SURGERY USING A 3D-PRINTED TITANIUM CUSTOM-MADE PROSTHESIS

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**Radovan Hudak**, PhD, Professor  
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**Igor Drstvenšek**, PhD, Professor  
 Faculty of mechanical engineering, University of Maribor, Slovenia

## ABSTRACT

*Dehiscence of the sternal bone is a major complication after cardiac surgery that significantly increases mortality, morbidity and cost in cardiac surgery. Standard techniques for reconstruction include steel wires, bands, various clips and titanium plates. Additionally, a variety of muscular flaps (pectoralis, latissimus, rectus) or even allogenic bone grafts are often used. Recently, with the rise of 3D printing technology, a novel method is making a breakthrough. 3D-printed custom-made titanium prostheses are increasingly used in chest wall reconstruction because they allow almost perfect fitting to the patient's chest wall and lead to good functional and cosmetic results. However, most experience is limited to primary reconstructions after chest wall tumors. In this report, a complex anterior chest wall reconstruction using a custom-made titanium 3D-printed implant in a patient with a sternal dehiscence after coronary artery bypass surgery is presented. Initially, a reconstruction of the sternum was performed using conventional methods, which did not give satisfactory results. Then, a 3D printed titanium custom-made prosthesis was used for the first time in our center. Follow-up showed good cosmetic and functional results. To conclude, this method is well suitable for sternal reconstruction after, especially where other methods do not provide satisfactory results.*

**Keywords:** sternotomy, sternal dehiscence, reconstruction, titanium, prosthesis, 3D printing

# VIRTUAL PLANNING IN MAXILLOFACIAL SURGERY: FROM SURGICAL TOOLS TO SUBPERIOSTEAL IMPLANTS

Tadej Dovšak, M.D., PhD

Vojko Didanovič, M.D.

Luka Prodnik, M.D.

Matic Koren, M.D., PhD

University Medical Centre Ljubljana, Slovenia

## ABSTRACT

*Virtual planning (VP)/computer assisted surgery (CAS) together with 3D printing brought revolution into maxillofacial surgery. On the department for Maxillofacial and Oral Surgery, University Clinical Centre Ljubljana, VP has been used since 2008. From on screen visualization and segmentation of the imaging, development has come a long way: 3D printed models can be taken into surgeon's hand, rotated, viewed from any angle or direction and shown to younger colleges. Surgery can be simulated with all osteotomies performed on the computer for the resection of the tumor site and for the donor site. Surgical tools are printed and sterilized as the guides for the procedure itself. VP helps improving surgical efficiency and accuracy, shortens surgical time and enhances predictability. Brainstorming needed during planning is also wonderful educational tool for the whole surgical team. Time invested into VP pays off during the procedure. In some patients planning and fabricating of the patient specific implants (PSI) is indicated. In fact in some of them, creating and fabricating titanium made subperiosteal implants, is their last and only chance to be dentally rehabilitated. The lecture presents established VP workflow and use of 3D printed surgical tools and PSI on our department.*

**Keywords:** virtual planning, 3D printed models, patient specific implants

# AUTISM

## EXPERT PANEL

### A MODEL OF SUPPORT AND HELP IN THE FIELD OF AUTISM FOR EMPLOYERS IN SLOVENIA

Jana Ponikvar, CEO

Ksenija Bratuš Albreht, Head of Employment Rehabilitation  
Šentprima - Institute For Rehabilitation and Education, Slovenia

#### ABSTRACT

*Within the project, VIS A VIS – Support for professionals in education and employment in the field of autism, which is co-financed by the program of the Norwegian Financial Mechanism 2014 - 2021 and led by the Association for Autism of Slovenia, we will, among other things, create a model of support and assistance in the field of autism for employers in Slovenia. Activities for the preparation of the model are led and coordinated by the Šentprima. First, we reviewed the current situation in the field of employment of persons with autism in Slovenia: snapshot of the state of the support environment; a review of reports and research that includes good practices and findings summarized in the report. The next step was to carry out a survey among employers in Slovenia, with which we obtained information about their needs and attitudes towards the employment of persons with autism, knowledge about the employment of persons with autism and the readiness of employers to successfully employ persons with autism. 93 organizations took part in the survey and filled out an online questionnaire. In the following, we conducted in-depth interviews with 10 organizations. The report on the review of the situation in the field of employment of persons with autism and the data obtained from the survey among employers will serve us to prepare an optimal model of support and assistance in the field of autism for employers in Slovenia. In the paper, we will present the results of the research.*

**Keywords:** autism, employers, support, needs, attitudes

# NATIONAL RESEARCH ON AUTISM PREVALENCE IN SLOVENIA

**Barbara Žnidarko**, Teacher of Special and Rehabilitation Pedagogy

**Janja Kranjc**, Educational Psychologist

**Patricija Lovišček**, Director

Autism Association of Slovenia, Slovenia

## ABSTRACT

*The Association of Non-Governmental Organizations for Autism of Slovenia has conducted the national research on autism prevalence in Slovenia, within a VISA VIS project. The VISA VIS project is cofunded by the Norway grants 2014–2021 of the Programme Education, Scholarships, Apprenticeship and Youth Entrepreneurship (Izobraževanje – krepitev človeških virov), with Government Office for Development and European Cohesion Policy acting as the Programme Operator. Within the research an online application was developed to gather information and to monitor the autism prevalence in Slovenia. The research focused on: - the number of persons, diagnosed with autism in Slovenia - the number of persons, diagnosed with autism in Slovenia, regarding the age - the ratio of persons, diagnosed with autism in Slovenia, regarding gender - the number of persons, diagnosed with autism in Slovenia, regarding the region of residence*

*20 primary care centers, 15 children psychiatry offices, 49 psychiatric offices and 1475 pediatricians and general medicine doctors were invited to participate in the research. The participants provided the relevant research data on persons, diagnosed with autism, referred to their institution, by filling in the data into an online application. On the basis of the collected data the autism prevalence estimation was made, which is pivotal for planning the strategic support to persons with autism in Slovenia, raising autism awareness and identifying the most important research guidelines.*

**Keywords:** autism, diagnose, research, prevalence, online application

# RELATIONSHIP BETWEEN SPECIAL INTERESTS AND ORIENTATION TO HAPPINESS IN ADULTS WITH AUTISM SPECTRUM DISORDER

Aleš Zavrl, Teacher

Institute for the deaf and hard of hearing Ljubljana, Slovenia

## ABSTRACT

*One of the main criteria for autism is the presence of narrowly focused repetitive behaviors, interests and activities. We investigated correlations between special interests with the orientation to happiness, the effect of special interests on life, and daily functioning in 58 adults with ASD: 40 M (69%) and 17 F (31%), 1 non-binary. Data collection took place between 30 June and 30 September 2021. A statistically significant orientation towards meaning occurs most often. Of the proposed 26 areas, five are statistically significant for the orientation to happiness through meaning, one area for the pleasure and four for the orientation to happiness through engagement. The correlation between special interests and their impact on life is typical in five areas, and their impact on everyday functioning is typical in four areas of special interests. People with autism use special interests to fight depression and anxiety, increase their chances for well-being, social participation and a path to a professional career. Special interests represent tendencies towards global change, which confirm a change of focus from the simple hedonic enjoyment of the individual to the search for meaning, important for the wider environment and the emancipation of otherness, which indirectly expresses empathy.*

**Keywords:** autism spectrum disorder, special interests, correlation

# REVIEW OF EDUCATORS' NEEDS FOR ADDITIONAL KNOWLEDGE ABOUT AUTISM IN SLOVENIA

Irena Marinič, Special and Rehabilitation Pedagogue  
Primary School Kozara Nova Gorica, Slovenia

## ABSTRACT

*Project VIS A VIS Support for professionals in education and employment in the field of autism addresses shortcomings in systemic support for professionals educating and employing persons with autism in Slovenia. Five online questionnaires were made to research the situation from educators' point of view. Professionals employed at early childhood education and care, basic education, music education, upper secondary education and adult education, higher vocational education and higher education were included in the survey. The goal was to assess professionals' experiences with persons with autism, knowledge about autism, evaluation of situation in the field of education for people with autism, self-evaluation of skills for working with people with autism and their need of further education. Data provides insight into the needs and challenges respondents face in their daily practice with people with autism. Findings show that professionals at different levels of education want to gain additional skills and support to work more successfully with people with autism. Participants in the survey will have the opportunity to take part in free training sessions based on the data collected. The results will form the basis for the development of a model of help and support for educators in the field of autism.*

**Keywords:** education, autism, educators' needs, VIS A VIS



# AUTISM RESEARCH

## SCHOLARLY PANEL

### AGE OF AUTISM SPECTRUM DISORDERS (ASD) DIAGNOSIS AND ASSOCIATED FACTORS

Irena Stojanovska, Researcher

Vladimir Trajkovski, PhD, Professor

Institute for Special Education and Rehabilitation, Faculty of Philosophy, Ss. Cyril and Methodius University, Macedonia

#### ABSTRACT

*Introduction* The mean age of ASD diagnosis varies globally and the factors affecting it are inconsistent across populations and studies. We undertook quantitative research to investigate the age ASD was diagnosed and some possibly related factors, in a sample from Macedonia. *Methods* A web-based survey was conducted among 103 parents of 103 individuals with ASD, from December 2021 to May 2022. Socio-demographic characteristics of parents/families and demographic and medical characteristics of individuals with ASD were reported by means of an anonymous questionnaire. Descriptive statistics and non-parametric inferential statistical tests were used to analyze data. *Results* The median age of the ASD sample was 10 years and most individuals (47.57%) had moderately severe ASD. In 39.81% ASD was diagnosed by a psychiatrist/neuropsychiatrist, in 37.86% by several professionals, while pediatricians/developmental pediatricians were the source of diagnosis in only 2.91%. Over half of the individuals with ASD (51.46%) received the diagnosis before the age of 4, while around 17% received the diagnosis after the age of 6. The level of education of the parents, family living location, gender, current age and severity of ASD were not found to be associated with the age of diagnosis. *Conclusion* Nearly 1/5 of our sample was diagnosed rather late at school age. However, characteristics pertaining to parents/families and to individuals with ASD, did not significantly affect the age of diagnosis. Possible influence of other, external factors (e.g., awareness and vigilance among professionals, availability of early screening programs) is acknowledged and will be included in further research.

**Keywords:** autism spectrum disorders, diagnosis, age, severity, parents

# ANCIENT ORIGINS OF AUTISM SUSCEPTIBILITY GENES

**Emily L. Casanova**, PhD, Assistant Professor  
Loyola University New Orleans, United States

## ABSTRACT

*Much of the genetics research on autism has focused on gene variations and their relevance to molecular and/or clinical phenotype. My lab, however, has been investigating evolutionary patterns in susceptibility genes. We have found that the radiation patterns of autism susceptibility genes vary significantly compared to background genome. A large proportion of autism genes arose during early vertebrate evolution, likely as a result of the two whole genome duplications (WGD) that occurred in stem vertebrates. Likewise, these same genes exhibit more protein-protein interactions (PPI) and have unusually high ExAC pLI scores, both suggesting a high level of sequence conservation in autism genes. When looking at Evolutionary Rates (ER) across Metazoa in OrthoDB, autism genes have significantly lower ER, further supporting these findings. These results suggest that autism susceptibility genes are particularly ancient, tightly conserved over long periods of time, and may have arose during key periods of nervous system evolution.*

**Keywords:** autism genetics, evolution, vertebrates

# KNOWLEDGE OF AUTISM SPECTRUM DISORDERS IN EMERGENCY SERVICES

**Urška Mikuž**, PhD, Assistant Professor

**Marta Macedoni Lukšič**, PhD, Assistant Professor

Autism Institute Ljubljana, Slovenia

**Jernej Vidmar**, PhD, Assistant Professor

University Medical Centre Maribor, Division of Pediatrics, Unit for pediatric and adolescent psychiatry, Slovenia

## **ABSTRACT**

*Autistic spectrum disorders, which manifest as altered behavior in the areas of social interaction, verbal and non-verbal communication, and imagination, are one of the fastest growing developmental-neurological disorders. The purpose of research was to explore how much firefighters, police officers, and healthcare professionals know about Autism Spectrum Disorders, whether they have ever been involved in any training on this topic, and how competent they feel in the case of having to assist or rescue a person with Autism Spectrum Disorders during an intervention. Data was obtained on the sample 192 respondents by combined research method with survey questionnaire and interview. It was concluded that the survey respondents were well acquainted with the characteristics of Autism Spectrum Disorders. However, only 8,8% of the respondents feel well or very well prepared in the case of helping a person with Autism Spectrum Disorders. More than 80% of the respondents want to be provided with an Autism Spectrum Disorders training and would actually attend the same, while 73,5% of the respondents consider such training important or very important. The research carried out within the master's thesis is the first to provide proper insight into this field in Slovenia and offers many opportunities for further research.*

**Keywords:** autism spectrum disorders, firefighters, police officers, healthcare workers, training

# RECREATING AN AUTISM IDENTITY

**Digby Tantam, PhD, Professor**  
Existential Academy, London, United Kingdom

## **ABSTRACT**

*Autism is changing. There is a much greater demand for diagnosis by adults with autism, and this has resulted in the widening of the criteria to include many people with other neurodevelopmental conditions, to the exclusion of people with the neurodevelopmental condition of intellectual disability. There is a movement to reintroduce 'types' of autism, such as 'profound autism' to re-include children with intellectual disability. The epidemiology of autism is suspect because of this diagnostic widening. It is assumed that autism is a life-long condition, but there is surprisingly little evidence for this. Little account is taken of the bullying and social rejection that people with autism almost always experience. So emotional difficulties in autistic people are considered to be a core part of the syndrome, rather than a consequence of the nonverbal communication disorder that is a core part of the syndrome. Associated language difficulties have led to the proliferation of hypotheses that autistic people lack a theory of mind, but this narrative ability looks likely to be language related rather than autism related. Finally, autism is becoming an identity for some who consequently strongly resist the notion that it is a pathology. At my higher education college we have an MSc in Autism and Related Neurodevelopmental Conditions, plus a PG Certificate in Autism Assessment (both awarded by Middlesex University, which is based in the UK). The latter provides an academic alternative to the US credentialling process and follows detailed guidelines from the UK Department of Health for the qualifications required of a National Health Service staff member working with autistic people. I am dubious that these procedures will be enough to ensure standardisation of diagnosis. But we have been living with a comparable uncertainty about what constitutes the condition known as schizophrenia for well over a century. Maybe we need to consider that we are not dealing with diseases but a cluster of closely related, although still not well understood, disabilities.*

**Keywords:** autism, identity, National Health Service, UK

# SOCIAL SKILLS IMPORTANT FOR THE FUNCTIONING IN SCHOOL: TEACHER'S AND SPECIAL EDUCATOR'S PERSPECTIVE

**Branislav Brojčin**, PhD, Professor

**Slobodan Banković**, PhD, Professor

Faculty of Special Education and Rehabilitation, University of Belgrade, Serbia

**Ivana Vasilevska Petrovska**, Vice-president

Macedonian Scientific Society for Autism, Macedonia

**Marina Antonijević**, Expert

**Aleksandra Bukovica**, Expert

Primary School „Miloje Pavlović“, Serbia

**Vladimir Trajkovski**, PhD, Professor

Macedonian Scientific Society for Autism, Macedonia

## ABSTRACT

*Introduction: Teachers, especially in inclusive environments, are expected to take the initiative in working to improve the social functioning of students with disabilities. The aim of this study is to determine which social skills are considered important for the functioning of students in a school context by regular teachers who have students with autism spectrum disorder in their class and special educators in special schools. Method: The sample includes 57 special educators from special schools and 33 regular teachers. The study used the teacher form The Social Skills Improvement System (SSIS). Results: Among the proposed skills, both teachers and special educators attach the most importance to cooperation skills and some aspects of responsibility. Although to a lesser extent, respondents agree that it is important for a student to know how to ask for help in an appropriate way (assertiveness). The respondents differ significantly only in terms of skills related to empathy, with teachers attaching greater importance to these skills in comparison to special educators. Conclusion: The obtained results suggest which skills students who have difficulties in spontaneous acquisition of social skills should be explicitly taught in order to successfully function in school, regardless of the educational environment they are attending.*

**Keywords:** social skills, autism spectrum disorder, teachers, special educators, inclusive education.

# AUTISM – ROUNDTABLE

## OVERVIEW OF SPECIALISED TRAINING PROVISIONS FOR PROFESSIONALS SUPPORTING PEOPLE WITH AUTISM SPECTRUM DISORDERS (ASD) IN AUSTRALIA

Trevor R. Parmenter, PhD, Emeritus Professor  
Sydney Medical School, University of Sydney, Australia

### ABSTRACT

*Despite the rapid increase in the numbers of children and adults with the diagnosis of ASD in Australia, universities historically have provided limited opportunities for the training of professionals who wish to specialise in this field. Undergraduate and postgraduate programs in psychology, speech therapy, occupational therapy, and rehabilitation contain curriculum aspects which may be pertinent to the support of people with ASD. For people directly supporting people with disability in community living and employment agencies, limited training opportunities are provided by technical colleges. Several Australian universities now provide a Graduate Certificate and Masters in Autism Studies programs enabling graduates to register as a Developmental Educators. These are approved professionals who support individuals on the autism spectrum and their families to achieve their individual developmental, social, and learning goals. Government policy support research into the diagnosis and assessment of ASD has formerly preceded training. Prominent are the Griffith University Centre for Excellence and the Olga Tennison Autism Research Centre at La Trobe University. Autism CRC was established in 2013 under the Australian Government's Cooperative Research Centre (CRC) Program, as the world's first national, cooperative research effort focused on autism across the lifespan. The dearth of appropriately trained professionals has presented a serious challenge for the ASD community in Australia, but the recent emphasis on training is helping to bridge the gap.*

**Keywords:** autism, training, research

# SUPPORTED STUDENTS WITH ASD GOING TO COLLEGE

Fred R. Volkmar, PhD, Professor  
Yale University  
Southern Connecticut State University, United States

## ABSTRACT

*With earlier detection and provision of more effective evidence-based treatments, more and more students with ASD are entering colleges and universities. This group often has many areas of strength in terms of specific academic areas of interest and excellence, but unfortunately, they also face a number of challenges. This presentation will focus on how college staff (both educators and college life staff) can support students with ASD in the classroom. It should be noted that a number of transitional support programs, a few with some empirical data to support their effectiveness, have now appeared. Essentially supports focus on the two different major areas of college life. In this presentation, we will primarily discuss academic support and the challenges and needs of students with ASD in the college setting. In addition, we will also touch on the major needs in terms of adaptive skills, executive functioning supports, and mental health needs frequently seen in this group of individuals.*

**Keywords:** ASD, students, college, social support

# STATE OF EDUCATION ON AUTISM IN UNIVERSITIES

**Nicola Martin, PhD, Professor**

Interim Co-Director of Research Centre for Social Justice and Global Responsibility

School of Law and Social Sciences, Education Division, London South Bank University, United Kingdom

## ABSTRACT

*Autistic students and staff encounter multiple barriers in UK universities despite legislation such as the Equality Act 2010, which specifies the requirement to make reasonable adjustments for disabled learners and employees. The number of officially recorded autistic university students is increasing rapidly and is not necessarily representative of the true picture as access to adult autism diagnosis in the UK is patchy, to say the least. Principles of Universal Design for Learning (UDL) represent good autism practice and make university easier to navigate for all students. The acronym REAL is a good way to articulate UDL principles. It stands for reliable, empathic, anticipatory, and logical practices which benefit everyone. Despite the Equality Act, autistic employees rarely circumvent the myriad barriers to fair academic employment, yet many autistic academics carry out post-doctoral research independently. This situation is not fair, and increasingly autistic scholars are self-organising into groups such as The Participatory Autism Research Collective (PARC). PARC puts pressure on funders to specify that autism research should be carried out by properly employed autistic scholars. Research Groups such as London South Bank Universities Critical Autism and Disability Studies Research Group (CADS) specify that all funded research will work this way. The study of autism is part of the curriculum and research landscape in many disciplines, and the two main approaches are influenced by the social and medical models of disability. Social model thinking is about understanding that there is nothing wrong with being autistic and that disabling socially constructed barriers are the problem which needs to be understood and addressed. Medical model thinking seeks to understand the causes of autism, which is viewed as a deficit, and think about ways in which autism can be fixed. My research, teaching and work with autistic colleagues is influenced by social model thinking and principles of social justice. Some of the best people I know are autistic, and society could do better.*

**Keywords:** autism, students, curriculum, UK



# HOW TO SUPPORT AND IMPLEMENT SOCIAL SKILLS FOR TEENAGERS ON THE SPECTRUM: THE IMPORTANCE OF MIXED PEER-TO-PEER GROUPS WITH NEUROTYPICAL HIGH SCHOOL STUDENTS

**Paola Molteni**, PhD, Researcher  
Università Cattolica del Sacro Cuore, Italy

**Alessandra Ballarè**, PhD  
Autism Center, Cascina San Vincenzo, Italy

**Elena Zanfroni**, PhD, Professor

**Silvia Maggolini**, PhD

**Luigi d'Alonzo**, PhD, Professor  
Università Cattolica del Sacro Cuore, Italy

## ABSTRACT

Recent research works have enlighten the importance of involving non-autistic peers in social groups to develop a peer-to-peer coaching experience in practicing the real skills the pupil has developed in therapy sessions. Since 2008 the Autism Centre "Cascina San Vincenzo" NGO supports individuals on the Spectrum and their families in improving their quality of life through therapy, consultancy, and social groups; in 2022 the Centre team has developed a partnership with the Scholastic District involving high school students in conducting their PCTO (Training for Transversal Skills and Orientation a mandatory activity for high school students) participating in social groups with peers on the Spectrum. CeDisMa Research Centre at the Università Cattolica del Sacro Cuore has observed and measured the impact of this experience, presented in this panel discussion. *Methods:* Our research investigated the impacts of conducting three mixed social groups with teenager peers both on the Spectrum and neurotypical. We conducted a literature review; conducted interviews with non-autistic students from high school involved in PCTO training experience (n=6) and their professors (n=3); asked parents (n=20), individuals on the spectrum (n=15) and professionals (n=8) to complete a questionnaire. The impact on social ability and cooperation was measured using CCOS (Cooperation and Communication Observation Schedule - Travaglione et al.) in all three groups, with pre-assessment and follow-up after nine months. *Findings:* The strategy of involving peers not on the Spectrum had a profound impact on the pupils supported at the Centre and on the social group's experience. The research data enlightened (i) the improvement of social skills acted in daily life experiences; ii) the strengthening of self-confidence and self-esteem in social capability and cooperation with others; iii) the rise of awareness in high school students about autism, neurodiversity, and inclusion. *Conclusions:* The implementation of social coaching experiences and groups mediated by specialists and educators is of high importance to support the inclusion of teenagers on the Spectrum and it can be a fundamental experience for work and life skills. There is a need for the development of the following actions: more support for the students on the Spectrum in experiencing social skills in daily life, training for education staff on social coaching and peer-to-peer group mediation, better links between rehabilitation/therapy centers and schools, and improved resources to provide safe spaces.

**Keywords:** autism, inclusion, social coaching, education, peer-to-peer group

# TRAINING IN AUTISM EDUCATION: PERSPECTIVES FROM HIGHER EDUCATION IN SWEDEN

Jakob Åsberg Johnels, PhD, Associate Professor  
Institute of Neuroscience and Physiology, University of Gothenburg, Sweden

## ABSTRACT

*In the talk, a Swedish perspective on current trends in research and practice within the field of autism and autism education will be provided. An overview will be given of how training in this area is typically organized in the Swedish higher education system and further/specialist education for future or practicing teachers and educators. In this context, several key topics will be covered, including the increasing prevalence of autism, the policy and ideological landscape that shapes practices in higher education and teacher training, the issue of social versus medical/individual conceptualizations of school difficulties, inclusive education, and the important role of trust and collaboration skills among different professionals and between professionals and families in order to serve student needs. Finally, the concept of ESSENCE (Early Symptomatic Syndromes Eliciting Neurodevelopmental Clinical Examinations) will be presented, which highlight the multitude of "comorbid" difficulties (and also strengths) typically present in individuals with autism, a fact that has important ramifications for training in autism and autism education.*

**Keywords:** autism, ESSENCE, Sweden, school, higher education, professional development.

# SARCOPENIA

## EXPERT PANEL

### DEALING WITH SARCOPENIA IN COMMUNITY DWELLING ELDERLY IN BELGIUM

Sahar Kharaghanipour, Staff Member

Cindy Lermytte, Staff Member

White and Yellow Cross West flanders Belgium, Belgium

#### ABSTRACT

*There has been a growing interest in sarcopenia research in Belgium in recent years. As the aging population in Belgium continues to grow, there is a need for better understanding of the causes and consequences of sarcopenia, and for effective interventions to prevent and treat the condition.*

*In response to this need, researchers in Belgium have conducted a number of studies on sarcopenia, focusing on topics such as the prevalence and incidence of sarcopenia, the impact of physical activity and nutrition on muscle health, and the efficacy of various interventions for sarcopenia. Some of these studies have been conducted in collaboration with international research partners, and have contributed to the global body of knowledge on sarcopenia. While more research is needed to fully understand the complex processes underlying sarcopenia, the work being done in Belgium is helping to advance our understanding of this important issue. The prevalence of sarcopenia is increasing due to the aging population and the associated decline in physical activity levels. The prevalence of sarcopenia of individuals over the age of 65 in Belgium varies greatly among different populations, with estimates ranging from 1-29% among elderly individuals living in their homes, 14-33% among those residing in elderly care homes, and 10% among hospital patients. The „Richtlijn Sarcopenie“ (Guideline for Sarcopenia) is a set of recommendations for healthcare professionals in Belgium on the diagnosis, prevention, and management of sarcopenia in older adults. The guideline provides evidence-based information on the causes, consequences, and risk factors for sarcopenia, as well as recommendations for exercise, nutrition, and medication interventions to manage the condition. The guideline is intended to help healthcare professionals in Belgium provide the best possible care to older adults with sarcopenia, and to promote healthy aging and independence. The guideline is updated regularly to reflect new research and advances in the field.*

**Keywords:** sarcopenia, prevalence of sarcopenia, guideline for sarcopenia, nutrition, aging population

# DIAGNOSING AND TREATING SARCOPENIA - PERSPECTIVES FROM DENMARK

**Niklas Grundt Hansen**, Physical Therapist

Danish Society of Physiotherapists in Gerontology and Geriatrics, Denmark

**Katrine Storm Piper**, Physical Therapist, PhD Candidate

Department of Occupational Therapy and Physiotherapy, Copenhagen University Hospital, Rigshospitalet, Denmark

## ABSTRACT

*Sarcopenia is the combined presence of reduced muscle strength, muscle mass and function, which mainly comes with ageing, disease and sedentarism. It is reported for almost one-third of community dwelling elderly people. Recent estimates indicate, that more than 50% of people, 80 years or older, could be affected by sarcopenia. It is associated with increased odds of loss of physical function and independence, falls and fractures, and in the worst case scenario death. In addition, sarcopenia related health care costs are already extensive, and expected to rise with the continued increase of older people. In Denmark, most of the major hospitals have started screening for sarcopenia in the geriatric population. The lecture will present perspectives of these tests done in the Danish capital region, along with a presentation of the Danish national clinical standards in physical therapy for treating sarcopenia and other diseases and syndromes seen in the geriatric population.*

**Keywords:** sarcopenia, geriatrics, gerontology, physiotherapy

# E-SARC: DEVELOPMENT OF A TAILORMADE COMPREHENSIVE TRAINING CONCEPT ON SARCOPENIA FOR HEALTH CARE WORKERS

Lien Van den Broeck, Researcher, FoodLab Coordinator

Annelien Desplenter, Researcher

VIVES University of applied sciences, Belgium

## ABSTRACT

*Sarcopenia, an age-related loss of muscle mass and power, was recently recognized by the WHO as a disease. European consensus on sarcopenia is very recent. Currently no courses for general practitioners or health care workers exist across European borders. There is a high need for knowledge and new skills among different target groups in order to deal with sarcopenia in a similar way. The EU would benefit from comparable courses. There is a great need to create comprehensive teaching units within valid EU-systems. Many stakeholders are dealing with sarcopenia (in research, in the working field, ...) however often only one single topic has been focused on, while sarcopenia asks for a multi-factorial approach. Furthermore, no translation of research findings or practical experiences from the working field has been brought together and translated into good training concepts and education. There has been more attention for online learning or a combination of both traditional education and online training. This Erasmus+ project (KA2) aims for; increasing knowledge and skills among health care workers on the new but very relevant topic of sarcopenia developing new training concepts in line with the most recent standards of online learning bringing together different fields of expertise disseminating the obtained results to a diverse group of health care workers (GPs, nurses and physiotherapists)*

**Keywords:** sarcopenia, research project, health care, european context

# NUTRITIONAL ASPECTS IN THE PREVENTION AND TREATMENT OF SARCOPENIA

Annelien Desplenter, Researcher

Lien Van den Broeck, Researcher, FoodLab Coordinator  
VIVES University of applied sciences, Belgium

## ABSTRACT

*Sarcopenia is a condition characterized by the gradual loss of muscle mass and strength in older adults. It is a major public health concern as it leads to decreased mobility, increased risk of falls, and a reduced quality of life. The prevention and treatment of sarcopenia is multifactorial, involving a combination of exercise, protein intake, and other nutritional interventions. One of the key nutritional aspects in the prevention and treatment of sarcopenia is protein intake. Adequate protein intake is essential for maintaining muscle mass and strength, and research suggests that older adults may require more protein than younger adults to maintain muscle mass. In addition, the timing of protein intake is also important, as consuming protein in the post-exercise period has been shown to be more effective at promoting muscle protein synthesis. The prevention and treatment of sarcopenia requires a comprehensive approach that includes exercise, protein intake, and other nutritional interventions. Adequate protein intake is crucial for maintaining muscle mass and strength.*

**Keywords:** sarcopenia, protein intake, nutrition

# SARCOPENIA: GENERAL PRACTITIONERS AND THEIR NEEDS

**Paula Cengiz**, Expert

**Maria Pencheri**, Expert

**Tong Zhu**, Expert, EQuIP  
Denmark

## ABSTRACT

*Objectives: To understand how we can better support the General Practitioners (GPs) in Europe in their work with sarcopenia, we aimed to identify which are the barriers, challenges and needs GPs face in their work, and what could be the possible solutions to these issues. Methods: Data was collected via semi-structured interviews (two focus groups and one interview) with 7 GPs and researchers / professors practicing in 5 different countries in Europe (Luxembourg, Norway, Serbia, Spain, and Turkey). A topic summary was conducted. Results: The topic summary revealed that GPs are overloaded with work, tired, and overwhelmed by the amount of information and possibilities, making them in need of very simple tools that are easy to perform and easy to record in the medical journal. In addition, GPs emphasized the need of economic and community resources to treat patients and stressed the importance of tailored materials about sarcopenia designed for various target groups, such as patients and caregivers. Discussion: A selection of validated guidelines, resources, and tools, and the development of a precise diagnostic criteria can assist GPs to be more effective and efficient in their work with sarcopenia. It is of uttermost importance that the tailored materials are simple, attractive, and culturally and locally adapted. Also, identifying the community resources and establishing transdisciplinary and multidisciplinary collaborations with other specialists and sectors can contribute to a more productive approach to treating and preventing sarcopenia. Conflicts of interests: The study is part of \_E-Sarc, an Erasmus +, EU-funded project, with the grant agreement no. KA220-VET. The authors declare no conflict of interests.*

**Keywords:** focus group interviews, sarcopenia, general practice

# SCHOLARLY PANEL

## ASSESSING MUSCULOSKELETAL HEALTH IN OLDER ADULTS USING TENSIOMIOGRAPHY

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Alma Mater Europaea – ECM, Slovenia  
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### ABSTRACT

*Objective: Aims of this review were to: a) establish a reference values for the main tensiomyographic (TMG) parameters measured in older adults; b) summarise the evidence-based usefulness of the TMG assessment in older adults and; c) to provide future directions for the use of TMG in this specific population. Data sources: A systematic review was conducted using PubMed, Web of Science and SportDiscus and TMG database from inception to 25th of December 2022. Study selection: The following inclusion criteria were used to determine eligibility for studies: 1) sample older than 60 years and 2) measured parameters of contraction time (Tc) and maximal displacement (Dm). In total, nine studies fulfilled inclusion criteria. Data extraction and synthesis: Data were extracted by two reviewers and checked by a third reviewer, independently. TMG has been used to assess contractile parameters of different muscles on different groups of older adults: healthy regularly active, master athletes, patients with peripheral arterial disease and patients undergoing total knee. Most tested were leg muscles: vastus lateralis and biceps femoris. Conclusions: The present review demonstrates that TMG is used to assess neuromuscular function in healthy and diseased older adults. We believe that TMG might serve as a valuable tool for assessing neuromuscular function in older adults diagnosed with other ageing related diseases. Therefore, further efforts to evaluate diagnostic accuracy and early onset of certain diseases are warranted.*

**Keywords:** skeletal muscle, ageing, tensiomyography, TMG, sarcopenia



# FIGHTING SARCOPENIA WITH RESISTANCE TRAINING: THE DUAL BENEFITS OF EXERCISE

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Alma Mater Europaea – ECM, Slovenia

**Boštjan Šimunič**, PhD, Professor

Science and Research Centre Koper, Slovenia

## ABSTRACT

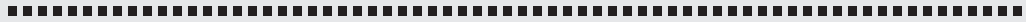
*Sarcopenia is a decline in skeletal muscle mass and function with age, characterized by muscle weakness. Resistance training (RT) can improve muscle strength and mass and it is a useful tool in preventing and treating sarcopenia. When developing RT programs for older adults it is important to consider: frequency, duration, exercises, sets, intensity, repetitions, and progression. Proposed frequency is between 2-4 days a week, typically with at least 48 hours in between session of the same muscle group. Suggested duration is between 30-60 minutes, however it may vary due to different rest time between sets. One to two exercises per each major muscle group are advised and large muscle groups should be trained before smaller ones. Multi-joint exercises are advised due to their functional application and for beginner's use of resistance machines is suggested over free weights. One to three sets of one exercise at 65-75% of maximum intensity are advised for strength improvement. Suggested number of repetitions per each set is inversely related to intensity - at 80% intensity, general population could perform 8-15 repetitions. Musculoskeletal adaptations will show with progression with each one of mentioned characteristics. In conclusion, supervised RT provides significant benefits in terms of muscle strength and physical performance in older adults with sarcopenia and those at risk for sarcopenia. It should be tailored to meet the specific needs of everyone and incorporated into a comprehensive approach to healthy aging.*

**Keywords:** sarcopenia, resistance training, older adults, muscle strength





# HEALTH SCIENCES





# SCHOLARLY PANEL

## PERCEPTIONS OF HOSPITAL SERVICE USERS ABOUT NURSING CARE PROVIDED

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**Arlinda Ramaj**, Specialist at epidemiological and environmental health department

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### ABSTRACT

*Shkodra Regional Hospital has over 390 nurses who provide nursing care to its users. The purpose of this study was to identify the perceptions of hospital service users about the nursing care provided, related to age, gender and ward. Methodology: Cross-sectional methods were used, following a quantitative approach. During the study, the following components were evaluated: Psychological dimension, how much attention is paid to the psychological aspect by nurses; The physical dimension, how much attention is paid to the physical aspect; the dimension of communication, how much attention is paid to communication with patients. The people who participated in this study were users of the nursing services of Shkodra Regional Hospital. For this purpose, a focus group was used. Discussions and conclusions: users' perceptions of the care provided by nurses at the Shkodra Regional Hospital differ depending on the ward where the users receive service, depending on age and gender.*

**Keywords:** nurse, hospital service user, hospital, care

# ESPECIALLY DANGEROUS VIRAL INFECTIOUS DISEASES OF ANIMALS STILL GREATLY THREATEN EUROPE: AN OVERVIEW OF LAST TWO DECADES

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## ABSTRACT

*In the last two decades, many animal viral diseases that are considered exotic or are only present in less developed countries have been introduced into Europe. In 2001, a large epizootic caused by the foot-and-mouth virus was recorded in Great Britain. Between 1998 and 2003, bluetongue disease occurred only in Mediterranean countries, but after 2006, many outbreaks were recorded in the countries of central and northern Europe, caused by different serotypes of the virus. In 2007, the African swine fever virus (genotype II) was introduced into Georgia and in the following years, it appeared for the first time in Lithuania, Latvia, Estonia, and Poland. The disease spread mainly through infected wild boars and domestic pigs in the direction of the central part of Europe and towards the east, to Russia, China, and Asian countries, in total more than 70 countries of the world are affected. The lumpy skin disease virus was introduced to Turkey in 2013 from the infected countries in the Middle East, and from there to many countries in the Balkans, causing numerous outbreaks between 2015 and 2017. During the outbreaks of the listed diseases, the veterinary capacities were tested for their ability, and it was shown that, in addition to the administrative veterinary service, it is necessary to have a sufficiently large number of qualified field veterinarians who cover the additional activities of animal health care for the successful eradication of the disease. Research organizations, institutes, and faculties are also an important part of capacities, implementing the interdisciplinary approach with the inclusion of students into research work and daily activities. The emergence of an especially dangerous infectious viral disease always causes great economic damage and breeders are suddenly faced with restrictions due to the implementation of numerous measures to eradicate the disease.*

**Keywords:** viruses, infections, dangerous diseases, measures, transmission

# THE ROLE AND EMOTIONS OF NURSING STAFF IN COERCIVE MEASURES AND EMERGENCY PSYCHIATRIC CONDITIONS

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## ABSTRACT

*Introduction: The implementation of a coercive measure in psychiatric intensive care units with a particular focus in geriatric patients were studied. Methods: The translation of "The Perceptions of Restraint Use Questionnaire" (PRUQ) was used. Data on the feelings of the nursing staff during the implementation of the coercion measure were collected. The Hi-square, Kolmogorov-Smirnov and Shapiro-Wilk test were used. Results: 42 nurses were included. Results for frequent causes of coercion on a geriatric unit were catheter retraction, fall prevention, or feeding tube withdrawal. Geriatric nursing staff are less likely to experience anxiety ( $p = 0.003$ ) and more likely to feel discomfort ( $p = 0.003$ ). A statistical significance was observed between the punishment and dangerous locomotion ( $p = 0.04$ ) as well as between the anger and the act of protecting staff or patients from physical violence/aggression ( $p = 0.05$ ). Respondents most often felt stress. Discussion and conclusion: The causes of coercion measures in the geriatric are different from younger people with mental disorders. In geriatric patients, the most common causes of coercion were to ensure safety at high risk of falling or injury or inability to participate in treatment. Stress was the pronounced feeling among the nursing staff, which was similarly described by previous Slovenian as well as foreign research.*

**Keywords:** agitated patient, de-escalation techniques, emergencies in psychiatry, geriatrics

# KNOWLEDGE AND BELIEFS ABOUT THE COVID-19 INFECTION AND VACCINATION AMONG PEOPLE OF SHKODRA REGION

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**Arketa Guli**, Lecturer

**Emiljano Pjetri**, PhD, Lecturer

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## **ABSTRACT**

*Research shows that receiving the COVID-19 vaccine is the most successful measure to combat the virus and could also address its indirect consequences. However, vaccine hesitancy was growing worldwide, and the WHO named this hesitancy as one of the top ten threats to global health. This is a transversal, cross-sectional study. The purpose of this study is to research/describe the knowledge of the population in the Shkodra region about Covid-19 and about the vaccine. The study period was April-September 2022. A questionnaire self-administered, anonymous conducted on the Google Form platform was used. The link was sent via WhatsApp to 500 participants. The data were elaborated with the Microsoft Office Excel 2010 program. Conclusion: Most parts of the population have basic knowledge about the Covid-19 infection and vaccination. People have heard of different types of vaccines. People believe that the vaccine can prevent the spread of infection, and 99,2 % of them think that vaccinated individuals can be reinfected. They know the side effects of covid-19 vaccines and how to alleviate them.*

**Keywords:** knowledge, Covid-19, vaccination



# EXPERT PANEL

## ASSOCIATION BETWEEN HEALTH LITERACY AND PREVALENCE OF OBESITY, ARTERIAL HYPERTENSION AND DIABETES MELLITUS

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**Božica Lovrić**, Lecturer  
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### ABSTRACT

*The aim of this study was to assess the association of health literacy with the prevalence of obesity, arterial hypertension and diabetes mellitus. Methods: This cross-sectional study included 500 patients (42.2% male), hospitalized at General County Hospital in Požega, Croatia, between July and October 2020. The level of health literacy was determined by use of the Short Assessment of Health Literacy for Croatian Adults (SAHLCA-50) questionnaire. Results: 173 (34.6%) subjects showed good health literacy. Overweight was recorded in 196 (39.2%) and obesity in 158 (31.4%) subjects. There was no statistically significant difference in health literacy according to body mass index ( $p=0.87$ ). A significantly higher level of health literacy was recorded in female subjects, subjects living in urban areas, subjects without arterial hypertension and subjects without diabetes mellitus ( $p < 0.001$ ). Conclusions: The lack of health literacy recorded in nearly two-thirds of study patients showed it to be a major public health issue in our society, as well as a connection with the prevalence of arterial hypertension and diabetes mellitus. However, the high prevalence of overweight and obesity, recorded in as many as two-thirds of study subjects, did not appear to be related to the level of health literacy.*

**Keywords:** arterial hypertension, obesity, diabetes mellitus, health literacy

# IMPROVING ICU SURVIVORSHIP WITH FAMILY-CENTRED CARE

Peter Kamničar, Lecturer  
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## ABSTRACT

*The ABCDE bundle, as it initially began, evolved to include the letter „F“ to represent family engagement as a core pillar of the bundle in facilitating patient-centred care. Patients’ family members are usually the ones who suffer the most when their loved ones are in the ICU. Namely, patients, on the other hand, are usually sedated and therefore mostly unaware of their critical condition. Family members should not be pushed aside but they should play an important role during treatment of their loved ones. Family-centred care in daily ICU practice represents a holistic model which emphasizes an empathic and respectful relationship between the healthcare team, patients and patient’s family members. The presence of family members in the ICU and incorporation of family engagement at the bedside allows for families’ questions and concerns to be addressed. Families therefore have increased feelings of inclusion and respect. When the communication between healthcare team and families becomes more frequent, family members can achieve better understanding of the patient’s care and treatment. Collaboration between family members and health care providers define care plans which improves outcomes at all levels – it improves healthcare team satisfaction, families become more effective caretakers and latter consequently leads to improved patients experience of care and better health outcomes.*

**Keywords:** ICU, family-centred care, ICU survivors, family, care provider collaboration

# INTERPERSONAL RELATIONSHIPS AMONG HEALTHCARE EMPLOYEES DURING THE COVID EPIDEMIC IN THE GENERAL HOSPITAL MURSKA SOBOTA

**Melani Čontala**, Employee in the Emergency Center

**Nataša Kreft**, Assistant Director for Nursing

**Bojana Jerebic**, Head Nurse of the Surgical Department  
General Hospital Murska Sobota, Murska Sobota, Slovenia

## ABSTRACT

*Theoretical guidelines: Covid-19 epidemic has profoundly changed the quality of life of all people worldwide. That is especially true for medical workers who have been exposed to completely new work conditions, new physical and psychological burdens. Methodology: Besides using the basic descriptive statistic, a quantitative method of research has been used. The sample taken in the research has included 162 nurses and people employed at the Splošna bolnišnica Murska Sobota Hospital. By analysing the results, a descriptive statistic with the frequency distribution, standard deviation, average values, the test of differences of arithmetic means, hi-square test, Mann-Whitney test and Wilcox test have been used with the Microsoft Excel and IBM SPSS 25 software. Results: Based on the Wilcox test we have found that the interpersonal relationship at the hospital's Head Department has been better ( $p = 0.001$ ) compared to the one which the participants have been assigned to during the Covid-19 epidemic ( $p < 0.05$ ). Also, the working conditions at the Head Department have been better evaluated (3.52) compared to the other department which the participants have been assigned to (3.22). The organizational climate in the parent department was rated with a mean value of 3.52, and in the department to which the respondents were assigned during the covid-19 epidemic, it was rated with a mean value of 3.31. Discussion: Despite all the efforts, most of the nurses did not think of leaving their workplace, which shows the commitment of nurses to their profession and organization, regardless of the difficulty. During the Covid-19 pandemic, nurses experienced increased physical and mental stress in their work, but nevertheless provided quality and safe nursing care in accordance with the doctrine.*

**Keywords:** SARS-CoV-2 virus, covid-19 epidemic, nurse, interpersonal relations

# PREVALENCE OF CIGARETTE SMOKING AMONG NURSING STUDENTS

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## ABSTRACT

*Background: Smoking among nursing students is a serious public health problem, also because of their role as future health professionals. The purpose of the research is to estimate the proportion of smokers and to investigate risk factors that may contribute to smoking among nursing students. Methods: A cross-sectional survey among nursing students was conducted using a modified standard questionnaire „Health-related lifestyle“. Data were collected non-randomly between April and May 2020. Results: 357 nursing students were included in the research, of which 85.2% were women. The proportion of smokers among nursing students was 21.3%. The median age at smoking initiation was 16 years (95% CI [16;16]). On average, regular smokers smoked 10.15 cigarettes per day (95% CI [8.88;11.43]). The proportions of smokers increased with increasing number of friends who smoke ( $p < 0.001$ ), increasing number of hours spent in an environment where someone smokes ( $p < 0.001$ ) and increasing frequency of alcohol consumption ( $p = 0.044$ ). Other statistically significant factors related to smoking status were smoking of at least one parent ( $p = 0.009$ ), smoking of siblings ( $p < 0.001$ ), physical activity ( $p = 0.023$ ), use of illegal drugs ( $p = 0.011$ ) and past use of electronic cigarettes ( $p < 0.001$ ). Conclusion: The prevalence of smoking among nursing students is high. Further study of smoking habits and factors influencing smoking prevalence among nursing students is essential to design appropriate smoking prevention and cessation interventions.*

**Keywords:** smoking, risk factors, nursing students, prevalence, public health

# RECOGNITION AND MEASURES OF EMERGENCY MEDICAL SERVICES IN SPINE INJURY IN A PREHOSPITAL ENVIRONMENT

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**Mitja Ploj**, Healthcare Technician  
Lenart Health Centre, Ambulance station Maribor, Slovenia

## ABSTRACT

*Introduction: In research we present the basis of the spine and spinal cord anatomy and physiology. All segments of the spine, basic spinal injuries and their cause of occurrence were presented. As well as injuries of each segment of the spine, emergency medical response for this type of injuries, approach and ITLS examination of the injured and most common immobilisation devices. The immobilisation procedure is also pictorially presented. Methods: A quantitative research method was used to conduct the study. A questionnaire was used as a measurement instrument, in which 70 paramedics from the Lenart Health Centre and the Dr Adolf Drolc Health Centre Maribor participated. All the results obtained were subsequently processed using Microsoft Excel. Results: The results showed that respondents do not encounter spinal injuries very often. Overall, they rated their knowledge of such injuries as good, as did that of their colleagues. The survey also showed that the paramedics surveyed would like to see more additional training in the recognition and care of spinal cord injured patients. The analysis showed that the majority of respondents were familiar with the corset for immobilising an injured person in the sitting position, most of them were familiar with the procedure for performing the modified triple manoeuvre, and they were also familiar with the indications for discontinuing the ITLS examination. The results were below average for the recognition of neurogenic shock, and the same for the question on the transport position of a highly pregnant woman with a spinal injury. However, satisfactory results were obtained for the contraindication of the "Log Roll" maneuver. Discussion: Spinal cord injuries are among the most serious trauma emergencies. Pre-hospital emergency medical teams are expected to recognise such conditions - and paramedics are expected to be confident and well-trained in intervening and dealing with such injuries. If not managed properly and professionally, they can cause additional injuries that can have a significant impact on the patient's lifestyle and quality of life.*

**Keywords:** injuries, spine, rescuers, measures, immobilization

# SURVIVAL AND RECOVERY AFTER ICU: A PATIENT'S PERSPECTIVE

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## ABSTRACT

*The aim of this article is to present my personal perspective on survival and recovery after ICU and to make a critical reflection on the process that comes after survival. Patients with serious or life-threatening illnesses and injuries that require constant care are hospitalized in ICU. As well from personal experience I can say that the critically ill undergo significant distress. We must stress that ICU patients have different problems once they leave ICU. One of them is Post Intensive Care Syndrome which can influence the life of patient and his/her family. Some of that distress is physical and it reflects in fatigue, intense discomfort that comes with ventilation and muscle weakness. The other type of distress which is very common is mental. Patients for example usually experience delirium which would be better described as nightmares, together with paranoid delusions. After leaving ICU patients must go through rehabilitation project which gives them ability to fully recover and regain the strengths. Physical distress is the one that is intensively treated, meanwhile mental distress is often left untreated. Patients, after being released from ICU, can experience different mental issues. From this point of view, it is as well important to pay attention to mental health of ICU patients.*

**Keywords:** ICU, patient's perspective, physical distress, mental distress, recovery

# STUDENT PANEL

## CERVICAL SPINE INJURY

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**Kralj Nino**, Student

**Mlakar Andraž**, Student

**Šparakl Darja**, Student

**Turin Žiga**, Student

Alma Mater Europaea – ECM, Slovenia

### **ABSTRACT**

*A lot of knowledge is required of the nurse and her role in nursing a patient with a cervical spine injury. As a nursing care provider, the nurse teaches and encourages the patient to achieve goals and improve their health. He can perform all the tasks required by health care independently, interdependently and in an interdisciplinary manner, which means that he also works with physiotherapists and occupational therapists. The main goal of the direction itself is to achieve high-quality medical care and care in all necessary areas. Clinical treatment of the injured person ensures an accurate, safe and reliable assessment of spinal injuries, and all the literature warns that it is necessary to treat any injured person with a suspected cervical spine injury as if it were a spinal injury, as the consequences can be fatal.*

**Keywords:** cervical spine injury

# THE IMPORTANCE OF FAMILY MEDICINE IN THE HEALTHCARE SYSTEM

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Edvard Jakšič, Senior Lecturer  
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## ABSTRACT

*Family medicine outpatient clinics are a part of the primary level of the public health service network, which is defined and provided by the local municipality. The primary care network provides quick and easy access, as close to the population as possible, and allows patients to make first contact with a doctor for an appropriate diagnosis and, if necessary, treatment of acute and chronic conditions. In addition to treatment, health promotion, and healthy lifestyles, counseling and patient education are also important, as they can help prevent the appearance of the disease. Family medicine was defined in 2002 by the European definition as an academic and scientific discipline with its own educational content, research, evidence base, and clinical specialization focused on primary care. Specialist doctors, specially trained in the basic principles, are family medicine doctors who have a responsibility to provide patients with holistic, comprehensive, and continuous care. They are also responsible for the care of individuals within their families and communities, always respecting the autonomy of patients and their professional responsibility to the community. Family medicine reference clinics, which are part of the family medicine outpatient clinics and where a registered nurse or graduate medical technician plays an important role, were launched in 2011 to meet the needs of the population. Successful treatment requires empathy, which has a positive correlation with burnout, which is also present in Slovenian family medicine doctors due to overwork.*

**Keywords:** family medicine outpatient clinic, public health service network, reference clinics, empathy



# THE POTENTIAL OF CANNABIDIOL AND OTHER CANNABINOIDS, IN TREATMENT AND MANAGEMENT OF ENDOMETRIOSIS SYMPTOMS

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**Tanja Bagar**, PhD, Assistant Professor  
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**Sara Korošec**, PhD, M.D., Assistant Professor  
Clinical Department of Reproduction, Department of Gynaecology, University Medical Centre  
Ljubljana, Slovenia

## ABSTRACT

*The endocannabinoid system (ECS) consists of endogenously produced bioactive lipids, such as anandamide and 2-Arachidonoylglycerol (2-AG), enzymes that synthesize and degrade endocannabinoids and cannabinoid receptors, such as CB1 and CB2. This system regulates many processes and plays a critical role in maintaining the homeostasis of the human body, which encompasses the brain, endocrine, and immune system. Changes in this system have been described in most chronic diseases, including endometriosis. It has been shown that endocannabinoids affect several mechanisms that are key to the formation and maintenance of endometriosis, such as: cell migration, cell proliferation, apoptosis, inflammation and interaction with steroid hormones. Published data also show that the use of cannabinoids is common in patients with endometriosis and that alleviate symptoms such as pain, uterine cramps, muscle spasms, anxiety and mood disorders, sleep disorders and irritability. Based on the literature we know that endometriosis is a multifaceted disease and cannabinoids, especially cannabidiol-CBD affects multiple levels of pathogenesis and disease progression. Endometriosis appears to be associated with downregulation of CB1 receptors and upregulation of TRPV1 receptors and has a strong inflammatory component in its pathogenesis, pointing to potential of cannabidiol. The aim of the review paper is to show that the endocannabinoid system is a pivotal target in treating endometriosis and its symptoms.*

**Keywords:** endometriosis, endocannabinoid system, inflammation, pain, cannabinoids, cannabidiol

# THE PROBLEM OF CANCEROUS DISEASES IN SLOVENIA

Larisa Šabec, Student

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Alma Mater Europaea – ECM, Slovenia

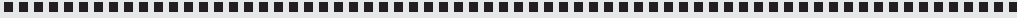
## ABSTRACT

*Cancerous diseases include various diseases that have in common the uncontrolled growth of cells, and they represent one of the main causes of mortality in developed countries. Cancer registries have made it possible to transparently collect data on incidence, its growth over the years, and data on patient survival. The Cancer Register has been operating in Slovenia since 1950. In 2012, Slovenia was ranked eighth among forty European countries in terms of both the incidence rate of cancer and the mortality rate. Annually, there are approximately 14,000 new cases of cancer in Slovenia, while approximately 6,000 cancer deaths are recorded. The burden of cancer has been increasing over the years, and predictions for the coming decades indicate an even greater increase. This will further increase the pressure on health care, while increasingly poor lifestyle habits and genetics will further burden individuals. The incidence of cancer is mostly influenced by environmental factors related to lifestyle, and to a lesser extent - genetics. The incidence of cancer increased from an average of 13,231 new cases in 2013 to 15,563 in 2019. The incidence rate rose from 445.1 new cases/100,000 population to 751.6 new cases/100,000, and the prevalence from 94,075 to 136,184. Non-melanoma skin cancer ranks at the very top of the frequency of occurrence. Among women, breast cancer is one of the most common, and although the mortality rate has been falling in recent years, it still represents a major public health problem. Among the more common cancers are lung cancer, pancreatic cancer, colon cancer and prostate cancer. The incidence is lower in tumours of the central nervous system, thyroid cancer and cervical cancer, the incidence of the latter has fallen sharply in Slovenia due to screening tests, increasing prevention and awareness. Cancerous illnesses in children are not very common.*

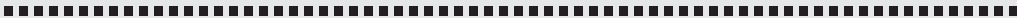
**Keywords:** cancer, cancer occurrence, incidence, prevalence







# LAW





# RESILIENCE OF THE POST-COVID LEGAL SYSTEM: ANALYSES FROM THE PERSPECTIVES OF DIFFERENT FIELDS

## SCHOLARLY PANEL

### CONSTITUTIONAL STANDARDS INSIDE AND OUTSIDE NORMALCY

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#### **ABSTRACT**

*In Hungary, the new constitutional story started in 2010 when the Fidesz-KDNP party coalition won two-thirds constitution-making majority in Parliament and adopted the Fundamental Law of Hungary. The new constitution, apart from its fundamental political goals, was intended to respond to the challenges of the financial crisis. Today we face a new challenge, the humanitarian catastrophe with the war in Ukraine in the shadow of the threat of the pandemic, and we are again in search of suitable constitutional answers within the framework of (illiberal) constitutional democracy. Constitutional democracies tackle the situations of danger very differently; some introduce a special legal order, some do not. Irrespective of whether the constitutional solution is within or without the normal legal order, the state must respect and protect human rights as much as possible. Regarding Hungary, many critics warned that the Fundamental Law will not be able to serve as a basis of a full-fledged democracy. The pandemic was a new challenge to Hungary, because the constitutional law, as a result of the new constitutional regime, had to function not in normal but in an extraordinary legal order. In the special legal order, according to the official justification of Article 54 para (1) of the Fundamental Law, „the exercises of the fundamental rights can be suspended or restricted more than prescribed in Art. 1. proportionality close. The special legal order is a deviation from the application of ordinary law. This deviation takes two directions: one is a different approach to human rights limitations, and the other is a different approach to the separation of powers in protecting fundamental rights. I will first provide quick information about the system of constitutional review and the protection of fundamental rights by the Constitutional Court in general and I will discuss the standards of rights protection in normalcy.*

**Keywords:** hungarian state of danger, special legal order, constitutional standards

# COVID-19 AND THE RESTRICTION OF FUNDAMENTAL RIGHTS

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## ABSTRACT

*Pandemic measures involve enhanced restriction of fundamental rights, affecting almost every part of societal existence. In this situation the constitutions acknowledge the need for speedy and effective actions, however, fundamental rights cannot be limited without boundaries. As other channels of fundamental rights protection are usually barred, it is primarily up to the courts to oversee whether the constitutional limitations are observed. Apex courts are therefore in a precarious situation; they need to oversee whether the balance between freedom and security is struck. This involves a plethora of dilemmas. In terms of the applicable tests, the question arises how the aforementioned balance could be struck in a way that is compatible with the requirements of necessity, proportionality and timeliness. As to the role of natural sciences in constitutional reasoning, it is also to be answered whether there is a way to integrate the results of natural sciences into the constitutional tests in a way that certain restrictions of rights are allocated to certain threats of infection. Moreover, if the violation is asserted, then what liability the state should be subjected to for the damage caused by unlawful measures? Our presentation examines these questions through the examination of the case-law of the Hungarian Constitutional Court in the pandemic period. Our inquiry employs a legal doctrinal analysis as well as a theoretical one, highlighting the contents and shortcoming of this jurisprudence.*

**Keywords:** COVID pandemic, fundamental rights limitations, necessity-proportionality test, role of scientific reasoning in legal argumentation



# LAW AND TECHNOLOGY IN THE POST-COVID SOCIETY: NEW CHALLENGES AND OPPORTUNITIES

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Boldizsár Szentgáli-Tóth, PhD, Senior Research Fellow

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## ABSTRACT

*Technological developments, which have a fundamental and often disruptive impact on the society and economy of our time, have a particular challenge for the legal system and directly affect its functioning. Modern technologies are transforming social and economic relations that were once considered familiar and redefining the framework of power, responsibility, and accountability, to which challenges the legal system as a whole and the different areas of law. Technological change also affects the way we know the law, have access to it, or apply it, and the institutional framework within which it is applied. The Covid-19 pandemic has particularly enhanced the role of digitalization. Therefore, the potential and legal risks of using modern technologies need to be increasingly considered in a post-Covid society. The new technologies will affect many areas and vital services that need to be made more efficient and accessible, such as healthcare, finance, public administration, and justice. Our research covers areas where either no regulation exists, or the applicability of current regulation is unclear, or regulation is in an experimental phase. Our results can be of direct use to the domestic regulatory process. As a member of the European Union, it is crucial for any member state to act as an innovative protagonist in regulation, as this will guarantee the maintenance of its regulation and the competitive advantage that provides. Our research in this area explores the potential for regulatory responses based on relevant societal expectations, fears, and perceptions, as well as the expectations of technology and industry actors. These will be explored and discussed especially in the context of industry and societal dialogues. Our research aims to formulate and strengthen the social and economic integration of the regulatory solutions, democratic control of innovation, technological development, and related industrial processes.*

**Keywords:** technological change, legal system, Covid-19 pandemic

# THE GAMES OF THE PANDEMICS AND THE LAW

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## **ABSTRACT**

*Covid-19 created numerous situations where the Game Theory predicts suboptimal equilibria, like for example wearing a mask in order to protect other people or taking a (low) risk of vaccination. These cases can be classified within the taxonomy of Game Theory. In this paper, we examine, how law influences individual suboptimal behavior and Nash equilibria in order to reach a (Pareto) optimal societal outcome. We also analyze the contrast between the individual character of legal norms, and the collective goals of the measures and policies, and the legal-constitutional limits of moves toward the optimum.*

**Keywords:** Game Theory, bystander effect, epidemiology and law

# UNPRECEDENTED PERSPECTIVES OF COMPARATIVE CONSTITUTIONAL LAW: CONSTITUTIONAL COURT CASE LAW DURING THE COVID19 PANDEMIC

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## ABSTRACT

*Our research project aims to map out the constitutional implications of the Covid-19 pandemic with a global database from the related constitutional case law. Several scholars have pointed out several legal aspects of the public health emergency during the recent months. Significant contributions have focused on the extra-ordinary restrictions on fundamental rights and also the separation of powers aspects of the crisis. The deeper understanding of the constitutional practice would lead to the reconsideration of several issues even in the theoretical and practical field concerning the scope and the extent of emergencies, the limitations on fundamental rights during these periods, on the separation of powers between the main constitutional actors under extra-ordinary circumstances, and also on the constitutional impact of a global pandemic. Therefore, our research group, comprised of constitutional lawyers and experts with relevant informatics and database-related knowledge, will establish a database from the constitutional court rulings linked to the extra-ordinary public health situation. This data set will serve as a key source for numerous further research projects.*

**Keywords:** *global database, constitutional case law, fundamental rights, constitutional impact of a global pandemic*

# ELECTION LAW IN EUROPE

## SCHOLARLY PANEL

### FOR PROPAGANDA WITHOUT DISINFORMATION: DRAFT EU REGULATION ON POLITICAL ADVERTISING

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#### **ABSTRACT**

*In 2023, the European Parliament adopted the proposal for a Regulation on the transparency and targeting of political advertising (RPA) which will be the first piece of EU legislation to directly address political advertising. The text of the RPA is explicitly designed to be another step in the consistent response of the Union to political disinformation "from abroad," that – through its messages – undermines the ability of citizens to "exercise their democratic rights in an informed manner". Disinformation is a means to an end, not an end in itself. Disinformation's raison d'être is to serve as an instrument, if not the instrument of propaganda. Political propaganda is a notion very close to political advertising. Both attempt promoting certain ideas and, if necessary, changing in their favour the opinions of individuals. Political advertising, disinformation and propaganda are an exercise of the right to freedom of expression. Under international law dissemination of information is prohibited, only if it amounts to propaganda for war of aggression or advocacy of hatred that constitutes incitement to discrimination or violence. It is generally irrelevant, whether such illegal information is false (disinformation) or truthful. The chapter debates emerging contradictions between the desire to stop disinformation from outside the Union, and freedom of expression commitments in Europe, it also suggests alternative mechanisms to regulate misleading political speech.*

**Keywords:** political advertising, propaganda, disinformation, European Union, regulation

# ELECTION LAW IN AUSTRIA

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## ABSTRACT

*The Austrian Federal Constitution regulates general elections at federal, Länder (regional) and municipal level which basically have to follow the same electoral principles (universal, equal, free, personal, direct, secret and proportional suffrage). Despite the general concept of electoral homogeneity, some specifications apply at subnational level, eg with regard to territorial restrictions or the possibility for non-Austrian EU citizens to vote or stand as candidates at local level to which they are not entitled at regional or federal level. Apart from separate remedies against irregularities in earlier phases of the electoral process, the Constitutional Court is competent to decide on electoral disputes. In particular, the Constitutional Court may set aside the results of an election if the procedure was illegal and if the illegality had impact on the electoral result. While the number of electoral decisions taken by the Constitutional Court is rather low, its judgment of 2016 in which the Constitutional Court declared the elections of the Federal President illegal was a landmark case in Austria's electoral history.*

**Keywords:** Austria, constitutional court, election law, electoral homogeneity, federal constitution

# ELECTION LAW IN SERBIA

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## ABSTRACT

*The basic elements of electoral system have been recognized in the Constitution Those are: universal and equal suffrage, free, personal and direct vote by secret ballot. Serbian Constitution does not specify the type of electoral system, but implicitly defines the proportional electoral system. The electoral legislation is not homogenous. The legal framework was significantly revised in early 2022, following two-inter party dialogue processes between the ruling parties and the opposition. Resolving the electoral disputes implies activation of different organs: electoral commission, courts, constitutional courts and Parliament. Administrative Court has a central role in resolving electoral disputes on national level. Constitutional Court has subsidiary jurisdiction in the resolution of electoral disputes. However, this jurisdiction is marginalized in practice, especially because there is no clear division of powers between Constitutional and Administrative Court. Serbia's first multi-party election took place in 1990. Then, elections were neither free nor fair. Nevertheless, over the past 23 years, the electoral process has been improved in accordance with international standards in the framework of Serbia's effort to join the European mainstream. One of the major deficiencies in this process is the lack of fairness, efficiency and transparency in electoral justice.*

**Keywords:** electoral system, electoral legislation, electoral disputes

# VOTING MATTERS: AN ANALYSIS OF THE USE OF ELECTORAL-ASSISTIVE DEVICES THROUGH THE LENS OF THE UN CONVENTION ON THE RIGHTS OF PERSONS WITH DISABILITIES

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## ABSTRACT

*This study adopts an evidence-based approach and a mixed research design to explore the de facto realisation of the right to vote by persons with disabilities on an equal basis with others through the use of voting technological solutions, under Article 29(a) of the UN Convention on the Rights of Persons with Disabilities (CRPD). This study, which is a contribution to the research in the field of political participation of persons with disabilities, has led to the following key findings. This study demonstrates the use of assistive technology in elections as a measure for achieving greater accessibility in the voting environment. The legal interpretation of relevant international human rights law provisions, and primarily Article 29(a) CRPD, revealed that anti-discrimination prohibitions applicable in the context of voting are only effective when implemented alongside equality measures.*

*After having comprehensively interpreted Article 29(a) CRPD, this study analyses how Article 29(a) CRPD has been implemented through law, policy, and practice in England and Spain. The analysis is based on the experiences of a small sample of voters with disabilities and election officials. The study demonstrated that implementation of Article 29(a) CRPD can be enhanced or constrained not only by national legislation and policy instruments but also by the practices of relevant social actors. These practices include people's understanding of disability itself. The study concludes that addressing the voids in law, policy, and national electoral system practices identified in this research would increase the chance of Article 29(a) CRPD's successful implementation in England and Spain. Therefore, this study contributes to our greater understanding of how Article 29(a) CRPD has been implemented in practice in these two countries. Nevertheless, the issues raised by this study's interpretative data analysis may also prove relevant to other countries.*

**Keywords:** equality of opportunity to vote, persons with disabilities, voting technological solutions

# IT IS ABOUT PRESERVING SLOVENIAN CULTURE - TERAN CASE (T-626/17)

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## ABSTRACT

*This paper analyzes the recently adopted judgment of the General Court of the European Union against the Republic of Slovenia against the European Commission (T-626/17), which deals with the issue of the origin of Teran. We were interested in the historical background of the Teran case study, how goes the procedure for action of annulment and what is the role of geographical indication in this verdict. Firstly, we examined the action for annulment under European Union law and later on, we use historical method to summarize the selected cases as judicial practice of the General Court. After presenting the facts, we also discussed the judgment using the methods of analysis. In the concluding part of the diploma work, we explained the reasons that led to the beginning of that trial of Slovenia against the European Commission. During the writing we propose three research questions, to which we found answers during the writing. Finally, we also summarized the responses to the judgment of both parties involved. It is important to be aware that the Teran is a symbol of Slovenian identity. Because we do not have a lot of similar icons, it is important that we are proud of them and fight for them.*

**Keywords:** action for annulment, general court, teran, european union, wine



# SHOULD THE LAW FIGHT AGAINST DEEPPAKE?

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## ABSTRACT

*Deepfake is one of the biggest challenges of our digital age, both socially and legally (Westerlund 2019). Faking people and events can even be live nowadays (Farish 2021). Although it has a historical precedent (retouching, censorship), it has never been seen on such a scale by humanity. Is this really the 'renaissance' of visual communication (Graber, Stenberg, Vaccari)? In the presentation, the two speakers will (1) introduce deepfake, (2) describe the effects of deepfake, and (3) seek to apply the tools provided by the law to remedy the problems. The presentation will discuss the role of artificial intelligence (Pantserev 2020) and the harmful and dangerous uses of deepfake in terms of effects (revenge porn, fake news). It will also provide a legal comparison of current and potential solutions. The presenters will identify deepfake as both a technological tool and a tool for political deception and outline the social and legal controversy surrounding it. The presentation will also focus on the most famous examples of deepfake, the regulatory attempts in the US in recent years (DEEPPAKES Accountability Act) and the solutions to the issue in the new European regulatory environment (Digital Services Act – Digital Markets Act) (trusted flaggers, monitoring, VLOP/VLOSE).*

**Keywords:** deepfake, legislation, artificial intelligence, deep learning



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# **SOCIAL INNOVATIONS - DEVELOPMENT OF SOCIAL INFRASTRUCTURE**

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# SCHOLARLY PANEL

## INTERGENERATIONAL DIFFERENCES BETWEEN MEMBERS OF RURAL COMMUNITIES IN THEIR ATTITUDES TOWARDS THE IMPORTANCE OF AGE-FRIENDLY COMMUNITY FEATURES

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**Marija Bogataj**, PhD, Professor

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### ABSTRACT

*Slovenia is belatedly following the World Health Organization, which launched an international movement in 2006 to promote active aging and build age-friendly communities by focusing efforts on the built environment, community development and care networks for all generations. It is necessary to collect the preferences of the population regarding what the communities and their built environment should be. We proceed from the assumption that views on the design of environments in which long-term care will be provided differ between generations. The purpose of our study was to examine differential views on the importance of individual factors for quality of life in the community as it ages. In April 2022 and February 2023, we conducted a survey among the inhabitants of the Slovenian countryside on how to organize the built environment, how the community and care networks for elderly citizens should function. We included 374 residents in the survey, of which 55% were 50 years old or younger, 36% of them were 51-80 years old and 9% of them were 81 years and older. Most of them believe that life in the countryside is better than in the cities, so they would prefer to stay in the countryside if they had the opportunity to get a job at home. However, they believe that legal frameworks and conditions in rural areas limit them. However, the results of the z+4 test show significant differences between generational age groups in all areas with the largest differences relating to preferences for housing, outdoor spaces and employment. We assume that the digital literacy influences it. The findings are important for the correction of the Act on long-term care (ZD0sk) and the support of local communities in the countryside, which are trying to prevent the emptying of the countryside.*

**Keywords:** ageing, intergenerational differences, rural communities, long-term care

# DEVELOPMENT OF AN AGE-FRIENDLY ENVIRONMENT IN RURAL AREAS THROUGH 8 WORLD HEALTH ORGANIZATION DOMAINS - DOMAIN: TRANSPORT AND MOBILITY; LITERATURE REVIEW

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## ABSTRACT

*An ageing population and the emptying of rural areas are important factors that will have an impact on the development of services for older adults in rural areas. The need for long-term care services will increase and the number of carers, especially informal ones, who have traditionally cared for older adults in rural areas is decreasing. Age friendly environment in rural area can address the depopulation issue of rural areas. We examined the development of age-friendly environment in rural areas with the focus on transport or mobility. This we checked through a systematic review of the articles. We used web search engine Web of Science with the phrase „age-friendly environment“ AND „transport or mobility“; AND „rural“ OR „village«. The thematic analysis of the material read was used to review the literature. The development of age-friendly environment within the rural area is a fairly new research area, with relatively few articles covering these two areas in substance (20). From the articles reviewed and the analysis, we can summarise that there is still a lot of research to be done to define more clearly the preferences of rural populations, the development of transport or mobility for older adults.*

**Keywords:** older adults, ICT, age-frindly environments, rural area, outdoor environment

# DEVELOPMENT OF COMMUNITIES FOR THE ELDERLY IN EUROPE

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## ABSTRACT

*A historical review of the development of human rights shows that in the past, the rights of elderly were considered within the framework of general human rights, or as part of „public policy“, and for a long time they were not given priority consideration. Despite this, the first forms of communities for the elderly began to take shape in Europe, which not only have survived to the present day, but with their original efforts, they remain examples worth following. During the period in which the political systems did not „feel“ the need or postponed the consideration of the problems of the elderly, the demographics of the population began to change and the impact of exponential technological development has begun to change all aspects of social and individual life. The article shows that most examples of communities for the elderly in Europe are accompanied by an effort to organize the life of the elderly as they were used to living in their home environment. These represent the source of interest in the exchange of good practices, models and forms of community, which is growing in developed countries as a counterweight to the social and individual responsibility for caring for the elderly, which in a long-lived society is obliged to provide quality care for the aging population. The examples presented in the article reflect the socio-economic context of their locations, which are a reflection of the history, culture of space and time, and the political system, which must be taken into account when looking at possible directions for the development of age-friendly communities in Slovenia. Efforts that change existing socio-economic systems are not the domain of escalating technological development, but primarily of a social nature and change social relations and fill the void between conventional housing and institutional homes for the elderly.*

**Keywords:** *older adults, communities for the elderly, development, good practices*

# HOUSING FOR LGBTQ+ OLDER ADULTS - CASE OF REGNBÅGEN

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## ABSTRACT

*The REGNBÅGEN housing for LGBTQ+ older adults in Stockholm, Sweden, the only housing of its kind in Europe, is a case in point with the fact that LGBTQ+ older adults are a unique and growing subgroup of the population who have specific life experiences and are subject to long-term minority stress, stigmatization and discrimination good practice. LGBTQ+ older adults face two challenges – ageism (as a whole population) and heteronormativity (the view that all people are heterosexual and a society where heterosexuality is the only socially accepted sexual orientation). As a result, LGBTQ+ older adults face many challenges in meeting basic human needs. The goal of such a home is to provide LGBTQ+ older adults with safety, community, an inclusive environment and well-being in old age. In addition to the accommodation capacity, the REGNBÅGEN home offers spaces for spending time together, activities and a place for parties with a kitchen. The building houses a medical center, a hair salon and a foot care salon, as well as a restaurant. The property also has a gym and a library. Social gerontologists must strive to ensure equal opportunities for all older adults, while also taking into account different sexual orientations, which are often overlooked.*

**Keywords:** LGBTQ+ older adults, discrimination, living environment, inclusive environment



# SMART HOMES IN PROVIDING SAFETY FOR OLDER ADULTS

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## ABSTRACT

*The challenges posed by demographic changes in the population today are great, and it is to be expected that they will be even greater in the future. As a result of these demographic changes, today we are witnessing an increasing number of older adults who choose to age in their own homes instead of in institutions that specialize in the care of this population. That is why there is a growing need for the development and improvement of services that can contribute to meeting the needs of this growing population. We are witnessing the continuous development of ICT technologies and their implementation in everyday aspects of life. We are also witnessing the development of opportunities to use technology to improve care for older adults. One of the many challenges that society faces are of a health and social nature, and what we will talk about here is the implementation of technology in the form of Smart homes and its role in improving the safety of older adults who live in them.*

**Keywords:** smart homes, older adults, security, safety, gerontotechnology

# THE WIGOR APP HELPS SENIORS UNDERSTAND THE RESULTS OF A COMPREHENSIVE GERIATRIC ASSESSMENT - GOOD PRACTICES IN AREA OF INTEGRATED CARE

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## ABSTRACT

*Background: The most effective treatment for frailty syndrome is prevention and maintenance of intrinsic capacity; it is why the growing number of geriatrics patients with frailty syndrome requires a comprehensive therapeutic approach. Even a very well-diagnosed patient, during her/his stay in the geriatric ward, must implement therapeutic recommendations upon returning to the home environment. It has to become a part of their everyday life. The neglect that occurs in the absence of coordination and motivational activities causes rapid progression of the frailty syndrome and contributes to the occurrence of disability, additionally burdening both the medical and social care system. Solution: Currently, in Lodz (Poland), we are testing a solution based on a „WIGOR“ application. The application, on the one hand, transfers the medical knowledge about the patient (derived from the Comprehensive Geriatric Assessment) is necessary to develop a continuous care schedule in a home environment. On the other hand, it monitors and supports the patient in implementing daily recommendations for preventing frailty syndrome. How it works. At a hospital, tests included in the Comprehensive Geriatric Assessment (CGA) are performed by a multidisciplinary team (geriatrician, doctor, nurse, physiotherapist, psychologist, dietitian). The assessment results of nutritional status, functional fitness, physical fitness, mental condition, and the risk of pressure ulcers are communicated to patients as a discharge from the hospital. The patient interprets the results using the „WIGOR“ application and gets acquainted with the recommendations and prophylaxis appropriate to his health condition and the resulting needs. Conclusion: Using the application is crucial in connecting hospital care with proper care in the home environment. At the same time, it allows the collection of basic information about the patient's health at home. Both general practitioners and specialists can share gathered information. This information is also valuable information for rehospitalisation.*

**Keywords:** aging, coordinated care, application, comprehensive geriatric assessment

# SOCIAL INFRASTRUCTURE UPSCALING THROUGH EDUCATION REJUVENATION MISSION: A CASE STUDY FROM KERALA, INDIA

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## ABSTRACT

*Kerala has revolutionised public education through well-planned, engaging, and community-supported activities. Focusing on Kerala's public education system, the paper examines how the "Education Rejuvenation Mission" (ERM) has been working towards making all government and government-aided schools into Centers of Excellence to boost educational quality and equity. The case study method is used to explore the role of the ERM in upscaling social infrastructure. This study indicates that this mission has led to advancing academic standards and innovations through community participation and public-private partnerships.*

**Keywords:** *education rejuvenation mission, public education, social infrastructure development, community participation, public-private partnership*

# THE POSSIBILITIES OF INDEPENDENT LIVING FROM THE PERSPECTIVE OF PEOPLE WITH DISABILITIES AND PROFESSIONALS

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## ABSTRACT

*One of the most important global movements is the Independent Living Movement of Persons with Disabilities. It empowers these people to represent and advocate for their rights. This social movement also supports community development and mobility based on emancipation, autonomy and full participation on an equal basis for all citizens. From the scientific evaluations and other reports, it is clear that there is some progress on this way, but also many challenges. In cooperation with the Croatian Union of Associations of People with Disabilities, a scientific study was conducted as part of the partnership project „Platform 50+“. As part of the broader project, this survey asked about the actual possibilities for independent living in different regions of Croatia. Through the qualitative approach, the perspective of adults with different types of disabilities and professionals from support systems is presented. The qualitative data from the focus group interviews were analysed using thematic analysis. The part of the results based on the perspective of all participants from Zagreb County is presented in this paper. The data obtained from both perspectives show some limited opportunities, but still many obstacles to independent daily living and starting one's own family, availability and individualization of support/assistance, accessibility of community resources, and social inclusion, especially the ability to make one's own choices and decisions. These findings also provide important guidance and recommendations for improving public policy based on the experiences of people with disabilities and their caregivers.*

**Keywords:** *persons with disabilities, independent living, social inclusion, community development*

# DEVELOPMENTAL ASPECTS OF SOCIAL INFRASTRUCTURE IN THE WESTERN BALKAN REGION

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## ABSTRACT

*Social infrastructure as facilities for education, health, and housing are of utmost importance for development of the human capital and represent societal foundations necessary for long-term economic growth. The paper presents the study on social infrastructure development in counties of Western Balkan and presents legal framework, regulation of spatial planning and construction, development plans of municipalities and internal regulations within the neighborhood and marketing approach of developers. Residents' satisfaction is based on urban design, respect for privacy, access to green spaces, access to general and specialist medical services, kindergartens, primary and secondary schools, markets and shops, neighborhood safety, access to facilities for the elderly, public transport, etc. Neighborhood development and access to social infrastructure in Western Balkans is compared with neighborhoods development and access to social infrastructure in Western Europe. As study cases are presented new neighborhood developments the Panorama Resident area located in Ferizaj, Iliria Neighbourhood area located in Ferizaj, and Kodra e Diellit Resident area located in Tirana-Albania.*

**Keywords:** social infrastructure, spatial planning, neighborhood development

# ALLEVIATING SOCIAL PRESSURES AND ENSURING SOCIAL INCLUSION IN RURAL AREAS

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## ABSTRACT

*In Slovenia, there has been a growing fragmentation of small municipalities over the past three decades, resulting in 212 municipalities distributed across 12 regions. These smaller municipalities primarily exist in rural areas, which face challenges such as limited employment opportunities, leading to a decline in population. Smaller municipalities also lack social infrastructure for provision of long-term care services. To address these issues, a new long-term care law has been enacted in Slovenia, aiming to ensure equitable access to long-term care services across the entire country.*

*An analysis of the geographical distribution of nursing homes has revealed an uneven availability of long-term care facilities, which are primarily concentrated in urban areas. Through an examination of financial flows, it has been observed that smaller rural municipalities bear the cost of long-term care services provided by towns and cities. The new law also includes provisions for establishing smaller accommodation units, and in this article, we explore the potential for developing such units in rural municipalities. The results indicate that by utilizing the available financial resources and investing in accommodation unit, rural municipalities in Slovenia can effectively alleviate the burden on social security and long-term care systems. This approach would foster the growth and revitalization of rural areas, generate new job opportunities, enhance accessibility to quality long-term care for the elderly, and contribute to an overall improvement in long-term care services in rural areas.*

**Keywords:** long-term care, social infrastructure, financing, municipalities, social policy

# TOWARDS DEVELOPMENT OF LIFETIME NEIGHBOURHOODS

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## ABSTRACT

*Lifetime neighbourhoods are community spaces designed to cater to the diverse needs of residents across all stages of life, promoting inclusivity, connectivity, and overall well-being. This paper explores the key features and benefits of lifetime neighbourhoods, highlighting their significance in creating supportive environments that enhance the quality of life for individuals of all ages and abilities. These neighbourhoods prioritize accessibility, ensuring seamless mobility through features like wheelchair ramps, elevators, and wide sidewalks. Housing diversity is emphasized, providing a range of options to accommodate individuals and families at different life stages. By offering convenient access to essential amenities such as healthcare facilities, parks, and recreational spaces, lifetime neighbourhoods reduce the need for long commutes and encourage active living. Social connections play a vital role in these neighbourhoods, fostering interactions through community centers and well-designed public spaces that encourage engagement. Multigenerational design elements create opportunities for intergenerational interactions, allowing individuals to learn from and connect with people of different ages. Safety and security measures, including well-lit streets and pedestrian-friendly infrastructure, ensure a sense of safety. Active transportation options such as bike lanes and walking paths promote a healthy and sustainable lifestyle, complemented by environmentally friendly practices. By accommodating the changing needs of residents as they age, lifetime neighbourhoods allow individuals to age in place, maintaining independence and social connections. This abstract concludes that lifetime neighbourhoods are integral in creating thriving communities that prioritize inclusivity, connectivity, and well-being, offering a blueprint for future urban planning and development.*

**Keywords:** *lifetime neighborhood, social inclusiveness, long-term care, social infrastructure, social policy*

# INTEGRATING SOCIAL MEASURES INTO RURAL DEVELOPMENT POLICY

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## ABSTRACT

*The Common Agricultural Policy (CAP) is a long-standing and significant agricultural policy framework established by the European Union (EU) with the objectives of supporting and safeguarding farmers, ensuring food security, and fostering rural development within member states. Comprising two primary pillars, the CAP includes Market Support, which aims to stabilize agricultural markets and secure fair incomes for farmers, and Rural Development, which seeks to promote sustainable agriculture, enhance competitiveness, and improve the quality of life in rural regions. The instruments and measures of Rural Development encompass diverse areas such as rural infrastructure investments, environmental protection, economic diversification, and agri-environmental programs. Funding for the CAP is derived from the EU's budget and plays a crucial role in determining its effectiveness. In 2020, the CAP underwent its latest reform, known as the CAP 2021-2027, which introduces new elements such as heightened environmental and climate ambitions, mandatory eco-schemes to incentivize sustainable practices, and greater flexibility in fund allocation across pillars. Within the context of the CAP, there exist multiple instruments and measures designed to facilitate investments in the advancement of rural areas. This paper examines the instruments of the CAP's second pillar, known as rural development, and explores how these instruments and measures can be employed to develop social infrastructure catering to the needs of older adults residing in rural regions.*

**Keywords:** rural development, Common Agricultural Policy, long-term care, social infrastructure, social policy



# CONTEMPORARY ASPECTS OF FARM TRANSFERS

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## ABSTRACT

*Farm succession is an important process that allows farming to continue and family traditions to be preserved. In Slovenian law, the transfer of a farm to descendants can take place in two ways: 1. by inheritance, and 2. by intergenerational transfer of the farm between the living. The inheritance of a protected farm is subject to a strict regime under the Act on the Inheritance of Agricultural Land and Holdings, the purpose of which is to prevent the division of medium-sized farms so that they do not become incapable of efficient management, and to minimise threats to the livelihood of the heir taking over. However, the amendment to the Agricultural Land Act allows the heir to sell the farm after acquisition, as there are no longer any restrictions on the disposal of the protected farm or parts of it during the lifetime of the heir. Another important development is that the Supreme Court's recent case law has departed from the rigid concept of a protected farm as a mere collection of land. Similar problems with the definition of a farm arise in the question of which immovable property should be transferred in the case of an intergenerational transfer of a farm. It would therefore make sense to abolish the transfer requirements of Slovenian law, which are not foreseen by EU law.*

**Keywords:** intergenerational farm transfer, protected farm, inheritance of protected farms, agricultural policy, agricultural holding

# PLANNING THE CONSTRUCTION OF PUBLIC HOUSING UNITS IN THE CENTURY OF THE CHANGING AGE STRUCTURE OF THE EU POPULATION

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## ABSTRACT

*The public housing fund in EU consists primarily of social housing. The term “social housing” emerged in Europe as an instrument to combat housing shortages that arose in the 19th and early 20th centuries as a result of industrialization and increasing urbanization and the WW2 devastation. Social housing in Europe consists of public housing stock (owned and managed by the state or in the hands of local authorities). However, it may also be owned and operated by voluntary or non-profit associations and foundations, and in some cases by private non-profit companies or cooperatives. Investors can thus be public or private. The shortage of social housing after the Second World War was also great due to the devastation of the War. At that time, the target population was mostly younger working families. Therefore, the housing units were adapted to their abilities and needs. Today, however, social housing faces the challenges of an ageing population and the ageing or depreciation of the buildings themselves. The housing stock has become increasingly market-oriented, competitive and under economic pressure. Many European countries have a large stock of public social housing for low- and middle-income families. A report by the European Partnership for Active and Healthy Aging shows that much of this housing stock is unsuitable for the growing number of older residents with declining functional abilities, particularly those requiring long-term care (LTC) services. Based on EUROSTAT data, we studied the availability of social housing in Europe and the impact of this housing structure on housing for the elderly in Slovenia. A decision-making support model for dynamics of investments in social housing for the elderly is presented on the example of one of the statistical regions.*

**Keywords:** housing fund, social housing, ageing, geo-gerontology, actuarial projections

# PRESENTATION OF THE GEO-GERONTOLOGICAL OBSERVATORY

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## ABSTRACT

*The GEO-GERONTOLOGICAL OBSERVATORY is a new part of the MEORL monograph series that focuses on geographical-gerontological issues in the modern world. Understanding the spatial aspects of aging, including where and how it occurs, how it impacts decision-makers and communities, and its effects on society, the local economy, and communities, is crucial for research, policies, programs, and day-to-day operations related to aging in regions, rural areas, and cities. This book introduces the field of geographical gerontology, which is referred to as GEO-GERONTOLOGY, and explores various geographical perspectives and concepts related to aging and the older population in relation to space. Each book specifically examines one of the Slovenian regions, its municipalities, and Local Action Groups, providing insights into the current structure of the elderly population and the distribution of older adults without younger relatives in their households. This distribution necessitates additional resources for provision of home care services to cover the costs associated with overcoming distances within the region. The book also calculates the required capacity of social infrastructure needed to ensure quality care for older adults in the regions and municipalities. Projections of demographic and geo-gerontological structures are presented, assuming no new migrations occur in the area, which is typical for rural areas. These projections also include estimates of the necessary human resources, such as nurses, social gerontologists and social workers, to meet the care needs of this population. Overall, this book series serves as the first comprehensive resource on geographical gerontology in the Slovenian language, providing a foundation of knowledge on the subject.*

**Keywords:** demography, geography, gerontology, social infrastructure, long-term care



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# **STRATEGIC COMMUNICATION MANAGEMENT**

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# SCHOLARLY PANEL

## NO FAKE: NEWS! EDUCATING PRIMARY AND SECONDARY SCHOOL STUDENTS BY PRACTISING JOURNALISM

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### ABSTRACT

*No fake: News! - Educating primary and secondary school students by practising journalism. A fact-based discourse is a precondition for respect and human dignity. As conspiracy theories, fake news production and claims spread worldwide, it is vital to create tools to deal with this situation responsibly. It is common that the sooner learning options start, the more successful the approach is. In consequence, research, fact check, and public presentation should be part of early steps in education, as it could be offered in a journalistic approach to diverse subjects with primary and secondary school students. A synergetic foreign language approach is a great plus, as communication skills are an essential further need for a sovereign and successful life in a globalized world. The implementation of these requirements since 1996 in several countries goes back to a concept of the author, to make use of main German daily papers not just for learning German abroad, but to enable the creation of knowledge and the production of articles to be published in papers of international reputation. In Slovenia the project is run successfully since 2020 with Frankfurter Allgemeine Zeitung/FAZ. Its history, outcomes and potential will be presented and discussed, because "It's About People".*

**Keywords:** educating journalism, research, fact check, communication, publication

# SOCIAL MEDIA AS A TOOL FOR SIMPLIFYING SCIENTIFIC TOPICS AND IMPROVING THE LEARNING EXPERIENCE

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## ABSTRACT

*We live in a time of extreme complexity of social circumstances, technological progress, and complexity of scientific information. The media image of the social role of science has changed over time, but it is precisely the complexity and diversification of scientific research that distances science from the interest of the general population and makes it difficult to understand the importance of science in everyday life. Likewise, science topics are becoming increasingly complex to teach. There is a permanent specialization of scientific fields, but its understanding still requires a „bigger picture“ and the processing of a large amount of information. The aim of this work is to investigate how social media, which enable collaboration, sharing, evaluation and commenting, and at the end simplification and visualization, influence the teaching of scientific topics and how social media can help the understanding of special, specific scientific topics while simultaneously keeping science in a wider social and technological context. The paper provides an overview of the scientific literature on the topic of the use of social media in the context of education and given that social networks are a space where all kinds of information - scientific and pseudo-scientific - can be found, it was investigated how students use and evaluate scientific information present in social media. This research explores the adoption of social media as a supporting tool in higher education using students' perspective. The study consists of two focus groups, which provide insights into students' perspectives and attitudes towards the use of social media in higher education. Results show that students acknowledge the importance of incorporating social media, but they have a problem with validating the credibility of the sources.*

**Keywords:** science, media, social media, higher education, evaluation of information



# THE DEVELOPMENT OF MEDIA TECHNOLOGIES AS A BASIC CHARACTERISTIC OF MODERN COMMUNICATION

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## ABSTRACT

*Accelerated technological development creates newer and newer media, so we cannot imagine the end of the above-mentioned technical process, not even in our most fantastic predictions. Now we have the Internet, multimedia, and VR (virtual reality), but it's not easy to predict what will be next. Apart from technology, as a creator, new media are increasingly the topic of scientific research through social sciences, primarily through communicology in its multi and transdisciplinary sectors. Learning how new media be used became a challenge and, at the same time, its purpose, but above all, the necessary thing. Tracking technological innovations in the new media becomes more and more complicated since something new today and tomorrow has become old-fashioned and is not used anymore. But regardless of these changeable facts, it is reasonable to get these two conclusions:*

*New media shall be upgraded in their essential elements, which is the same case with offline media, as well as in most cases, new media shall not eliminate existing digital communications; instead, the latter shall be increased with new dimensions. Now we may ask ourselves questions: "What is it going to change?" and "What will stay unchanged?" but we cannot answer these questions, and, for now, both of them stay rhetorical because we all lack empirical research to get adequate and complete answers. The truth is that not only technological levels have been undergoing profound changes, but social and cultural levels as well, which is finally the most important thing. It is a strategic question of what kind of social, psychological, and cultural changes will be caused by new media development. Regardless of so many unanswered questions, some answers and future theories on this topic are possible at the communicational level.*

**Keywords:** technology, modern communication, internet, media, VR (virtual reality)

# THE IMPACT OF VIRTUAL MEDIA COMMUNICATION ON MODERN COMMUNICATORS

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## ABSTRACT

*The virtual world offers the possibility to satisfy the hunger for communication, but also to disseminate information and form different discussion groups in order to exchange opinions. This phenomenon of human community allows positioning of one's own choice. However, in such a parallel communication space, it is possible to endanger the security of users. The acceptance of the imposed views of the media in order for the communicator to identify with the group he/she is approaching is particularly dangerous, as this leads to the renunciation of freedom and the right to know the truth. Absolute defense against the media is not possible, but media literacy can mitigate the negative effects of the media and its deception. The research conducted in this paper answered the following research questions: Is virtual communication as attractive as real-world communication? Do communicators adhere to virtual group attitudes? Does media literacy contribute to preserving the freedom of communicators and realizing the right to the truth?*

**Keywords:** virtual world, security, virtual group attitudes, freedom and right to truth, media literacy

# NEW WAYS OF POLITICAL COMMUNICATION

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## ABSTRACT

*This paper presents that digital communication ensures success in political campaigning, given that political parties and their candidates can build a better perception among voters, and thus motivate them to spread positive electronic word of mouth (eWOM). For research in this paper, the author formulated the following research questions: RQ1: Is digital political communication, which is applied for the purposes of a political campaign, needed for the purpose of creating a positive perception of voters? RQ2: Does engaging credible social media influencers in a political campaign affect positive electronic word of mouth (eWOM) among voters in a digital environment? RQ3: Does the continuous adaptation of multimedia content to the needs of the target market affect success in political elections? By analyzing the attitudes of respondents, the author tried to bring this topic closer to political experts, and draw their attention on the possibilities that digital political communication can provide in order to communicate with the public more efficiently, and thus achieve the planned political goals.*

**Keywords:** digital political communication, social media influencers in politics, electronic word of mouth (eWOM), digital environment, voters

# NON-FINANCIAL REPORTING AS THE WAY OF COMMUNICATION BETWEEN THE FINANCIAL SECTOR AND PUBLIC

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## **ABSTRACT**

*The aim of this review is to show how financial sector institutions communicate with the public about their socially responsible behaviour. With the adoption of the Directive on non-financial reporting 2014/95/EU for large companies in the territory of the European Union, non-financial reporting becomes a new way of communicating between business entities and the public. Large companies, which also include financial sector institutions, send a message through non-financial reporting that achieving profit is not their only business goal, but that their business strategy also includes care for society, the environment, and especially care for employees. We assume that the media follow this essentially new form of communication with the public. Using the inductive method and the method of discursive analysis, the paper will analyse how and which communication channels are used and what is the role of the media in disseminating information about socially responsible business. Future success, and ultimately profit, depends on the feedback a financial institution receives from its public and learning from it.*

**Keywords:** *communications, socially responsible behaviour, non-financial reporting, financial sector communication with the public, green financing, media, communication channels*

# PRIVACY POLICIES OF DIGITAL PLATFORMS AND THE OVERLOOKED FACTS; A CRITICAL LOOK

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Nur Emine Koç, PhD, Professor  
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## ABSTRACT

*Within the scope of this study, the most overlooked and perhaps the most critical problem, the security policies of today's social media platforms and how their content is understood, will be reviewed. With the developing social media platforms and increasing user profiles, the consent of personal data is ignored by most users, and the security policy texts that are approved without reading will be the topic of this research. First, an introduction to the issue will be made with the example of the Facebook–Cambridge Analytica data scandal, a privacy violation case that Facebook (now Meta) faced in 2014. Later, despite the adverse reactions of people to this case, this study is intended to examine the privacy policies of companies critically, how and for what purposes users' data is used, and their emotional trust in these companies while subscribing to digital content platforms. The privacy policies of 6 famous and widely used platforms, Meta (Facebook, Instagram, WhatsApp), Twitter, Netflix, and Disney Plus, will be examined through content analysis. As the result of this study, it aims to determine what the security policies, which are not emphasized much, really mean.*

**Keywords:** meta, netflix, twitter, disney plus, privacy policy

# THE ROLE OF STEREOTYPES IN INTERPERSONAL COMMUNICATION WITH REFUGEES IN THE REPUBLIC OF CROATIA

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**Tanja Grmuša**, PhD, Professor  
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## ABSTRACT

*Refugees are undoubtedly a social phenomenon, and the stereotypes that accompany them are a phenomenon with complex psychological characteristics. Therefore, the emphasis is placed on intercultural sensitivity, intolerance, prejudices and the radical relocation of a person from the previous environment to a new living environment. The goals of the work were to examine the differences in the awareness of the existence of stereotypes among refugees and among representatives of institutions that work with them, to analyze the influence of the cultural environment on the presence of stereotypes, to investigate the influence of media reporting on stereotypes about refugees, as well as to determine their awareness of the stereotypes that exist about them in the public sphere. The empirical part of the work brings qualitative research conducted in 2021 using the method of in-depth interviews on a sample of nine respondents. The research conclusions indicate that stereotypes are created as generalized opinions, which are significantly influenced by the mass media, as well as cultural differences. The solution can be seen in constant education, objective information of the public and coordination of civil society organizations, state institutions and bodies.*

**Keywords:** *interpersonal communication, refugees in the Republic of Croatia, stereotypes, integration, civil society organizations*

# DIGITAL EXHAUSTION AFTER AND DURING PANDEMIC PERIOD: EXAMPLES IN TURKEY UNIVERSITY EDUCATION

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## ABSTRACT

*Communication is an action that is performed using different tools. Considering the usage and impact areas, Communication and technology have the ability to influence all the processes today and in the future. Especially with digitalization, new communication developments in technology have had a transformative effect on communication. Thanks to the information and communication technologies that have developed from the past to the present, the media has also changed. Digitalization as a product of the rapid development of information technologies has become one of the leading topics of the world and the twenty-first century is named as Digital Age. The fact that the Internet is now easy, cheap and widely accessible, and therefore the number of computer users has increased, constitutes important axes of the digital age. There are a lot of opportunities of new media like; people can get instant news from the world via their mobile phones and even comment on these news instantly; can do banking transactions quickly and without going to the bank ; can shop whatever and whenever they like; can share photos and ideas with large mass in a matter of seconds without even stepping out of their homes. Social media, being the essential feature of our daily life and branch of new media, has offered an interactive communication space. Unlike traditional media understanding, social media provides multi-use and virtual sharing, therefore becomes the most preferred communication tool covering crucial part of our daily life. On the other hand, there are many disadvantages that threatens our social lives and freedom. Within this study the digital disease in which students and teachers involved in is going to be analysed*

**Keywords:** digital exhaustion, digital diseases, whatsupitis, nomophobia, zoom fatigue

# FAR RIGHT POLITICS AND THE MOBILIZATIONS AGAINST LGBT+ IN TURKEY

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## ABSTRACT

*The discrimination and ostracizing of the LGBTs is not new, but it is impossible to understand the forms of discrimination and ostracization without understanding their roots in a heteronormative order and heterosexist ideology that give rise to gender categories and social prejudices and stereotypes based on them. There has been a concerted effort in Turkey to create a more conservative-Islamic society and to design a political authority capable of bringing this about. It is within this framework that the government party has orchestrated an even more comprehensive assault on the LGBTs. The Big Family Gathering in October 2022 is one of the most recent examples and organized rally continues to be held with the slogan „Protect Your Family and Generation, Stop Perversion“ with the participation of communities and sects organized by the ruling and ultra-nationalist parties and supported by state institutions. The AKP regime and the different legal practices it has set in motion have started to attack LGBTs at both discursive and actual levels by using all media platforms. In this context, this study explores the discursive construction of anti-LGBT posts in Twitter with the hashtag „Big Family Gatherings“ by the content analysis. Obtained patterns have been used in semi-structured in-depth interviews with the 5 LGBT NGOs operating in Turkey will be conducted. The main aim is to understand, how they evaluated the great family gatherings and the censorship law implemented in 2022 which stipulates up to 3 years in prison for social media sharing's who are thought to be provoking the public by the government authorities and how they take counteraction on the government's efforts to make LGBT invisible in both virtual and public spaces. In line with the data obtained, how far-right policies and discourses affect social struggles in the axis of the rapidly expanding bans in Turkey will be discussed.*

**Keywords:** digital media, LGBT+, discursive construction, discrimination, far right mobilization



# THE IMPACT OF SYSTEM ERRORS DURING THE GAMEPLAY OF GAMES OF CHANCE ON PLAYERS AND CRISIS COMMUNICATION OF PROVIDERS OF GAMES OF CHANCE ON SOCIAL MEDIA

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## ABSTRACT

*Players who play games of chance may encounter certain inconveniences during the gameplay that spoil the positive experience of gaming, such as various system errors while playing the games, inability to access games, inability to log into the system or unsuccessful pay-in and/or pay-out of stakes and winnings. Such errors or omissions in the system can mask security incidents in the background, which could cause financial damage, loss of credibility and damage to the company's reputation and standing. Despite the efforts of gaming organizers to ensure a safe and fluid gaming experience on their platforms, system errors could still happen. This usually leads players to report their dissatisfaction to tech support or share their opinion and experiences on social media. In case of system errors, the promotional posts of the organizers of games of chance on social media may also receive bad comments from players on the promotion or the game itself. This should be viewed as feedback to the organizers and a cue for action in the form of crisis communication. Under the assumption that players give up further play after experiencing system errors, it was decided for the purpose of this paper to research whether system errors negatively affect players and change their opinion and attitude towards the providers of games of chance. With research results in mind, a few examples of the game providers communication on social media in moments of a crisis caused by a system error will be provided. These will then be analysed on how well they reacted in those situations and whether they respected the rules of good crisis communication.*

**Keywords:** games of chance, reputation, company image, system errors, social networks, crisis communication

# WHAT ARE THE CONSEQUENCES OF AN UNINFORMED PUBLIC FOR A SECTOR?

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## ABSTRACT

*The theme of the paper is to show how important an informed public is for any sector, specifically in this paper for the energy sector. Energy prices have reached record levels in 2022. According to the Council of the European Union, the reason is the Russian invasion of Ukraine, i.e. the dependence of European countries on Russian gas. The research question is how familiar the general public is with the basic concepts of energy, energy transition and climate change mitigation. The main hypothesis is that an informed public is crucial for any sector, including the energy sector. To conduct the research and test the hypotheses, I will rely on quantitative research and use a sample of 400 respondents between the ages of 18 and 65 in order to confirm the thesis that the general public is inadequately or poorly informed about crucial energy concepts. Without energy independence, even a secure democracy is not possible. An informed public is essential for the implementation of changes, which in this case is required by the energy crisis.*

**Keywords:** informed public, communication, energy crisis, energy transformation, climate change

# CORRELATION OF MEDIA AND SCIENCE ON THE ISTRIAN PENINSULA

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## ABSTRACT

*Modern society is increasingly based in science and technology, thus the promotion of science is recognized as a strategic interest and is very important for the development of the same. Since the general public gets most of its scientific information from the media, the research question would be to what extent scientific topics were present on the Istrian peninsula in the past and today - to define the topics and their frequency in the daily newspaper Glas Istre and on Radio Pula. An assumption is that with the development of the technology and the science in the past 50 years, there has been a change in focus on the topics that directly affect the quality of the life of individuals. The methods that will be used are analysis and synthesis method, as well as statistical methods. The scientific contribution of this research should be an additional confirmation that informing about science positively contributes to the development of society and the quality of life of an individual.*

**Keywords:** media, science, communication, strategic communication, mass communication

# DIGNITY AND HEALTH CARE IN A NEW ERA

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## **ABSTRACT**

*Advances in science and technology make our lives more comfortable and longer. Extending our lives increases our chances of having more experiences and contributing to our society in more ways, but it also makes us heavily dependent on healthcare. Ministries of health in Europe are increasingly investing in innovative digital technologies to strengthen the health system and health service delivery, improve compliance, adherence and, during the COVID 19 pandemic, maintain social distancing. The increasing use of information and communication technology also means the digitization of interaction between people, as well as between people and organizations using augmented and virtual reality and digital platforms. The use of new technologies becomes debatable due to the possible violation of ethical values such as security and privacy, data use, excessive monitoring, and surveillance, and, ultimately, the impact on public trust. They represent a new era in health care, which, along with several advantages, also presents challenges that could threaten human rights. Considering all the effects of technology that have already changed the world as we once knew it, human dignity is succinctly revalued. The purpose of the paper is to study previous research that describes dignity in health care because of social and technological development. A qualitative desk analysis of available research and the relationship between dignity and social and technological progress will be conducted with the aim of possible progress.*

**Keywords:** health, dignity, social and technological development

# JOURNALIST'S INTERPRETATION OF VACCINATION DURING THE COVID-19 PANDEMIC

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## ABSTRACT

*This paper will present a study that was conducted to determine methods of media reporting on the SARS-CoV-2 vaccine and its effectiveness. The main purpose was to determine how the media reported on the vaccination and how much of the reports were supported by scientific evidence. Articles in the daily newspapers Večernji list (Croatian), and Dnevnik (Slovenian) will be analyzed. The survey covers the period from the start of vaccine availability from 1 January 2021 to 31 March 2021. The analysis will include the number of articles on vaccination, the number of text cards, and affirmative, neutral, and negative texts. These articles will analyze both those that refer to the sources of the scientific research and those that are solely journalistic interpretations. There were two hypotheses presented: H1 is the difference in the representation of affirmative, negative, and neutral articles about the vaccination of SARS-CoV-2 in newspapers, and H 2: The difference in the articles published in newspapers about the vaccination of SARS-CoV-2 based on the interpretation of the journalist, but not to ignore relevant scientific sources and articles where the source of the scientific research is clearly indicated.*

**Keywords:** vaccination, SARS-CoV-2, pandemic, media, articles about vaccination

# THE IMPACT OF NEW MEDIA USE ON THE WORK EFFICIENCY OF EMPLOYEES

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## ABSTRACT

*Social media, as contemporary media, a global phenomenon and one of the biggest industries of the present, have changed the way people perceive the world. With a wide range of different functionalities that they enable, they reflect relations between people who share the same interests and activities. The use of social media has exceeded the boundaries of private life, which means that they are now widely used also at work for private, business or professional purposes. This has undoubtedly changed the business world as well, as the social media boom has given companies access to a wide range of information that they did not have before. At the same time, they have an impact on marketing, the level of competitiveness, internal and external communication of the company and, to a large extent, also on employees, their mutual relations and work efficiency. There are contrary opinions regarding the use of social media during working hours. It is often believed that their use during working hours distances the employee from the point, from the work process and reduces their work efficiency. A question about the security aspect of the social media user also arises. On the other hand, there are many companies that support and promote the use of social media sites during working hours, and the latter ones are among the most innovative, successful and progressive companies. For the purposes of this paper, a survey questionnaire and a random sample will be used to explore whether the use of social media during working hours has an impact on the work efficiency and work performance of employees. We assume that if the nature of the employee's work is innovative, the use of social media has a positive effect on their work efficiency, but in the case of routine work, this effect is negative.*

**Keywords:** social media, employees, user safety, employee efficiency, work performance

# ASPECTS AND METHODS OF COMMUNICATION IN RELATION TO THE DIGITIZED EVERYDAY LIFE OF YOUNG PEOPLE

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## ABSTRACT

*I am interested in the specifics and ways of using the media with the aim of reaching the young population as best as possible with information related to the written strategies of young people in the municipalities. It is the desire of the municipalities where I live that certain documents not only remain written down, but that they reach the target groups. The key goal is to understand the ways of communication between young people and, as a result, the connection of this with the use of media by municipalities and an improved flow of information. The entry of mobile and digital technologies into our lives practically from birth has changed the (in)visibility of many other media. The key processes of digital media, such as algorithmization, datafication and artificial intelligence, require different communication approaches, which does not mean that this is the best way to use media in our case. The question is which media and how to use them so that young people get the (correct) information that the municipality wants to convey. This is also the basis of my research hypothesis that the current methods of communication are not effective enough for the information to reach the target group of young people. For the research I will use a focus group among young people aged 15 - 29. With this, I will obtain data on the current state of information and methods that would provide an optimal media framework for the transmission of information. Through the analysis, I will thus identify the existing situation and provide a matrix of communication methods that would represent the most optimal media practice for the future.*

**Keywords:** youth, municipalities, communication, youth strategy, digital technologies

# DIGITAL CHANNELS AS A MARKETING METHOD IN SLOVENIAN SOCIAL ENTREPRENEURSHIP

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## ABSTRACT

*Introduction* Digital channels as a form of marketing are becoming the main way of marketing communication for companies worldwide. It is not hard to see why: real-time communication, which establishes them as an effective marketing method. 'As more businesses utilise emerging technology, this has shaped the way that social e-enterprises are functioning.' (Ratten, 2014, 1) The aim of this thesis is to focus on the link between digital marketing and social entrepreneurship in Slovenia, offering a new perspective on the role of digital marketing in the development and success of social entrepreneurship. *Methods* The study includes a quantitative and qualitative method: a digital survey to all the social enterprises in Slovenia and a literature analyses of the previous studies. *Results* The results will contribute to the existing literature on digital marketing and social entrepreneurship. *Discussion* Social enterprises work for social benefit and are therefore less market-oriented. For this reason, it is possible that they do not use enough new and more effective marketing methods, which may affect not only their successful operation but also the service user's awareness of the social benefit orientation of the social enterprise and his/her indirect support for such enterprises.

**Keywords:** social entrepreneurship, digital marketing, marketing methods, digital communication, digital channels



# E-CONSULTATION AS A WAY OF COMMUNICATING WITH THE PUBLIC IN ADOPTING REGULATIONS IN THE REPUBLIC OF CROATIA

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## ABSTRACT

*The concept of "smart legislation" includes the need for consulting with the wider public before adopting regulations. For an effective communication media are required. In the Republic of Croatia, the very procedure of consultation with the interested public is carried out by the central body of the state administration after which it publishes a report and drafts a bill i.e. legislative proposal. The aim of this article is to provide answers to the questions: what are the media that can play the most positive role in the process of consulting with the public; what is the role of media and what is its extent in such a process? In the research a method will be used that employs analysing the existent sources of relevant literature and available information as well as conducting a survey that will either reject or confirm hypotheses: (whether) the e-consultation platform via specific websites represents an appropriate way to collect information on legislative proposals and; (whether) all relevant media are sufficiently and equally involved in the consultation process.*

**Keywords:** media, e-consultation, smart legislation, public, legal acts

# INSPIRATIONAL MOTIVATION AS A DRIVER OF MANAGING SOCIAL PROJECTS IN A TURBULENCE ENVIRONMENT

**Sergey Bushuyev**, PhD, Professor

**Victoria Bushuieva**, PhD, Professor

**Denis Bushuiev**, PhD, Professor

**Natalia Bushuyeva**, PhD, Professor

Kiev National University of Construction and Architecture, Ukraine

## ABSTRACT

*Inspirational motivation is considered a social and psychological tool for transferring the intuition, leadership and design of the social project management team to the project's success. Inspirational motivation impacts the development of modern technology project implementation and the involvement of the project manager and team in inspirational states has an impact on the effectiveness and efficiency of social project management. The objective of inspirational motivation analyses is to develop the organization of specific behaviour in turbulence or aggressive external conditions of the project managers. The inspirational motivation model, as the driver of social projects, is based on an understanding of the intuition, leadership and design of the project management team. Emotions are considered the driver of managing social projects. A conceptual model of inspiring management in the processes of managing innovative projects based on emotional intelligence, inspiring intuition, leadership and motivation is given. The influence of cognitive models on the development of inspiring management of innovative projects regarding the acquisition of knowledge and management technologies is determined. Within the framework of cognitive models, in the example of a construction project, the qualitative effects of individual competencies on the formation of inspiring management are determined. The model related to the application of the system of knowledge and competencies for the management of innovative projects and P2M programs allows for the evaluation of the key competencies of managers. Within this model, the priority competencies that form inspiring project management are defined. Based on the assessment of cognitive maps in the usual mode and in the mode of inspiring management, a model of the influence of inspiring management on the competencies for the implementation of innovative projects and programs was built.*

**Keywords:** *inspirational motivation, social projects, turbulence environment, competencies*

# INTERPERSONAL COMMUNICATION AS A PREDISPOSITION FOR LIFELONG LEARNING OF THE UNEMPLOYED

Ivan Talijančić, PhD Candidate  
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## ABSTRACT

*Globalization processes, social and technological development, and the green and digital transition have affected the necessary skills to perform certain jobs. Unemployment undermines human dignity, and the lack of competence can be compensated to a large extent by continuous lifelong learning. By strengthening the factors that influence the probability of lifelong learning of the unemployed, the gap between the needs of the global labor market and unemployment can be bridged. Very little attention is paid to the role of interpersonal communication in the inclusion of the unemployed in the lifelong learning process, especially in Croatia. The aim of this paper is to identify the attitudes of the unemployed towards interpersonal communication in the environment as a key indicator of current and future engagement in lifelong learning and to answer the question, to what extent and how predispositions of interpersonal communication affect the lifelong learning of the unemployed. Quantitative research on a sample of 200 unemployed people aged 18-65 will try to confirm the hypothesis that better predispositions for interpersonal communication of the unemployed have a significant impact on involvement in lifelong learning activities.*

**Keywords:** interpersonal communication, lifelong learning, unemployed, motivation

# ADDRESSING THE LOCAL THROUGH DIGITAL

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## **ABSTRACT**

*While European Union will start mapping the phenomenon of European communities without news outlets in 2023, the news deserts in the United States are already a high-speed expanding phenomenon. Local storytelling has a demonstrated effect in increasing civic participation and securing pro-social behavior. Despite the important roles of local media concerning engagement of communities, communication science seems to overlook the local storytelling in the area of southeast Europe. As vast changes in communication ecologies are directing local storytelling to online mode, we are interested in different ways and modes by which online local media of Slovenia and Croatia are addressing their audiences. Furthermore, by adopting the multimodal approach our study will also assess the relations among glocal, national, and global discourses in four local digital outlets and introduce some implications for the future of smaller media and the decentralisation of information in two countries.*

**Keywords:** local media, digital media, media ecology, multimodal analysis, legacy media

# DIGITAL MARKETING, DEMOGRAPHICS AND CANNABIS USE

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**Besnik Fetaj**, PhD, Professor

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## **ABSTRACT**

*Digital Marketing has transformed the way products are advertised and sold, including cannabis products of different types, from cosmetics, to medical and recreational ones. This has influenced also their use, by making it easier to the customers to choose between them and to get informed about their properties as well. This is of course connected also to different demographic factors such as age, education, and income, etc. Two questionnaires were used to gather the primary data, then stata was used to process them by analysing the results through econometric methods. The findings from this study are important to assess the use of cannabis products in and outside of the country and the impact that demographics and of digital means have on their consumer behaviour, as well as the relationship between digital marketing and consumer demographics. They shall be of usage for marketers, cannabis companies, including the pharmaceutical sector, scientists of different areas, policymakers and consumers themselves.*

**Keywords:** *online ads, social impacts, mentality, Albania, legalization, marketing ethics*

# THE IMPACT OF MEDIA RELEASES ON THE HEALTH OF YOUNG PEOPLE WITH ANXIETY DISORDER

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## ABSTRACT

*The aim of this research was to review and investigate the available literature on the impact of media and media releases on the mental health and psychological well-being of people with an anxiety disorder. It is expected media reports have negative impact on mental health of people with anxious personality disorder. For this purpose, available databases were used, searched according to the given criteria, whereby the influence of media reporting on special or catastrophic events such as pandemics, epidemics, mass murders and terrorist attacks on anxious individuals was omitted, since it is assumed that they have an unsettling effect on most of the human population as well as people suffering from anxiety disorders. Also, book reviews, editorials and non-professional and non-academic articles are not included in the content analysis. It has been shown that previous studies of media influence have not focused their interest specifically on people suffering from anxiety disorders. There is a room for more specific research in this area. Therefore, the purpose of this paper is to offer an overview of the current knowledge about the impact of media releases on the mental health of people with anxiety disorder.*

**Keywords:** communication, media, mental health, anxiety, media releases

# STUDENT PANEL

## SURVEILLANCE CULTURE EFFECT ON TURKISH SOCIETY

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### ABSTRACT

Privacy in private life represents an area where humanity must be free, secure and honorable since its existence. Individual freedom of people is possible by keeping certain things that make up the private space secret and safe. McLuhan's „medium is the message“ statement tells us the effect of the message given with the tool on the audience. With the change in communication between people, the effect of the message also changes. Changes in technology has changed lifestyles. In general, people's families and homes are private areas, and the environments outside their homes are known as public spaces. Especially the development of web 2.0 technology has removed the houses from being a private space. Internet users digital trail and phone cameras has become new extensions of the surveillance society. The personal data display all kinds has come to a position that is desirable rather than avoided. With mass media, the dependence on seeing and being visible becomes damaging to human dignity. This surveillance culture ensures that watching rather than thinking is adopted by the society. So, opinion leaders in the society leave their place to popular influencers. The aim of this study is to examine the concept of privacy through content analysis method through the posts shared by influencers. The research will be limited to 5 popular influencers who produce content through family and friend active in Turkey. Influencers have been identified as „Şahangiller, Facia Aile, Kocakarı Ansiklopedisi, Selçuk Büyük, Cihan Kosif. In this research It has been observed that surveillance culture has weaken the privacy policies in the social networking sites and the users endeavours to make the appropriate changes on their social media privacy, which is substantially lower than other mode of security operations.

**Keywords:** surveillance, secure, social media, privacy, digital reputation

# THE ROLE OF PERSONAL BRANDING AS A CONTRIBUTION TO CREATING POSITIVE IMPACT IN SOCIETY: EXAMPLES OF GROF DARKULA AND PAMELA PERKIĆ

Vanja Krznarić, Student

Tanja Grmuša, PhD, Assistant Professor  
University of Zagreb, Faculty of Croatian Studies

## ABSTRACT

*This paper's topic is personal branding's role in creating positive changes in society, i.e. the role that personal branding plays in social marketing campaigns to encourage activism and social change. The first part of the paper presents marketing communication and its peculiarities and strategies. The second part of the work defines branding, its factors, and strategies, and given that the emphasis of the work is on personal branding, the concept of personal branding, strategies, and peculiarities of branding through social networks is further defined. The third part presents the concept of social marketing, its peculiarities, features, strategies, and strategies through social networks. The connection between personal branding and social marketing lies in the fact that personal branding is also used by social marketing actors - a form of marketing in which the strategic approach is the development of activities aimed at changing and maintaining people's behavior for the benefit of the individual and society as a whole. Finally, this paper conducted research using the methods of in-depth interviews and case studies, based on which we want to determine what are the personal branding strategies of social marketing actors when presenting on social networks and communicating current social topics.*

**Keywords:** marketing communication, integrated marketing communication, personal branding, social marketing, social media activism







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# **PROJECT MANAGEMENT**

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# WELCOME SPEECH

**Reinhard Wagner, PhD, Assistant Professor,**  
Doctoral Study Program in Project Management  
Alma Mater Europaea – ECM, Slovenia

*“Since the beginning of the Doctoral Study Program in Project Management at the Alma Mater Europaea, we have been organizing this special stream in the context of the annual conference „It’s About People“, and this year is no exception. The focus of this year is on „Social and Technological Development in Service of Security and Dignity“, which plays a significant role for project management as well. This is because, on the one hand, projects are carried out in order to implement social and technological developments, and, on the other hand, social and technological developments change the way projects are carried out. That’s why we’re proud to offer insights into the actual development with two keynotes. For example, doctoral candidate Niko Spicek will talk about the concept of „Industry 5.0“ and provide insights into his practical work as well as into theoretical concepts. At the end of the stream, Prof. Dr. Gunnar Lühr, first alumnus of the Doctoral Study Program at the Alma Mater Europaea will talk about change management in the construction industry. He will address both practical and scientific findings. Furthermore, five doctoral students give presentations on intermediate results of their scientific research in project management, e.g., on hybrid forms of collaboration in projects, building trust in project teams and on appropriate communication and control approaches. It is important to mention that the conference is not only a space for the presentation of results, but also an opportunity to get inspiration for your own scientific work, as well as exchanging experiences and getting feedback on what is shown. With this in mind, I wish everyone an event rich in insights and lots of success to the presenters.”*

# SCHOLARLY PANEL

## COMMUNICATION SCREEN SHOT IN PROJECTS OF MULTICULTURAL DIVERSITY

**Walid Nassar**, PhD Candidate  
Alma Mater Europaea – ECM, Palestine

### **ABSTRACT**

*Organizations are turning their projects towards multicultural environment, which adds value to these projects. On the other hand, this diversity may push the project towards the abyss as well. In this essay, I will try to collect the pros and cons of working in a multicultural environment and provide a literature review of the hottest managerial topics related to multiculturalism and diversity through the teamwork, with an intensive focus on the communication tool between management and teams, following its impact on projects and organizations, whether negatively or positively. Then I will provide a roadmap for each manager working in an organization that contains multicultural team projects, to take advantage of this diversity and twist it to an opportunity that can be developed through the evolution of the project towards more success. The competence of project managers in managing communication in a multicultural work environment depends on a set of knowledge skills and tools, the most prominent of which are related to communication in such a situation will be addressed in a progressive and coherent manner.*

**Keywords:** communication, multicultural diversity, multicultural team projects, project management

# INFLUENCE OF TRUST ON PROJECT SUCCESS IN VIRTUAL PROJECT ENVIRONMENT

**Melita Posavac**, PhD Candidate  
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Croatian Waters, Croatia

## ABSTRACT

*Nowadays, digital transformation and challenging times due to the COVID-19 restrictions push project managers to work in virtual environment. Project managers and team members have to quickly adapt and replace face-to-face communication with virtual communication, and without direct contact it is not easy to retain and build trust relationships. Therefore, in virtual environment it is very important to develop trust between project managers and project team members from the first step of a project and keep building trust throughout every phase of the project life cycle. The aim of this paper was to examine trust relationships in virtual project environment and what effect project managers' trust had on project success in virtual environment. The research was conducted on a sample of 50 project managers using LinkedIn and e-mail network, and data were collected with quantitative and qualitative questions. Trust relationships were examined using correlation analysis that measured how strong the connection between the two variables was. The obtained results confirmed the importance of developing trust between project managers and project teams in virtual environment, and positive influence of virtual trust on project success. This research provides insight into a better understanding of the importance of trust relationships in virtual environment and contributes to project managers who are interested in increasing the level of trust in virtual project environment.*

**Keywords:** trust, project success, virtual project environment, project manager

# TRUST AND CONTROL IN HYBRID WORK PROJECT TEAMS

**Mario Paparic**, PhD Candidate  
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## ABSTRACT

*Project teams have increasingly turned to remote work in the past few years and are primarily impacted by the challenges of the latest pandemic. Most practised work arrangement is hybrid. This combines work in the office and from home using virtual communication tools. This organizational change has prompted many researchers to examine factors that drive and affect the dynamics and success of projects. This research paper will examine the relationship between trust and control in virtual project teams. We examine the relationship between trust and control in hybrid project teams. How the relationship between trust and level of control changes in dependence on whether work is done in the office or virtually. The survey is taken among project managers in a leading energy company in Ireland. Data analysis has shown that level of trust is higher and control lower when working in the office, and the opposite is true when working virtually. However, the paper recommends strategies for how that relationship can be best utilized for managing hybrid project teams.*

**Keywords:** virtual teams, project management, trust, control, communication



# CONTRIBUTION OF THE COMMUNICATION IN ADDRESSING THE CULTURAL CHALLENGES IN THE INVESTIGATIVE JOURNALISM PROJECTS

**Walid Nassar**, PhD Candidate  
Alma Mater Europaea – ECM, Slovenia

**Constanta-Nicoleta Bodea**, PhD, Professor  
Bucharest University of Economic Studies, Romania

## ABSTRACT

*In our days, more and more non-traditional domains, in terms of professional project management approaches, tend to become part of the general projectification trend. The journalism field is a domain where the projects are relatively common, but the project implementation is not enough professionalized yet. This is one of the reasons that managing these projects represent a very challenging endeavor. Another reason relies on the specificity of the journalism projects, especially the investigative journalism ones. They main characteristics of this type of projects are their complex environment, in terms of stakeholders' typology and their multiculturalism. The focus of the paper is two-fold: the first objective is present the main cultural challenges in the investigative journalism projects, as they were identified during the extended literature review performed by the authors, based on theoretical concepts, such as: cultural diversity, cultural effectiveness etc., and cross-cultural models. The second objective of the paper is to present how communication may contribute to face the cultural challenges in the investigative journalism projects. This is the result of the study of current practices in some investigative journalism projects implemented in Middle East region. The paper ends with some general recommendations for achieving project management professionalization in this type of projects and this specific geographical region.*

**Keywords:** *investigative projects, culture in project management, project management professionalization, projectification, Middle East region*

# CRITICAL SUCCESS FACTORS IN HYBRID PROJECT MANAGEMENT

**Emmanouil Papadakis**, PhD Candidate  
University of Macedonia, Greece

**Loukas Tsironis**, PhD, Associate Professor  
University of Macedonia, Greece

## ABSTRACT

*During the last decades in the project economy the desire of being more flexible and responsive has been increased. This desire paved the way for agile methods and practices to be adopted into environments previously defined as traditional. Thus it has opened the road of combining agile practices with traditional project management methods and plan driven approaches. This combination of methodologies is referred to as Hybrid Project Management (HPM), whose aim is to leverage the benefits from both APM and TPM. The emergence of hybrid project management is a recent phenomenon in project management examining challenges and benefits of using both agile and traditional project management models towards a hybrid model. Purpose: The study researches the challenges of combining APM and TPM practices providing specific Critical Success Factors (CSF) which are to examine the differences between traditional, agile project management practices mainly in non-IT sectors. The challenges of both agile and traditional project management models represents the project management Critical Success Factors (CSF). While other research has investigated the CSF in traditional and agile project management, this research studies CSF for hybrid project management mainly in a non-IT environment. Method: This research study has been carried out through semi-structured interviews as a research method, with experienced project managers and pmo leaders around the world within HPM. Inspired by Grounded Theory, this study has employed purposive sampling and analyzed the data through a grounded analysis technique. The semi-structured interviews for the present study were conducted using online virtual tools with the participation of project management professionals from various countries around the world. This research shows that neither traditional project management nor agile project management is wholly similar to hybrid project management. As a further research outcome, the guiding principles have been formulated for showing which situations requires hybrid project management.*

**Keywords:** *critical success factors, agile, traditional, hybrid models*

# HOW TO CREATE AND MAINTAIN TRUST IN HYBRID PROJECT TEAMS? A CASE STUDY IN IT PROJECTS

**Brigitta Vereczkei**, PhD Candidate  
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## **ABSTRACT**

*In the past two decades, virtual teams have become a natural form of work design, and their importance has increased, especially since the beginning of the 2020, due to the Covid-19 pandemic. In addition to completely virtual teams, the importance of hybrid teams - that dually exist on a spectrum of virtualness and physical distance and use a combination of face-to-face and online communication - has also increased. Team trust has been widely discussed in academic literature as a fundamental characteristic of any work. It is also one of the most frequently addressed topics in the virtual team literature, which points to fundamental differences between trust in traditional organizations and virtual groups. This paper aims to summarize what was experienced during desk research on hybrid teams and trust in two periods, before Covid-19 and since the emergence of Covid-19 to the present day. Our hypothesis is that (1) a hybrid team is a tangible, from a research point of view, interpretable phenomenon and that (2) operation of hybrid teams, and the factors affecting their operation and success, will differ after the Covid-19 pandemic from those experienced in the previous period. If the hypothesis is confirmed, we would like to interpret the hybrid team as a unit of analysis and the post-Covid-19 era as a context in a future case study research in the field of "Trust and its effects in hybrid project teams." With our current desk research, we also aim to provide a basis for additional hypotheses for our future research.*

**Keywords:** hybrid team, virtual team, trust, Covid-19



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# **APPLIED ARTIFICIAL INTELLIGENCE**

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# WEB AND INFORMATION TECHNOLOGIES

## SCHOLARLY PANEL

### A METAVERSE EDUCATION IN PRIMARY SCHOOL: CREATIVE AND COLLABORATIVE LEARNING IN VIRTUAL ENVIRONMENTS IN BRAZIL AND ITALY

**Daniele Agostini**, Lecturer  
University of Trento, Italy

**Jorge Franco**, Lecturer  
University of Sao Paulo, Brazil

**Chiara Ferronato**, Official  
Italian Ministry of Education, Italy

#### ABSTRACT

*Urged by Covid19 pandemic, many schools throughout the world have enhanced their capacity to use educational technology tools for new teaching and learning methods and to provide a seamless learning experience. Web3D-based information production, visualization, and interactive technology, for example, has improved instructor and students' skills in learning how to deal with cyberspace technological transitions since K-12 school level settings. This work discusses examples of how accessible Web3D virtual reality tools and techniques can and have contributed to achieving Sustainable Development Goals (SDGs), specifically SDGs 4 and 5, by assisting individuals in acquiring and applying transdisciplinary knowledge with the support of constructionist and computational action perspectives. Subjects have made use of metaverse technology tools such as web-based hypertext languages, HTML/VRML/X3D, and platforms like X3Dom and Mozilla HUBS. A design thinking technique has been used to create and perform the case studies in Brazilian and Italian primary schools and supported this ongoing collaborative research work. These human and technical resources articulations have brought about improving individuals' visual, coding, spatial, and conventional literacies as well as sustaining lifelong researching, learning and teaching actions.*

**Keywords:** educational technology, immersive learning, primary education, distance learning, computer simulation

# ESTIMATING THE ECONOMIC IMPACT ON THE BUSINESS THROUGH THE INTERNET OF THINGS (IOT)

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**Mohammad Mahoud**, PhD, Professor  
3M-CEPM R&D Institute, Iran

## ABSTRACT

*In this day and age, to grasp the notion of connectivity anytime, anyplace, the Internet of Things (IoT) refers to the global connection between items and associated concepts such as mobile and ubiquitous computing. To ensure that this link is not disrupted. The usage of IoT, as well as its proliferation and penetration in organisations, has generated a new competitive economy that motivates the non-digital sector to hold a different view about their business. The analysed business model, which is based on the findings of top IoT Scholars, has three major components: Who, Where, and Why. The word „Who“ indicated the collaboration of corporate partners that generates a „Value Network.“ The terms „Where“ and „Why“ relate to the sources of collaborative value creation that are based in the digital object layer model, and the partners who profit from working in the value network are defined. The suggested framework for strategy, tactics, and value chain components is integrated to explain „How“ this model operates.*

**Keywords:** competitive economy, organisation, internet of things (IoT), business model, value network



# MEDIA AND INFORMATION LITERACY IN THE AGE OF DIGITALIZATION

**Tanja Muha**, Director

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## **ABSTRACT**

*Trend of digitization is present in all areas of society. The introduction of 5G technology and networks raises many issues that need to be faced and addressed accordingly. This type of networks and digital platforms will be the meeting point of all segments of society, even those that have not appeared in these stories until now. By connecting a large number of systems and devices and, as a result, collecting a huge amount of data, the possibility of various abuses also increases. There will be more and more application solutions, and with it greater dependence on software and significantly more devices among users. Therefore, both the media and information literacy of these end users are crucial for effective and appropriate implementation of digitization and the provision of information and cyber security. AKOS has been very active in this field since 2019.*

**Keywords:** AKOS, media, information, literacy, digitalization, 5G, cyber security

# ASSISTIVE TECHNOLOGY FOR A BETTER QUALITY OF LIFE FOR PERSONS WITH DISABILITIES

Miroslav Vrankić, PhD, Professor  
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## ABSTRACT

*Assistive technology plays an important role in increasing the quality of life of persons with disabilities. In this paper, the author will present several innovations in the field of assistive technology, developed by his team. The first is a thought communication system designed to help people with locked-in syndrome, and which is based on the processing of EEG signals. The second is the Kokolingo application for online speech therapy exercises to children with speech articulation disorders. The third is the SENcastle device, which introduces innovations in the field of sensory therapy.*

**Keywords:** *assistive technology, EEG signal processing, locked-in syndrome, articulation disorders, sensory integration therapy*

# DEEP MOVEMENT WITH THE AI: EMBODIED ETHIC IMAGINATIONS IN A VIRTUAL ENVIRONMENT WITH ONE ORANGE FEATHER FLIGHT

Tatjana Christelbauer, Lecturer  
ACD – Agency for Cultural Diplomacy, Austria

## ABSTRACT

*Ethical imagination may serve as a preventive tool when it comes to furry which can suddenly occur and cause mostly undesired damages in human relations. Art-based practices have shown an evident impact on the development of skills connected with assertive communication and self-control, and thus prevent effective acts provoked due to a person's state of feeling regardless of the consequences that follow it. How can AI assist in creating a "clear picture", verbalizing and dis\_embodiment emotions into a visual virtual image? The presentation will address the question of ethics in human relations connected with the potential of artificial intelligence as an assistive tool in preventing violence, in particular the hate speech which tends to be followed by physical acts of violence, such as it has been evidently shown by cases of femicide, "Hass im Netz" (hate speech) and generational violence in Europe and worldwide within the last two years. The Orange feather flight syllabus is a part of the art-based research on the impact of artistic co-creation among humans and AI for the purpose of verbalization and external embodiment of imaginative attempts connected with emotional stress through visualization in a multilingual setting. Orange feather flight thought experiment has been created in 2021 within the frame of the Austrian SDG Award 2022 winning initiative "Orange Feather\_Stille Post 25/11 x 365" as an art-based exercise for gaining ethical imagination through play with AI-based tool which assists in verbalization and visualization of accumulated emotional tensions. The image of the one Orange feather on a black background has been created with the aim to explore if such an image can effectively serve as an alert & mind marker, thus contributing to and providing simple, but impactful assistance in preventing raising violence which seems to become one of the most challenging concerns worldwide.*

**Keywords:** AI, thought experiment, prevention of violence, ethical imagination, embodiment

# TRANSIENT PATTERN OF INTERSPECIES COMMUNICATION

Andrea Gogová, PhD

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## ABSTRACT

*In the paper I focused on possibility to record or to visualize pattern of communication of coupled systems human, non-human and more than human from the view of ArtSci research and practices. Electronic writing, as recording communication, has a character which allows writing technique in relation to human/machine/human. Philippe Bootz reflected it by description of a procedural model of communication and the introduction of performative signs, which relates to the unstable form of communicative artwork. It could be embodied in a variable form of code and represented, manifested, or articulated on/in various interfaces. According to Maturana and Varela (1972), the recurrent interaction of unit and medium causes structural coupling, which is reflected in a patterned cognition and communication of autopoietic complex organization. Donna Haraway (2016) believes that not autopoiesis, but sympoiesis is enabled to incorporate a complex interrelation of system as such. Then the principle of structural coupling of sympoietic systems can be applied to the interrelation of the interface and communicative units. In the research I related the water to the interface and notion of fluid form also. Then the water is inevitable medium of living and interface but also a principle of each of that communicative pattern also.*

**Keywords:** interface, pattern of communication, sympoiesis, structural coupling, water





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# **CULTURAL FORMATIONS**

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# CULTURAL FORMATIONS AND CULTURAL MEMORY

## SCHOLARLY PANEL

### DIGNITY AND NATURAL RIGHTS

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#### **ABSTRACT**

*The concept of dignity is opposed to assumed reasonableness in self-constitution. Through the natural law framework of Finnis, moral responsibilities in light of the common good will be analysed. Morality, namely, often requires one to sacrifice the individual choice or individual benefit in order to respect other people's fundamental individual needs. The common good can thus be understood as constituted by the fulfilment of duty to others, required by interpersonal justice. To that end, first, the concept of dignity itself will be analysed. It will then be situated within the Finnisian framework. Lastly, dignity will be stressed regarding duties constituting the mirror image of rights.*

**Keywords:** *dignity, natural law, moral responsibilities, duty to others, common good*

# EVERYDAY LIFE IN THE NAZI STAMMLAGER CAMP 18 D

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External Associate and Researcher

International Research Centre for Second World War Maribor, Slovenia

## ABSTRACT

*Drawing on archival sources, pictorial material, memoirs, and private collections, the paper aims to present an aspect of everyday life in the Nazi Stammlager 18 D for the detainment of soldiers from the Soviet Union and the Western Allied Coalition. It was established on 1 June 1941 on the site of the customs grain warehouses and military barracks in occupied Maribor. Initially, it was built for the captivity of Western Allied soldiers, which were under the Geneva Convention (1929) and thus registered as prisoners of war by the Red Cross. After Operation Barbarossa, Soviet soldiers found themselves in the camp as well. They were excluded from the Geneva Conventions because the Soviet Union was not a signatory state. To the existing camp complex, facilities for the internment of captured Soviet soldiers in a separate „Russenslager“ were added, which operated until late autumn 1942. Ordinary soldiers had to work in the factories; they took part in construction work, reconstruction of roads and railways, and removing rubble and unexploded bombs. Western Allied soldiers had free daily passage and movement outside the camp complex. A Red Cross delegation could visit them. They could organize sports games (rugby, football, and indoor tennis) and cultural and artistic activities (theatre performances, the publication of a French newspaper, and book reading). The story of the Soviet prisoners was different and tragic. Unprotected by the humanitarian organizations, the Red Army prisoners were forced to live in a barricaded, guarded, and wired camp complex whose purpose was the destruction of its inmates. They arrived in Maribor in overcrowded, sealed cattle wagons of freight trains. Upon arrival, they were starving and freezing; their physical condition was poor. Many died during transport or on arrival. They were beaten, shamed, mocked, tortured, shot, and deliberately subjected to psychophysical exhaustion in the camp.*

**Keywords:** Stammlager 18 D, Maribor, German occupation, prisoners of war, destructive camp, everyday life, 1941–1945

# NATURE RELIGION IN SLOVENIA IN COMPARATIVE PERSPECTIVE

**Cirila Toplak**, PhD, Professor  
University of Ljubljana, Faculty of Social Sciences, Slovenia

## **ABSTRACT**

*In this conference paper, the historical counterculture of nature worshippers in the west of Slovenia will be briefly explained and then compared with remnants of pre-Christian beliefs and potential primordial social forms in Slovakia and Estonia. Comparison is founded on a hypothesis that (post)colonial relations and therefore theoretical concepts from subaltern studies may represent a relevant context for study of religious minorities whose belief systems stem from opposition to Christianisation in Europe that was at places simultaneous to medieval colonisation processes.*

**Keywords:** nature religion, Slovenia, Slovakia, Estonia, subaltern studies

# ON THE QUESTION OF A DIGNIFIED HANDLING OF HUMAN REMAINS IN ARCHEOLOGY

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## ABSTRACT

*The investigation of various human legacies forms the core of archaeological research and enables insights into the past and the development of past societies. An important group are human remains, whose handling requires particular sensitivity. Questions of ethics and human dignity must be taken into account when handling human remains during archaeological excavations, documentation, scientific examination, storage and, in particular, when they are included in museum exhibitions. The content, context and aim of the presentation of human remains should always be critically examined. A good example in this context is the presentation of the "Iceman Ötzi" in the museum in Bolzano. On the one hand, the scientific findings that could be gained from the glacier mummy are of enormous importance and must be presented to the public, on the other hand, the exhibition of the frozen corpse raises questions about the respectful and dignified treatment of the individual. Another question is what role the age of the human remains plays or whether we are tackling remains from a sensitive find context, so called "injustice contexts" such as battlefields of the 20th century. Here, for example, the question of the still living descendants arises.*

**Keywords:** archaeology, archaeological ethics, human remains, dignity, moral issues

# THE NEW EUROPEAN BAUHAUS AS AN OPPORTUNITY TO REVITALIZE CULTURAL HERITAGE IN RURAL AREAS

Mojca Sfiligoj, PhD Candidate

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## ABSTRACT

*In 2021, the European Commission launched the New European Bauhaus initiative. It is a creative and transdisciplinary movement in the making at the intersection of art, culture, social inclusion, science and technology. The goal of the initiative is to implement the green deal and to create new ways of life. In the paper, I will outline the state of building cultural heritage in Slovenia. In doing so, I will rely on the data of the Register of Cultural Heritage, which is the central collection of data on heritage in Slovenia. I will focus mainly on the ethnological building heritage in rural areas and present some reasons for its endangerment. Despite the fact that the state of ethnological building heritage in Slovenia is not encouraging, we can find some examples of good practice. I will mainly present those cases where the goals of the New European Bauhaus are highlighted. In the period of social and technological development, new opportunities for the transformation of life in rural areas also arise. In this paper, I will try to summarize some of the orientations of the New European Bauhaus and at the same time pursue the modern principles of managing the ethnological heritage building.*

**Keywords:** *New European Bauhaus, cultural heritage, rural areas*

# PRESENTATION OF THE SECOND (SUPPLEMENTED AND EXPANDED) EDITION OF SCHOLARLY BOOK ROGAŠKA SLATINA UNDER THE SWASTIKA: SPA RESORT DURING THE OCCUPATION OF 1941–1945

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## ABSTRACT

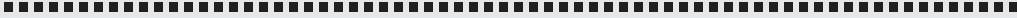
*In November 2021, the publishing house of Alma Mater Europaea – ISH, as a result of four years of research, published the author's book debut – Rogaška Slatina Under the Swastika: Spa Resort During the Occupation of 1941–1945. In the academic field of contemporary Slovenian historiography, the book represents the first comprehensive, systematic, thorough, in-depth and rounded micro-study of the four-year Nazi occupation of the famous Slovenian health resort and the rule of occupying forces in Rogaška Slatina during 1941–1945, analysing a wide range of thematic areas, aspects and far-reaching implications. The spa municipality's occupation period was a completely unexplored thematic area until now. Consequently, the scholarly book is a pioneer work. Due to the enormous interest, inquiry, received publicity, media coverage and report at the local, regional and national level, as well as positive reviews and reactions from the wider readership, the book quickly sold out, which led to an additional reprint shortly thereafter. Last year, the author launched a project of a second (supplemented and expanded) edition, which, like the first edition, was published by the faculty publishing house. The second edition has been given a larger format and harder cover. Existing photographs and reproductions of archival documents and other primary material (especially private collections) have been enlarged. The content of the individual chapters has been restructured and supplemented with hitherto unpublished pictorial material, which includes reproductions of archival and other documents and individual photographs (for instance, from the Archives of the Auschwitz-Birkenau State Museum. New content has been added to some chapters based on the inclusion of additional (newly acquired) oral testimonies, the existing collection of hitherto unexamined archival material and a research visit at the German Federal Archives in Ludwigsburg. An entirely new added chapter covers an aspect of everyday life in occupied Rogaška Slatina. At the premiere presentation of the second edition, the editor-in-chief of the publishing house, Dr Gašper Pirc, will moderate the discussion with the author.*

**Keywords:** historiography, humanities, supplemented and expanded edition, Rogaška Slatina, Second World War

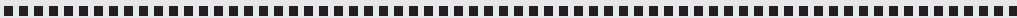








# HUMANITIES





# ETHICAL DILEMMAS IN THE AGE OF DIGITAL REPRESENTATIONS OF REALITY

## SCHOLARLY PANEL

### FILM AND CINEMA OF EMOTIONS

**Uroš Zavodnik**, PhD, Assistant Professor  
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#### **ABSTRACT**

*Film as art, which combines all the other arts, is confronted with the creation of reality on the cinema screen, regardless, it is all the time disposed an unlimited fantasy of film director, writer, actor, i.e. all the creative crew (authors), which creates on the film set the imagination, the spectators could accepted as real, despite it is imaginary. Director seduces the spectators through the subversive power of cinema (cinema hall), which is a quite special place. It is a place full of emotions. They appear between the film characters on the big cinema screen and spectators. Film is a battleground of emotions. The spectator is the one, who suddenly appears inside this battleground. Here he can be placed into the process of own emotional state of the art, either through the protagonists or antagonists. Jean-Luc Godar, as the member and creator of 'new wave cinema' (La Nouvelle Vague), created a unique cinema. He is not among us anymore, yet his cinema is still here, because he created an engaged characters, full of contradictory emotional states. So, his cinema still supports us, the film artists, especially through unique discourses about the cinema, which are hidden inside of his films.*

**Keywords:** film art, cinema, cinema of emotions, film director

# NEW MEDIA AND ETHICAL PROBLEMS: FACEBOOK-CAMBRIDGE ANALYTICA SCANDAL

**Erdem Koç**, PhD, Associate Professor  
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## ABSTRACT

*Ethics, known as moral philosophy, is an ancient branch of philosophy that investigates whether human behaviors, thoughts and values are moral, and suggests how they should be. In the historical process, the media has always been handled, researched and sometimes criticized within the framework of ethical values. When it comes to today, the new media, which offers many different features and possibilities, has continued the existing ethical problems and sometimes caused new problems to be encountered. With the intertwining of technology and life, every area of life has started to shift to the digital environment. Moreover, people have become unable to do even simple activities without technology. This situation has started to necessitate a new ethical understanding in online environments. This concept, which is called digital ethics, refers to the definition of new ethical concepts and the development of solution proposals by using traditional ethical terminology, since all kinds of activities are carried out in online environments. It is a fact that the boundaries of digital ethics are still unclear. It is not enough to discuss digital ethics only within the framework of privacy. There is a need to define the ethical understanding in digital activities in wider boundaries. In this study, it will be tried to develop suggestions about what kind of measures can be taken in order to reveal the ethical violations in the new media and to establish universal ethical values in the new media afterwards. As a case study, Facebook-Cambridge Analytica scandal will be examined in terms of content analysis method. While doing it, first of all, the content of the universal ethical rules will be discussed and it will be tried to determine the principles and rules that should be in the new media understanding, which is shifting to digital environments.*

**Keywords:** ethics, digitalization, digital ethics, social media, online life

# THE USE OF ENGLISH BORROWINGS IN THE SOCIAL MEDIA IN KOSOVO

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**Arta Toçi**, PhD, Professor  
South East European University, North Macedonia

## ABSTRACT

*This study aims to examine the use of English borrowings in the social media in Kosova and consider the potential effects on the comprehension of the audience. It takes into consideration the role of technology in the spread and adoption of English borrowings through the social media. With the rise of the internet and social media, access to English language media has become more prevalent, leading to a greater influence of English on the Albanian language. The use of technology in media also plays a role in the way English borrowings are adopted and incorporated into the language, as media outlets may choose to use English terms for the sake of convenience or to appeal to a younger, tech-savvy audience. This adds a new dimension to the analysis of English loan words in social media in Kosova and highlights the importance of considering the role of technology in language evolution. Furthermore, due to the fact that younger generations are familiar with English, those borrowed words can be understood by them, however, the same cannot be said for older generations. The research also examines those linguistic features that have entered Albanian via the English language, even though they are from distant languages, such as the words gong, typhoon, and so on. In the Albanian those words are considered as English words because they have been fully adapted to the English language in terms of phonological, phonetic, and semantic viewpoints over time, and so may already be considered English language elements. Additionally, with the increasing technological development and globalization, it is not uncommon for English borrowings to be used in media as a way to stay current and relevant. However, it is crucial to consider the impact of these language choices on the audience and ensure that the language used is accessible.*

**Keywords:** anglicism, media, Kosovo, language, conferences

# TRANSPARENCY AS A PRINCIPLE AND REQUIREMENT: WHAT DO WE DEMAND WHEN WE DEMAND TRANSPARENT AI?

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## ABSTRACT

*The rise of machine learning has brought artificial intelligence (AI) into all areas of our lives, and with it the need to ensure that it is used in an ethical way. In recent years, we have seen an increasing number of documents from NGOs (UNESCO, OECD) offering ethical guidelines for the use of AI, as well as proposals for its legal regulation (European Commission). All documents cite transparency as one of the key principles for ethical use of AI. In this paper we show that transparency requirement actually require a wide range of different phenomena. This makes it difficult to have a clear view of what is actually demanded when we demand transparency. We show why the best formulation of the transparency requirement can be found in the document produced by the High-Level Expert Group On Artificial Intelligence (2018) and why it is important to distinguish between transparency as an ethical principle and transparency as an ethical requirement. Finally, we offer a suggestion on how to distinguish terminologically between the different phenomena, all of which are hidden in the requirement for transparency, and how to formulate them in a way that the guidelines can be actually useful.*

**Keywords:** artificial intelligence, transparency, principle, requirement, ethics

# HERITAGE CULTURE AND IDENTITY

## SCHOLARLY PANEL

### OLFACTORY HERITAGE IN SLOVENIAN MUSEUMS

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#### **ABSTRACT**

*Olfactory heritage is an aspect of cultural heritage concerning smells that are meaningful to a community due to their connections with significant places, practices, objects or traditions, and can therefore be considered part of the cultural legacy for future generations. Olfactory heritage science is an emerging field of research, focused on the scientific techniques to analyse, document, and preserve odours and perspectives to understand their relevance. Research in olfactory heritage involves many disciplines, such as medicine – neuroscience, chemistry, anthropology, archaeology, conservation science, philosophy, psychology and history. Studies on the culture of odours have been conducted in several manners, but the prevailing literature on the subject focuses either on linguistic-semiotic analyses of olfactory notions, which essentialize smell as a universal language or on anthropological comparisons of olfactory meaning, which emphasize commonalities and differences between cultures. Due to the intangible and ephemeral nature of smells, one of the main challenges of olfactory heritage science is developing methodologies for documenting and archiving the smells. The paper will present the types of olfactory heritage in Slovenian museums as well as its presentation to a wider audience.*

**Keywords:** olfactory heritage, anthropology of smell, museum, methodology, Slovenia

# POLITICAL ENGAGEMENT OF CULTURAL HERITAGE AND PROCESSES OF DEMOCRATIZATION OF SLOVENIAN SOCIETY

Verena Perko, PhD, Assistant Professor  
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## ABSTRACT

*Modern heritology defines cultural heritage as a value that should be protected and preserved for future generations. The paper is devoted to a critical treatment of this definition. The author recognizes it as a reflection of postmodernist relativism, where all values within the framework of a „fluid“ society (according to Z. Baumann) are exposed to constant questioning in the light of social needs, which are mostly shaped by consumerism and capital. The relativization of values can also be dangerous for heritage, which according to the definition is recognized exclusively as a social value. The paper deals with the heritage postmodernist approach in the context of Slovenian society. Similar to all Eastern European countries, Slovenia is also marked by social upheavals in the semi-past, which radically changed the scales of values. In the second part, the paper discusses the inherently political nature of cultural heritage, which is clearly revealed in the definition. It searches for deeper reasons of the politics of heritage processes and thus cultural heritage and reveals them with the help of hermeneutics. It justifies the necessity of heritage interpretation as a decisive element of heritage, which enables the recognition of heritage community meanings in a certain social environment. The paper also deals with issues of the specific heritage of less „visible“ and politically exposed or even denied groups. In the light of the initial definition, the author concludes with a discussion of Slovenian contested heritage.*

**Keywords:** cultural heritage, modern society, interpretation, collective memory, democracy, contested heritage



# THE ROLE OF MEDIA REPORTS IN DEMOCRATISATION OF ARCHAEOLOGICAL HERITAGE MANAGEMENT – THE CASE OF SLOVENIA

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Faculty of Slovenian and International Studies, New University, Slovenia

## ABSTRACT

*Archaeological heritage management is one of the most demanding tasks in heritage protection. Even when archaeological remains are identified in situ and statutorily protected it is hard to overpower the negative effects of natural decay, illicit excavation, and development pressure. Heritage protection aims to integrate heritage sites into the contemporary life of local communities. Therefore, the authorities need to increase public participation. The process goes in line with the general policies seeking to democratise our societies beyond the concerns of political democratisation. The case study analyses the content of a set of journalistic reports published in Slovenian newspapers in the period 2005 – 2021. The typology of articles covers interviews with archaeologists, reports on archaeological research, other archaeological projects, and illicit or damaging activities related to the archaeological heritage. The methodology follows the principles of bibliometric analysis but contrary to bibliometric research of scientific literature from the Web of Science (WoS) and Scopus it is not limited to keywords and abstracts but covers full-texts treatment. We have assigned codes to the content of seventy-six articles. The codes (forty-six in total) pertain to seven categories and manifest either deficient or participative archaeological paradigms. The coding of articles was carried out according to the actual meaning of words in the context. The main results of this content analysis will be presented at the conference.*

**Keywords:** bibliometric analysis, heritage management, public archaeology, participative approach

# TWO 'TYPES' OF SODOM'S SIN IN DANTE'S DIVINE COMEDY

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## ABSTRACT

*Dante's Divine Comedy, a work that belongs to the treasury of mankind, is full of precise and subtle lines, not only about the value and role of women(s) in the personal economy of salvation but also about other groups of people. Homosexuals are one such group. Their placement in the seventh circle of hell is well known (Inf. 15-16), but less known is that homosexuals are also among the 'yearning ones' on the Mount of Purgatory (Purg. 26). Therefore, various interpretations have accumulated among Danteologists throughout history. Those with a theological background are more inclined to different classifications of the sinner, obstinate sinner or repentant sinner. It is also possible that Dante had in mind two different types of same-sex sexuality: the first group consists of same-sex rapists, maybe even paedophiles (the mention of Brunetto Latini in this connection is by some authors a hint that Dante himself was a victim of sexual violence) that would end up in hell. The second group represents sinners who practiced consensual same-sex sexuality. From the latter, we can even derive the thesis that Dante distinguishes between something that is a 'sin against God' and something completely natural. A wider range of possibilities will be collected through the method of the hermeneutic circle. We must keep in mind some facts: that the category of homosexuality is an invention of the 19th century, that Dante does not use the terms sodomy or sodomite, but speaks of the sin of Sodom, which in medieval representations represents a kind of umbrella term for a whole range of individual sinful activities contra naturam. Considering all this Dante's mention of homosexuals in Purgatory is theologically very modern and, in this sense, suggests prophetic solutions as in the case of the three women: Lucy, Mary, and Beatrice.*

**Keywords:** Dante, Divine Comedy, homosexuality, sodomy

# PERPETUAL PEACE IN EUROPE: BACK TO THE FUTURE?

IN PARTNERSHIP WITH SCIENCE  
AND RESEARCH CENTER KOPER

## SCHOLARLY PANEL

### GEOPOLITICS OF PEACE

**Thomas Hippler**, PhD, Professor  
University of Normandy, France

#### **ABSTRACT**

*It is widely known that the language of peace can be used as a justification of domination, both domestic and international. Expressions modeled upon Roman notions of peace – pax britanica, pax americana, pax sovietica, etc. – have been used to describe such deceptive notions of peace. Using the methods of conceptual history the paper argues in a first step that the criticism have to be taken seriously and will map out this claim through a series of historical examples. To put it bluntly, the stronger part in an asymmetric power relation has a vested interest in peace. In a second step, however, the paper will develop the idea that this criticism does not disqualify the notion of peace as such. It rather leads to the question of how we define peace. Drawing upon Merleau-Ponty's notion of a 'lateral universalism' the paper will thus make a case for an intercultural understanding of peace that does not make abstraction from existing power inequalities on the global level.*

**Keywords:** geopolitics of values, world-system theory, lateral universalism, conceptual history, definitions of peace

# NORMATIVE STANDARDS, HUMAN CONDITION, AND THE ARTIFICIAL INTELLIGENCE IN EUROPE AT THE CROSSROADS

**Gašper Pirc**, PhD, Researcher

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Institute for Philosophical Studies of ZRS Koper, Slovenia

## ABSTRACT

*At present, we still live in a society crucially characterized by a two-year crisis over COVID-19 and the current Russian invasion of Ukraine, which also points to the consequences of an unfinished transition in the post-binary world of the 20th century and a possible economic crisis under the aegis of contemporary social pathologies. Such social pathologies establish independent normative focus with their ideological force and at the same time affect the standards of knowledge in society. In this troublesome time, it is worth asking whether we can conduct a thorough investigation of society outside of the Eurocentric modern conception of reason or its relativistic counterpart, the denial of communication, based on either non-coerced or power-affected rationality. In addition, the new weaponization of Europe alongside the ever-more effective tactical weapons and the development of autonomous weaponry which has proved to be a decisive factor in many of the recent military conflicts showcases a new and perhaps even more dangerous take on the art of war, especially in regard to responsibility and the above-mentioned issues with normative standards of society. After all – are tactical weapons really more acceptable than the strategic weapons we were concerned about for decades? Or is the war in Ukraine actually showing us that the changes in human attitude and the development of AI-based machinery is only minute?*

**Keywords:** digital humanities, critical theory of society, ethics of AI, political philosophy, social philosophy, war in Ukraine

# PERPETUAL PEACE IN HISTORICAL EUROPEAN COOPERATION DESIGNS: PATTERNS TO CONSIDER

**Cirila Toplak**, PhD, Professor  
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## ABSTRACT

*European cooperation and unification designs precede modern integration processes leading to the present European Union of 27 by centuries. The earliest such idea is included in Dante Alighieri's 1314 De Monarchia. Almost simultaneously, Pierre Dubois composed the treaty On the Recuperation of the Holy Land that tied perpetual peace to an ultimate Christian Crusade. When Byzantium fell in the mid-15th century, the idea of perpetual peace was revived by the direct Ottoman threat to Europe in writings of Pope Pius II and in the extraordinary European confederation proposed by the Bohemian king Yuri Podiebrad. In the early 17th century the politically biased but influential Great Design by the French Duke of Sully followed, the last to suggest war as the means of peace. A century on, William Penn's enlightened proposals partly inspired Charles de Saint-Pierre's Project for Making Peace Perpetual in Europe. Immanuel Kant's 1795 essay Toward Perpetual Peace thus hardly came out of nowhere. In the 19th century, the list of theoretical peacemakers and unifiers of Europe goes on. In the aftermath of the Great War, the pacifist Paneuropean movement launched by Richard Coudenhove-Kalergi resulted in the initiative on the United Nations of Europe that came too late to prevent the Second World War. The post-War creation of European Communities, albeit dictated by the United States, was founded on genuine pacifism. Yet, the lasting European peace again only lasted until the Yugoslav wars in the 1990s. Besides unification against common enemy and economic prosperity, lasting peace was a recurring motive in almost all historical European unification designs. Since the Enlightenment, it has been recognized as a precondition to any prosperity. However, its elusiveness has been owed to the historical inability of European rulers and politicians to prioritize common European interests before partial national interests.*

**Keywords:** peace, war, history, political theory, europeanization

# PERPETUAL PEACE IS FOR THE DEAD, JUSTICE IS FOR THE LIVING

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## ABSTRACT

*Kant's text on "Perpetual Peace" begins with the coy and ironical reflection on a sign hanging on the entrance to a pub: so the dead are the ones that get perpetual peace, while the living can only dream of it. Kant's text is now a classic of both political and legal philosophy: it aimed to offer the groundwork for the basic conditions to secure peace in this world. Among the great accomplishments of this text, is that Kant recognized that peace is not possible without what he called the acknowledgement of "cosmopolitan right," the right to asylum and refuge. In this text, however, I will overview how Kant's views on race and war undermined his "cosmopolitan" intent. Did Kant cease to think that slavery was acceptable, and whether in fact the "white race" was fated to supersede all other races, and that other races were better off by having come into contact with the "white race"? As Kant said in his review of Herder's book on history, it was best that the inhabitants of Tahiti had come in contact with European civilization; otherwise, they would have been condemned to the life of mere sheep. We must decolonize cosmopolitanism, and this means decolonizing Kant's racism and his sanctioning of war and European legal imperialism.*

**Keywords:** Kant, race, war

# SPINOZA, KANT, AND WORLD PEACE AS THE COSMOPOLITAN VIRTUE OF HUMAN FREEDOM

**Nythamar de Oliveira**, PhD, University Professor  
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## ABSTRACT

*Spinoza famously said that “Peace is not an absence of war, it is a virtue, a state of mind, a disposition for benevolence, confidence, justice.” (Theologico-Political Treatise, 1670). As opposed to some form of quietism or Romantic flight into an apolitical oasis of nature, I will argue for the political implications of Spinoza’s takes on human freedom and political tolerance, as anticipating Kant’s philosophy of perpetual peace, and will attempt to show how both thinkers recast a late stoic cosmopolitanism that paves the way for worldwide, peacemaking institutions based on more democratic, pluralist, and humanistic ideals, as a difficult but achievable goal for humankind. I will seek to establish the thesis that the promotion and achievement of world peace turn out to be as rare and difficult as that of human freedom itself, and that one cannot attain the former without the latter.*

**Keywords:** cosmopolitanism, democracy, freedom, social peace, tolerance

# THE DECOLONIZING KANT

**Klaus-Gerd Giesen**, PhD, Professor  
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## **ABSTRACT**

*While Kant's Cosmopolitan law is culturally biased, the author of a rather complex and rich work gave nevertheless pledges to a position strongly denouncing colonialism and colonial wars. His many arguments, placed in their respective precise historical contexts, including his own empirical references, are examined in detail and connected all together. Particular emphasis is placed on their relevance to the whole of cosmopolitan law.*

**Keywords:** Kant, decolonization, colonialism, peace, war



# THE GREAT RETURN OF THE BAROQUE ARSENAL: A CRITICAL ANALYSIS OF ATLANTIC REMILITARIZATION

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## ABSTRACT

*In the context of the war in Ukraine, many European states have announced that they will significantly increase their defence spending. The authorities of these states have also announced that a non-negligible part of this expenditure will be aimed at the development and acquisition of new military equipment. The Atlantic military-industrial complex emphasized the « need » to innovate in the area of military research in order not to be left behind by peers competitors. The reaction of European states is intriguing. Indeed, many of these states are part of NATO, an extremely powerful military alliance. The combined defence budgets of France, Britain and Germany alone are currently much higher than that of Russia. How then can we account for the renewed willingness to massively acquire new armaments? Our contribution hypothesizes that this evolution can be explained in part by the return of an imaginary efficiency surrounding armaments. This fantasy, which is taken up in political discourse, is however not without consequences for the revival of arms control initiatives which, during the Cold War, helped to pacify relations between the powers.*

**Keywords:** arms control, NATO and Russia, mimetism, technostrategic imaginary, war in Ukraine



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# INTRODUCTORY SPEECH

## SECURITY AND DIGNITY IN ARCHIVAL THEORY AND PRACTICE

**Peter Pavel Klasinc**, PhD, Associate Professor, Archive Councilor  
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*Today's society is facing major changes in the social, economic, and above all technological development, where new information technologies play an important role. Archivists must pay special attention to those changes that affect the implementation of certain procedures of archival theory and practice, which are not few. We process these procedures within our research, since they are closely related to the issues of security, and especially to the dignity of archivists who work in all areas of archival theory and practice, as well as in archival science research. Social and technological changes are encountered in archival science in particular when recording or when taking archival material from valorised creators to competent archives. Namely, social changes bring about differences, changes and the creation of new fonds with changed creators, which is the actual creation of new archival fonds. This fact means a certain problem for the principle of provenance, because in terms of recording and informing about the fonds, we need to consider interruptions of the time definitions of a certain creator, but at the same time we know very well that it is actual archival material of an older and not a new creator. Because of these changes, we have to define it in a new time period and also list it under a new creator. Basically, this is actually one archival fond, which we have to reclassify, especially when it is accepted into the competent archive. This problem is reflected in the inventories and records of individual fonds, both at the level of the competent archive, as well as in the records of fonds for the entire country (SIRANET and VAČ).*

*Along with all this, we are also faced with the questions of some safety principles. Of course, it is about material protection, i.e. the implementation of all the principles and requirements of long-term protection of archival material on the one hand, and the security of data in and out of archival material on the other hand. Both systems are relatively well-developed in archival theory and practice and archival science according to the research to date. There is also extensive literature as well as legal and other by-laws, standards, where we find the basis for the implementation of the two systems mentioned above.*

*Dignity in archival studies, archival science, and archival theory and practice can only be discussed by leaning on some legal foundations and perhaps on the Code of Ethics of Archivists or the Declaration on Archival Studies. Dignity can be attached to persons - archivists who work in professional, competent archives or in the archive services of creators. They can also create dignity by performing their tasks at a high, professional, scientific or study-research level. The variety in terms of multidisciplinary and interdisciplinarity of the contents of the archival material enables them to do so. Whether archivists can expect improvements in terms of dignity in light of social and technological development, especially in the environments where they work, I cannot confirm for sure, but I would like to emphasize that neglecting the dignity of archivists is inappropriate.*

*Archivists can also create their own dignity by acquiring official degrees and the titles associated with it, depending on the level of study. The assertion of dignity can also be tied to the definition of archival science as an independent, academic, multidisciplinary science, which does not come by itself. According to current archival legislation, by-laws, standards and the like, archival experts must ensure their implementation and thus gain reputation and dignity. We have generally favourable legislation for archivists, but the question remains whether it is actually*

implemented at all levels, even in the so-called real world. I associate the word dignity with a positive attitude towards consideration, respect, mutual understanding, multidisciplinary, interdisciplinarity and similar attitudes. All the mentioned definitions and such a presentation of dignity can mean "modus vivendi" (way of life) between archivists and users and providers of archival services, especially in certain situations, as a possibility of cooperation. This all complies with legal regulations, proper material protection, and above all, everything must be based on the awareness that ensuring dignity in archival theory and practice will also ensure favourable conditions for the preservation of archival material as cultural heritage in the national and international environment.

Allow me to conclude with the Latin saying "Cuilibet in arte sua credendum" which means "everyone must be believed in their profession". I should add, also believe in our archival science

## ANALYSIS OF ONLINE APPLICATIONS FOR ACCESS TO ARCHIVE MATERIALS ON A SAMPLE OF EUROPEAN STATE AND REGIONAL ARCHIVES

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### ABSTRACT

*Purpose:* The purpose of this article is to analyse the web applications of the European national and regional archives focusing on the user interface and the elements of description necessary for international information exchange. *Method/approach:* The analysis method was used to collect data. The occurrence of elements of description in archives was processed using statistical methods.

*Results:* Based on the results, we can see that the functionality of user interfaces is quite high, as the percentage of compliance for all the criteria is above 50 %, except for direct communication. The analysed elements of description have an average compatibility with the ISAD(g)2 standard of 77 %.

*Conclusions/findings:* Archives should enable direct communication with users for a given unit of description using a user interface. The compatibility of elements of description would have been better if the information about the creators and the extent of the unit of descriptions had been available.

**Keywords:** web applications, national archives, regional archives, elements of description

# ENSURING THE DIGNITY OF ARCHIVES AND ARCHIVE SERVICES

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Alma Mater Europaea – ECM, Slovenia

## ABSTRACT

*The word dignity is one of the most used words today, but it usually refers to a person, to a human being. The Slovenian Constitution speaks of dignity and says: „Everyone has the right to personal dignity and security“. (Article 34) Dignity is also mentioned at the very beginning of the Charter of Fundamental Rights of the European Union (2000/C 364/01): Human dignity is inviolable. It must be respected and protected. (Article 1). In both cases, it is actually a person's right to be valued and respected for their own sake and to be treated ethically. However, there are other definitions of dignity. Most often, dignity is characterized as the state or quality of being worthy of honour or respect. This can also be transferred to Archives and archive services. Unfortunately, archives are not considered very popular in public life. The famous archivist and archive theorist Theodor R. Schellenberg has already written about it in the introduction to his book *Modern Archives*, which was published in 1956. Thus, a lack of respect for archives is not just a new phenomenon or a Slovenian specialty. In any case, it is surprising and worrying that just recently, completely unfounded, mistrust of the archive service was even reflected in two decisions of the highest court, whose task is especially to protect human rights and therefore dignity. With the Constitutional Decision from 2014 (U-I-70/12 z dne 21. 3. 2014), the Archives were deprived of the right to keep health documentation (medical records) because it was considered to be a threat to human dignity. With another decision three years later (U-I-246/14-20 of 24/03/2017, the court prevented the archives from keeping the entire criminal files. it was emphasized that it is not permissible to hand over the findings of covert investigative measures (PPU) to the competent archive, even if the criminal file itself, in which the findings are stored, has the nature of archival material. What can we say with all this? The dignity of archives and archive services is necessary, it is essential if we want to preserve human dignity. Without the archives, the documents would never have been preserved, which made it possible for many people in Slovenia who were harmed in the past to receive compensation for their damages, and for the unjustly convicted and their relatives to recover their reputation and good name. New technical achievements make archives even more capable of working for people. Taking away authority from the Archives is taking away human dignity. Failure to recognize the dignity of the Archives is an affront to human dignity. A prerequisite for a safe and reliable archive service is, of course, good archive law, which will protect sensitive and confidential data and prevent any misuse of archives.*

**Keywords:** *dignity of archives, authority of archives, confidential data*



# REMEMBRANCE AS RESTITUTION OF DIGNITY: VICTIMS OF NAZI-REGIME IN THE DESCRIPTION OF ARCHIVAL HOLDINGS AND PROJECTS ABOUT CONTEXTS OF INJUSTICE

**Dennis Hormuth**, PhD, Head of Hamburg University Archives  
Hamburg University Archives, Germany

## **ABSTRACT**

*During Nazi-regime several staff members of Hamburg University had been persecuted, marginalized, driven out of university, or murdered by Nazi-regime. Even though staff members who survived Shoah, war and political persecution had an official right to get back in office, in many cases this promise had not been fulfilled. Reasons for the none-realization were quite different: Most of the persecuted did not want to come back or – even worse – failed in trying. Hamburg University Archives are preparing an online-exhibition about these issues. The following text focuses on this project and its historical contexts. The question to be discussed is if highlighting special groups challenges the task of archives to give a representative overview over their holdings. How to balance projects of societal and political relevance with questions of canon debate? What significance has got restitution of dignity to this question?*

**Keywords:** *dignity, persecution, Jews, archival project, public service, Hamburg University Archives*

# ARCHIVAL DIGITAL CURATION AND DIGITAL HISTORY IN THE CONTEXT OF CULTURAL HERITAGE

**Robert Parnica**, PhD Candidate, Senior Reference Archivist  
Alma Mater Europaea – ECM, Slovenia  
Central European University, Hungary  
Vera and Donald Blinken Open Society Archives, Hungary

## ABSTRACT

*Purpose: The author elaborates on societal and cultural aspects of digital curation and emerging digital history. He argues that digital curation in an archival institution goes much beyond long-term preservation and data enrichment and plays an essential role in preserving Cultural Heritage. Being crucial for academic research, public history, and local community, archives are vital to maintaining the memory and identity of people and their communities, which could be challenging and demanding. Methods: In the first part, the author analyzes the theoretical framework of archival curation within the Cultural Heritage where he analyses the mission of some international organizations, such as UNESCO and ICA. The second part analyzes a few digital historical projects and their importance for Cultural Heritage. Results: The results show that digital curation and historical representations, together with digital history, play an essential role in preserving memory, history, and identity, especially of the marginal groups. The results also show that the practical use of digital curation stimulates a better understanding of the common history and cohesion. Conclusion: Archives as *loca credibilia* continue to evolve and redefine its place in society, even in the digital age. Archives store and protect reliable and trustworthy information of historical knowledge valuable for the marginal groups, and society in general. Digital curation and its enriched representations enable knowledge-based access to archives and their rich collections, and to stimulates the emergence of interactive history in urban public spaces.*

**Keywords:** digital curation, digital representation, digital history, cultural heritage, UNESCO

# DIGITIZATION OF VHS CASSETTES

**Aleksander Lavrenčič**, PhD Candidate, Head of TV Archives  
Alma Mater Europaea – ECM, Slovenia  
RTV Slovenija, Slovenia

## **ABSTRACT**

*The materials on various carriers are irrepressible fallen into decay. This applies specially to the carriers of audio-visual records. VHS tapes were among the once widely distributed media and the archives still receive these carriers. That for we prepared a longer contribution with digitization guidelines, which will be published and presented at the meeting of the Archive Society of Slovenia. With this presentation we would like to attract the archivist to participate in solving the problem, because as well similar problems occur with other media.*

**Keywords:** archives, audio-visual records, VHS cassettes, digitization

# THE DIGNITY OF THE ARCHIVIST THROUGH THE PRISM OF THE STATE AND MODERN TECHNOLOGICAL DEVELOPMENT

**Miroslav Novak**, PhD, Associate Professor, Archive Councilor  
Alma Mater Europaea – ECM, Slovenia

## **ABSTRACT**

*The dignity or professional integrity of archivists means the way they see themselves as archivists-individuals or as a group of archivists and how others treat this individuals or groups in the implementation of archival activity. The paper will present an actual case of violation of the dignity of an archival expert in the archival reading room. The committed violation was directly interdependent with the used modern technological solution. In the continuation of the paper, some methods of remediation of the damage caused by the violation of the archivist's dignity will be presented. At the same time, system solutions will be proposed in the area of ensuring the dignity of archival professionals in modern archival institutions.*

**Keywords:** dignities of the archivist, information technology, archive

# PROVENANCE, ORIGINAL ORDER, AND AN ANSWER TO WHY: THE ROLE OF EMPATHY IN ARCHIVAL SCIENCE

Karen Jamison Trivette, PhD Candidate  
Alma Mater Europaea – ECM

## ABSTRACT

*Archivists come to their scientific practice with two weapons in their arsenal; one is the respect des fonds (principle of provenance; Provenienzprinzip) and the other is respect de l'ordre intérieur (respect of original order). These two, together and independently, seem too slight to base an entire discipline on, much less an entire science. However, it is from these two dictates that other divining directions follow and ultimately lead not only to an empathetic exercise but also to an empathetic enterprise. In this paper, the author will address the dictates – both their historical and theoretical basis and the benefits of their current employment – and will discuss why they still matter after centuries of application.*

**Keywords:** provenance, original order, empathy, provenienzprinzip, empathetic enterprise

# CONTENT CHALLENGES IN BIG DATA PROCESSING

**Dimitrij Reja**, PhD Candidate, Archivist  
Ministry of Infrastructure, Republic of Slovenia  
Alma Mater Europaea – ECM, Slovenia

## ABSTRACT

*The amount of digitally generated data is increasing daily. At the same time, we must not forget about all analog data. All data together can be considered as a whole of big data. We need artificial intelligence to efficiently process large amounts of data. When processing big data, the first major challenge for the industry is the conversion of analog to digital data. The next challenge is the effective use of artificial intelligence. It is necessary to use machine learning technology with the help of which we would gain detailed insights into the collected data. With proper use, the dilemma of the legitimacy of inquiries arises, as each inquiry must include all legal norms.*

**Keywords:** big data, AI, machine learning

## **SPEAKERS WHO ALSO PRESENTED CONTRIBUTIONS AT THE 8<sup>th</sup> INTERNATIONAL SYMPOSIUM OF ARCHIVISTS**

### **DIGNITY IN ARCHIVE THEORY AND PRACTICE**

Eric Ketelaar, PhD, Emeritus Professor, University of Amsterdam

### **EMOTIONS IN ARCHIVES**

Charles Farrugia, PhD, National Archivist, National Archives of Malta

### **SOCIAL AND TECHNOLOGICAL CHANGES NEED NEW ARCHIVING SKILLS**

Stefano Allegrezza, PhD, Professor, University of Bologna

### **QUALITY MANAGEMENT IN ARCHIVES - IMPLEMENTING THE ISO 9001 STANDARD IN PUBLIC ARCHIVAL INSTITUTIONS**

Dieter Schlenker, PhD, Assistant Professor, Director, Historical Archive of the EU

### **PROFESSIONALISM AND DIGNITY OF UKRAINIANS IN CONDITIONS OF WAR AND DANGER FROM THE EXPERIENCE OF MODERN ARCHIVAL PRACTICE**

Marina Paliienko, PhD, Professor, Department of Archival Science, Taras Shevchenko  
National University of Kyiv

### **PROFESSIONAL DILIGENCE FOR THE ARCHIVIST IN AN AGE OF INFORMATION ABUNDANCE**

Francis Garaba, Manuscript Librarian and Honorary Lecturer, Lutheran Theological  
Institute in Pietermaritzburg

### **CODE OF ETHICS IN ARCHIVES: ROADMAP OF GOOD ARCHIVAL PRACTICE AND RAISING AWARENESS OF PROFESSIONAL ARCHIVISTS**

Maria Papanikolaou, Archivist and Records Manager at the European Molecular Biology  
Laboratory (EMBL), Heidelberg, Executive member of ICA Programme Commission-PCOM

### **ENSURING DIGNITY FOR ARCHIVES AND ARCHIVE SERVICES**

Sandra Marković, Archivist, State Archive of Montenegro





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# **HIGH SCHOOL RESEARCH**

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# HIGH SCHOOL RESEARCH IN PARTNERSHIP WITH II. GIMNAZIJA MARIBOR

## STUDENT PANEL

### MICROORGANISMS ON TOOTHBRUSHES

**Tim Šinko**, Student  
II. gimnazija Maribor, Slovenia

#### **ABSTRACT**

*The oral cavity is a habitat for more than 700 different bacteria. Oral health is crucial for maintaining systemic health throughout the body, as the mouth is the beginning of the digestive tract and the link between the external and internal environment. Toothbrushes help maintain a healthy oral microbiota by removing bacterial biofilms from the teeth twice a day.*

*In this study, we wanted to know which bacteria can be found on peoples toothbrushes. This was done by culturing the suspension from toothbrushes on COH and TSA media. The strains were then isolated in pure culture and identified by MALDI-TOF. We tested the success of stopping the growth of individual isolated bacterial species with mouthwashes and some natural, alcohol-free mouth rinses.*

**Keywords:** bacteria, toothbrush, MALDI – TOF, mouthwashes, sage

# FORMULATION OF NATURAL EXTRACT HYSSOPUS OFFICINALIS AS A SUPPORT THERAPY FOR COVID-19, USING GREEN TECHNOLOGIES

**Matic Mohorko**, Student  
II. gimnazija Maribor, Slovenia

## ABSTRACT

*My research paper focuses on the evergreen plant *Hyssopus officinalis*, also known as hyssop, which has been used in traditional herbal medicine since the ancient times. After reviewing the literature and selecting the appropriate methods, I obtained the natural extract of hyssop by ultrasonic extraction using ethanol as the solvent. The extraction was followed by the spectrophotometric analysis of the extracts using the Folin-Ciocalteu reagent and a UV-VIS spectrophotometer, with which I measured the content of biologically active components, specifically total phenols. The content of the latter was  $(47,3 \pm 0,3)$  mg of gallic acid (GA) per g of extract or  $(2,7 \pm 0,3)$  mg of GA per g of material. In the final stage, I formulated the extract into a nasal inhaler and an all-purpose cream that can be used as supportive therapy for respiratory problems during or after COVID-19, since hyssop, based on the reviewed literature, contains several medicinal substances that have a soothing and anti-inflammatory effect. In addition, it helps with respiratory diseases and inhibits coughing.*

**Keywords:** *Hyssopus officinalis, green technologies, ultrasonic extraction, spectrophotometric method, COVID-19*

# PRESENCE OF SARCOPENIA IN ACTIVE AND NON-ACTIVE ELDERLY POPULATION

Špela Polutnik, Student  
II. gimnazija Maribor, Slovenia

## ABSTRACT

*Sarcopenia is the age-related decline of muscle tissue. In addition to age, the development of sarcopenia is also influenced by various chronic diseases, physical inactivity, diet and vitamin D deficiency). The study of sarcopenia in the European area started in 2010, when the European Working Group on Sarcopenia in Older People (EWGSOP) issued its definition and diagnostic criteria. The group met again in 2018 to revise the diagnostic criteria and to issue an algorithm for the diagnosis of sarcopenia. The search for cases is carried out using the SARC-F questionnaire. The diagnostic criteria are reduced muscle strength and reduced muscle quality/quantity. The severity of the syndrome is assessed by the result of one of the muscle performance tests. The differences in these parameters between active and inactive elderly population were observed in the research. The sample consisted of older women (65-75 years) with no chronic diseases. The sample was divided into active and inactive groups using the IPAQ questionnaire (cutoff value 3000 MET). We found a statistically significant ( $p < 0.05$ ) higher SPPB test score and a higher percentage of skeletal muscle mass in the active group compared to the inactive group. On average, the higher muscle strength and better (lower) SARC-F questionnaire score of the active group compared to the inactive group were not statistically significant ( $p > 0.05$ ). The inactive group had a statistically significant ( $p < 0.05$ ) higher muscle mass index compared to the active group, which surprised us. We found a medium/moderate correlation between physical activity (IPAQ questionnaire score) and physical performance (SPPB test score). Sarcopenia was not detected in any of the subjects. From the results obtained in this study, we cannot conclude that physical activity prevents/delays the onset of sarcopenia in old age, although most of our results point in this direction. We therefore recommend that older people take part in sport, as physical activity could be a good preventive against the development of sarcopenia, but more research on this topic is needed in the future to be sure.*

**Keywords:** sarcopenia, physical activity, SPPB test, hand grip strength, skeletal muscle mass index (SMMI).

# CONNECTION BETWEEN STRESS, DEPRESSION, ANXIETY, AND CORTISOL IN HAIR OF ADOLESCENTS

Filip Dugonik, Student  
II. gimnazija Maribor, Slovenia

## ABSTRACT

*Stress is a common experience among adolescents and has a significant impact on their physical and mental health. Chronic stress has a negative effect on mental health and can contribute to the development of anxiety and depression. The hormone cortisol is secreted in response to stress and therefore serves as a biomarker of stress. Hair, due to its uniform growth of 1 cm/month, provides a longer-term view of cortisol secretion. This study examined how the perceived stress is associated with cortisol in hair, depression, anxiety, gender, body mass index, major stressful events, and attitude towards stress. We used a questionnaire that included two standardized rating scales: the Perceived Stress Scale (PSS) and the Depression, Anxiety and Stress Scale (DASS). Hair cortisol concentration was measured using the competitive ELISA method. Pearson correlation results showed no significant association between hair cortisol and perceived stress. Participants with high levels of perceived stress on average achieved higher scores of depression and anxiety than those with moderate or low levels of perceived stress. The association of perceived stress with depression and anxiety was further confirmed by Pearson correlation results, which showed a strong positive correlation between perceived stress and depression as well as between perceived stress and anxiety. The study showed a small negative correlation between perceived stress and body mass index. No significant correlation was found between perceived stress and major stressful events. Participants with different attitudes towards stress differed significantly in their perceived stress levels, with participants with negative attitudes towards stress having higher levels of perceived stress. We found that men and women differed in their perceived stress levels, with women perceiving more stress than men. The results of this study contribute to improving the method of measuring hair cortisol concentration and to a better understanding of the associations between perceived stress, depression, anxiety, and hair cortisol.*

**Keywords:** cortisol, human hair, stress, anxiety, depression







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# **CONFERENCE PROGRAMME**

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8:30 – 9:15

**REGISTRATION**

**WELCOME SPEECH**

Jurij Toplak, University Professor, Alma Mater Europaea – ECM, Fordham University, President of the Organisational Committee of the It's About People Conference

**WELCOME ADDRESSES**

Nataša Pirc Musar, President of the Republic of Slovenia, Honorary Patron of the It's About People Conference

9:30 – 11:30  
(in English)

Felix Unger, University Professor, Honorary President, European Academy of Sciences and Arts

Mariya Gabriel, European Commissioner for Innovation, Research, Culture, Education and Youth

Igor Papič, Minister of Higher Education, Science and Innovation, Republic of Slovenia

**KEYNOTE SPEAKER**

Jeffrey Sachs, University Professor, Director, Center for Sustainable Development, Columbia University; Bestselling Author

**BREAK**

**INVITED SPEAKER**

Klaus Mainzer, University Professor, President, European Academy of Sciences and Arts, President of the Scientific Committee of the It's About People Conference

**01 PLENARY SESSION: Educational and Research Strategies For Europe (Especially For Medicine and Health System)**

(Moderator: Klaus Mainzer, University Professor, President of EASA)

11:30 – 12:15  
(in English)

Igor Emri, University Professor of Physics, Board Member, Slovenian Academy of Sciences and Arts

Michael Molls, University Professor of Medicine, Director of the Institute of Advanced Studies, Technical University of Munich

Markus Schwaiger, University Professor of Medicine, President of the Bavarian Academy of Sciences

Felix Unger, University Professor of Medicine, Honorary President of the European Academy of Sciences and Arts

**DISCUSSION**

**LUNCH BREAK**

## PLENARY II

FRIDAY, 10 MARCH 2023

15:00 – 15:45  
(in English)

### INVITED SPEAKER: HEALTH

#### **Manifesto on the Need For Collaboration Between Healthcare Technology and Empathy**

Jeremy Howick, Professor of Empathic Healthcare and Director of the Stoneygate Centre for Excellence in Empathic Healthcare, University of Leicester; Senior Research Associate, Faculty of Philosophy, University of Oxford; Author of "Doctor You"

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16:00 – 17:00  
(in English)

### 02 PLENARY SESSION INVITED SPEAKERS

#### **Academies Mirrored In Our Society**

Felix Unger, University Professor, Honorary President, European Academy of Sciences and Arts

#### **Universal Health Coverage In Low Income Setting**

Sonia Ehrlich Sachs, Research Scholar, Earth Institute, Columbia University

#### **Modern Technology in the Service of Modern Medical Education**

Dragan Ljutić, Professor, Rector, University of Split

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17:00 – 18:00  
(in English)

### 03 PLENARY SESSION INVITED SPEAKERS

#### **The Meaning of Religion for Peace in Southeast Europe**

Vinko Puljić, H.E., Cardinal, Archbishop of Vrhbosna (Sarajevo), Roman Catholic Church

#### **The Curse of "Development": The Vulnerable Human Rights Hinterland**

Rok Svetlič, Professor, Principal Research Associate, ZRS Koper; Judge, Constitutional Court of the Republic of Slovenia

#### **Human Rights in the Digital Age**

Verica Trstenjak, Professor, Former Advocate General of the Court of Justice of the EU

9:00 – 10:30 **04 EDUCATION AND MENTAL HEALTH**  
(in Slovenian, Scholarly Panel)  
(Moderator: Polonca Pangrčič, Assistant Professor, Alma Mater Europaea - ECM)  
**Challenges of Participation of Children and Adolescents in the Digital Environment**  
Nataša Demšar Pečak, Expert, PhD, Ministry of Labour, Family, Social Affairs and Equal Opportunities of the Republic of Slovenia  
**Design in Education**  
Polonca Pangrčič, Researcher, Alma Mater Europaea - ECM  
**Young Adults and Their Perception of the Meaning of Life**  
Lidija Zorman, Student; Jasmina Kristovič, Research Assistant, PhD Candidate, Alma Mater Europaea - ECM  
**Peer Violence or Domestic Violence as a Social Problem**  
Jože Ruparčič, Assistant Professor, Deputy Human Rights Ombudsman, Republic of Slovenia  
**Constantly Connected to the Web: Distraction, Demotivation and the Problem of Social Inclusion**  
David Kraner, Research Assistant, Faculty of Theology, University of Ljubljana  
**Social Media Crush Self-esteem of Adolescents**  
Pia Lapanja; Sebastjan Kristovič, Associate Professor, Alma Mater Europaea – ECM  
**Testing Mindfulness In Second Language Learning**  
Maja Cergolj, Librarian, Italian Language Teacher, PhD, Primary School of Lucija

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10:30 – 12:10 **05 EDUCATION AND MENTAL HEALTH**  
(in Slovenian, Scholarly Panel)  
(Moderator: Sebastjan Kristovič, Associate Professor, Alma Mater Europaea - ECM)  
**Observation With Reflective Discussion as a Model For the Realisation of Methods of Active Learning and Developing Global Competencies of Students**  
Jerneja Jager, Assistant Professor; Mateja Režek, Researcher; Janja Žmavc, Assistant Professor; Sabina Autor, Research Assistant; Urška Štremfel, Scientific Associate, Pedagoški Inštitut  
**Strategic Plan and Guidelines For the Renovation of the Educational System in the Republic of Slovenia**  
Sebastjan Kristovič, Associate Professor, Alma Mater Europaea – ECM  
**Emotion Regulation and Psychosocial Functioning of Adult Children of Alcoholics**  
Barbara Simonič, Professor, Faculty of Theology, University of Ljubljana  
**Regulation of Differentiation of Self as a Key Intervention in Married Couples Where There is a High Level of Codependency and One Spouse is a Treated Alcoholic**  
Drago Jerebic, Assistant Professor, Faculty of Theology, University of Ljubljana  
**Tracking Therapeutic Interventions In Addiction Treatment Using Tar Coding System**  
Saša Poljak Lukek, Assistant Professor; Tanja Valenta, Teaching Assistant, PhD, University of Ljubljana, Faculty of Theology, Slovenia  
**Social Networks - Harmful Playgrounds For Growing Up**  
Jasmina Kristovič, Research Assistant, PhD Candidate, Alma Mater Europaea - ECM  
**Psychological Safety and Close Relationships: Polyvagal Theory Meets Attachment Theory**  
Tjaša Stepišnik Perdih; Edina Šifrar, Lecturers, School of Advanced Social Studies

**Case Study: The Leaving Process of Woman from an Abusive Relationship**

Sanja Kranjc, PhD Candidate, Faculty of Theology, University of Ljubljana

12:10 – 12:50  
(in Slovenian,  
Expert Panel)

**06 EDUCATION AND MENTAL HEALTH**

(Moderator: Jasmina Kristovič, Research Assistant, PhD Candidate,  
Alma Mater Europaea - ECM)

**Emotional Difficulties of Adolescents and Ways To Help**

Anja Žavbi, Teacher, Osnovna šola Toma Brejca

**The Influence of Physical Education Teachers On The Habits of Students**

Janez Čmer, Teacher, Center Janeza Levca

**Teacher's Metaphorical Conceptions of Teaching Students With Specific Learning Difficulties and Some Neuromyths**

Teja Vernik Trofenik, Teacher, OŠ Velika Nedelja

**Physical Fitness of Teachers**

Maša Čmer, Teacher, Center Janeza Levca

14:30 – 15:45  
(in English,  
Scholarly Panel)

**08 EDUCATION AND MENTAL HEALTH**

(Moderator: Polonca Pangrčič, Assistant Professor, Alma Mater Europaea - ECM)

**Integrating Web3d Technologies In K-12 Curriculum As A Possibility of Broadening Socio-Economic Development and Change With Innovation**

Jorge Ferreira Franco, Professor, University of São Paulo /  
Universidade Estadual Paulista

**Project Attend: Example of a Multidisciplinary Approach in the Use of Assistive Technology**

Ivana Vinceković; Ivana Rašan, Lecturers; Renata Pinjatela, Professor,  
University of Zagreb

**The Use of Digital Technology For Social Inclusion Among People With Id**

Lea Masnjak Šušković, PhD Candidate; Daniela Bratković, Professor; Ana-Marija Bohaček, PhD Candidate; Alisa Fabris, Educational Rehabilitator, Faculty of Education and Rehabilitation Sciences, University of Zagreb

**Relationship Between Internet Addiction, Loneliness, Depression, Anxiety and Stress Among Students of University of Shkodra, Albania**

Elona Hasmujaj, Lecturer, University of Shkoder

**Identifying the Problems Associated With the Implementation of the ICT Subject in Pre-university Education**

Edra Fresku; Seida Daija; Suada Veka; Arlinda Ramaj, Lecturers, University of Shkodra 'Luigj Gurakuqi'

**The Level of Confidence in Non-native Speakers of English**

Dajana Rakić, Lecturer, AR University College

17:00 – 18:00  
(in English,  
Scholarly Panel)

**09 EDUCATIONAL, HEALTH AND SOCIAL SERVICES DESIGN FOR INCLUSIVE SOCIETY**

(Moderator: Zlatko Bukvić, PhD)

Miroslav Vrankić, Professor, Faculty of Engineering, University of Rijeka

Ksenija Romstein, Professor, Faculty of Education, University of Osijek

Daniela Bratković, Professor, Faculty of Education and Rehabilitation,  
University of Zagreb

Sanja Bencetić, Professor, Faculty of Architecture, Studio of Design,  
University of Zagreb

**DISCUSSION**

## AUTISM RESEARCH

SATURDAY, 11 MARCH 2023

16:00 – 16:45  
(in English,  
Scholarly Panel)

**10 JOURNAL OF HEALTH AND REHABILITATION SCIENCES: EXISTENCE OF A SCIENTIFIC JOURNAL IN A SMALL COUNTRY**  
(Moderator: Polonca Pangrčič, Assistant Professor, Alma Mater Europaea - ECM)

Vladimir Trajkovski, Professor, Institute for Special Education and Rehabilitation, Faculty of Philosophy, Ss. Cyril and Methodius University

09:00 – 10:00  
(in English,  
Scholarly Panel)

### 11 PHYSIOTHERAPY

(Moderator: Živa Arko, Senior Lecturer, Alma Mater Europaea - ECM)

#### **Dairy Products and Health: Recent Insights in Physiotherapy**

Vittorio Zanello, Professor, University of Parma; Enrico De Pecol, Student, University of Ferrara

#### **The Effect of Therapeutic Exercise On Chronic Neck Pain**

Arbnore Ibrahimaj Gashi, Teaching Assistant, Faculty of Medicine, University of Prishtina; Tine Kovačič, Assistant Professor, Faculty of Health Sciences, University of Ljubljana

#### **Analysis of Quadriceps/hamstrings Fatigue Index As A Predictor of Injury Occurrence In Football Players**

Matija Brentin, Physiotherapist, Thalassotherapia; Nenad Petrc, PhD Student, Faculty of Health Studies, University of Rijeka; Ivana Žgrablić, Physiotherapist, Thalassotherapia; Mirela Vučković, Lecturer, Faculty of Health Studies, University of Rijeka

#### **Rehabilitation of Ankle Distortion**

Elda Latollari, Lecturer, Fan S. Noli University; Alketa Caushi, Professor, UST

#### **Respiratory Muscles Training In Pulmonary Rehabilitation**

Pawel Janus, Krakowska Akademia im. Andrzeja Frycza Modrzewskiego

10:00 – 10:45  
(in Slovenian,  
Scholarly Panel)

### 12 PHYSIOTHERAPY

(Moderator: Mladen Herc, Senior Lecturer, Alma Mater Europaea - ECM)

#### **The Influence of Psychological Factors On The Outcome of Physiotherapy Treatment of Patients With Low Back Pain**

Urška Šajnovič, Zdravstveni dom dr. Adolfa Drolca Maribor, PhD Candidate; Helena Blažun Vošner, Associate Professor, Alma Mater Europaea - ECM; Tine Kovačič, Assistant Professor, University of Ljubljana

#### **Early Physiotherapy After Anterior Cruciate Ligament Reconstruction**

Mladen Herc, Senior Lecturer; Tilen Gubelj, Student, Alma Mater Europaea - ECM; Samo Karl Fokter, Orthopedic Specialist, PhD, UKC Maribor

#### **The Effect of Personalised Vestibular Training on Fall Risk Reduction in Patients After Surgical Removal of Acoustic Neuromas**

Maruša Bracar, Physiotherapist, UKC Ljubljana, Institute of Medical Rehabilitation; Nataša Kos, Assistant Professor; Tomaž Velnar, Associate Professor, University of Ljubljana

10:45 – 11:30  
(in Slovenian,  
Expert Panel)

### 13 PHYSIOTHERAPY

(Moderator: Mladen Herc, Senior Lecturer, Alma Mater Europaea - ECM)

#### **Sarcopenia: Resistance Exercise As A Method of Treatment - A Literature Review**

Eneja Slaček, Physiotherapist; Mladen Herc, Senior Lecturer, Alma Mater Europaea - ECM

#### **Quality of Life After Total Hip Arthroplasty With Different Approaches**

Mirela Vučković, Lecturer; Mirhada Mešanović, Lecturer, Alma Mater Europaea - ECM

#### **Physiotherapeutic Treatment and Motivation for Seniors with Dementia**

Vesna Hojan, Nina Del Cott Vodlan, Physiotherapists, DSO Ljubljana Šiška



11:30 – 12:30  
(in Slovenian,  
Student Panel)

#### **14 PHYSIOTHERAPY**

(Moderator: Mladen Herc, Senior Lecturer, Alma Mater Europaea - ECM)

##### **The Effect of Electrical Stimulation On The Reduction of Spasticity In Patients After A Stroke**

Hana Simonič, Student, Alma Mater Europaea - ECM, Slovenia; Tadeja Hernja Rumpf, M.D., PhD, UKC Maribor, Alma Mater Europaea - ECM, Slovenia

##### **Physiotherapy Treatment In The Children With Cystic Fibrosis**

Karmen Šopinger, Student; Patricija Goubar, Senior Lecturer, Alma Mater Europaea - ECM

##### **Short-Term Impact of An Intensive Physiotherapy Program On Functional Movement and Muscle Strength of Lower Extremity In The Diagnosis of Thoracolumbar Sinistroconvex Scoliosis With Blue Rubber Bleb Nevus Syndrome: Case Study**

Tatjana Horvat, Senior Lecturer; Nika Jagodič, Student, Alma Mater Europaea - ECM

##### **Analysis of The Influence of Recreational Rhythmic Gymnastics On Motor Development In Girls Aged 6 To 9 Years**

Patricija Goubar, Senior Lecturer; Barbara Dobravec, Student, Alma Mater Europaea - ECM

##### **Find Physio - Portal For Finding Physiotherapy Clinics and Physiotherapists**

Blanka Lorenčič, Student; Barbara Toplak, Assistant Professor, Alma Mater Europaea - ECM

9:00 – 10:15 **15 SOCIAL GERONTOLOGY: DIFFERENT ASPECTS OF SECURITY IN THE ELDERLY**  
(in English, Moderator: Jana Goriup, Emeritus Professor, Alma Mater Europaea - ECM)  
Scholarly Panel)

**Technostress in Later Life**

Majda Bastič, Professor, Alma Mater Europaea - ECM

**Why Are We Ignoring/Rejecting Half of Societal Brain Power?**

Boris Cizelj, Professor, Alma Mater Europaea - ECM

**Is Cultural Competence Required In The Field of (Social) Gerontology?**

Helena Kristina Halbwachs, PhD Candidate; Helena Blažun Vošner, Professor; Marija Ovsenik, Professor, Alma Mater Europaea - ECM

**The Importance of the Intergenerational Connection Between Elderly People and Children**

Valentina Vincek; Željka Kanižaj, PhD Candidates, Alma Mater Europaea - ECM; Marijana Neuberg, Associate Professor; Tina Košanski; Ivana Herak, Lecturers; Rosana Ribić, Assistant Professor, Sveučilište Sjever

**Communicating With Older Adults Using Diminutives: Literature Review**

Aleksandra Ločičnik, PhD Candidate, Alma Mater Europaea - ECM

**The Association of Societies For Social Gerontology of Slovenia in the Light of Connecting and Including Older People**

Barbara Grintal, Lecturer, Alma Mater Europaea - ECM; Mateja Prosen, Expert, Zveza društev za socialno gerontologijo Slovenije

10:15 – 11:30 **16 SOCIAL GERONTOLOGY**  
(in English, Moderator: Jana Goriup, Emeritus Professor, Alma Mater Europaea - ECM)  
Scholarly Panel)

**Elderly In the Innovative Sustainable Socially Responsible Society**

Matjaž Mulej, Professor, University of Maribor; Anita Hrast, IRDO Institute for the Development of Social Responsibility

**Including Elderly Adults in the Safe Digital Space: The Case of Israel's Rural, Northern Periphery**

Shlomit Manor, Lecturer; Arie Herscovici, Senior Lecturer, Western Galilee College

**Financial Safety of the Elderly Who Receive Pension**

Marijan Papež, Director General, Pension and Disability Insurance Institute of Slovenia

**Digital Era Opportunities of Elderly In Nursing Homes**

Ivan Jurišič, PhD Candidate, Alma Mater Europaea - ECM

**Effectiveness of Planning the Discharge of Elderly Adults From Hospital to Home Environment After Acute Treatment**

Carmen Rajer, PhD Candidate, Alma Mater Europaea - ECM

**The Importance of Intervention Measures in Ensuring Intergenerational Cooperation**

Nataša Demšar Pečak, Expert, PhD, Ministry of Labour, Family, Social Affairs and Equal Opportunities of the Republic of Slovenia; Marija Ovsenik, Professor, Alma Mater Europaea - ECM

- 11:30 – 12:45  
 (in English,  
 Scholarly Panel)
- 17 SOCIAL GERONTOLOGY**  
 (Moderator: Jana Goriup, Emeritus Professor, Alma Mater Europaea - ECM)
- Supporting and Informing the Elderly in Arranging Mortis Causa Cases**  
 Suzana Kraljič, Professor, Faculty of Law, University of Maribor
- The Integration of Palliative Care in the Social Welfare Institution Coincides With Social and Technological Development**  
 Suzana Koštomaj, PhD Candidate, Alma Mater Europaea - ECM
- Ageism - Systematic Discrimination of Older People**  
 Tanita Knežević, PhD Candidate, Alma Mater Europaea - ECM
- Safety of the Elderly Residents in the Institutional Care in a New Context**  
 Nataša Štandeker, Lecturer, Alma Mater Europaea - ECM
- The Influence of Speleotherapy Combined With Pulmonary Rehabilitation on the Function of Respiratory Muscles in Older Adults With Chronic Respiratory Diseases**  
 Sylwia Metel, Lecturer, University of Physical Education in Krakow; Magdalena Kostzon, PhD, Wieliczka 'Salt Mine' Health Resort; Justyna Adamiak, Lecturer, University of Physical Education in Krakow
- Guided Autobiography as an Example of Gerontological Intervention and Its Application Areas**  
 Deniz Pamuk, Research Assistant, Muş Alparslan University
- 
- 14:00 – 15:00  
 (in English,  
 Scholarly Panel)
- 18 SOCIAL GERONTOLOGY**  
 (Moderator: Jana Goriup, Emeritus Professor, Alma Mater Europaea - ECM)
- Specifics of Communication With Elderly People**  
 Željka Kanižaj; Valentina Vincek, PhD Candidates, Alma Mater Europaea - ECM; Marijana Neuberg, Associate Professor; Rosana Ribić, Assistant Professor; Zoran Žeželj, Mateja Križaj, Lecturers, Sveučilište Sjever
- Possibility of a Countryside Daily Residence For Older Persons**  
 Alen Sajtl, PhD Candidate, Alma Mater Europaea - ECM
- Promoting Physical Activity in the Elderly Using Exercise Applications**  
 Mateja Buzina, PhD Candidate, Alma Mater Europaea - ECM
- Assessment of Bilingualism in Elderly Individuals Within the Context of Access to Social Services and Health Care Services**  
 Mehmet Efe; Özgür Yeşilyurt, Lecturers, Muş Alparslan University
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- 15:00 – 15:15  
 (in English,  
 Expert Panel)
- 19 SOCIAL GERONTOLOGY**  
 (Moderator: Jana Goriup, Emeritus Professor, Alma Mater Europaea - ECM)
- Benefits of Proactive Telecare Among Elderly Population**  
 Pablo Quinones Delgado; Jose Vargas Cascas, Junta de Andalucía; Donna Henderson; Andrea Pavlickova, PhD, Scottish Government

15:15 – 17:00  
(in English,  
Student Panel)

## **20 SOCIAL GERONTOLOGY**

(Moderator: Jana Goriup, Emeritus Professor, Alma Mater Europaea - ECM)

### **Pitch and Putt As a New Sports Trend For Active Aging of Older Adults**

Špela Zidarič, Student, Alma Mater Europaea - ECM; Marko Vidnjevič, Assistant Professor, Alma Mater Europaea - ECM, Ningbo University of Technology

### **Health Safety For Older Adults**

Valentina Gorjup Lisjak; Ana Menhard; Maša Simonič; Benjamin Ritlop, Students; Jana Goriup, Emeritus Professor, Alma Mater Europaea - ECM

### **Natural Spas for Healthy Aging and Longevity**

Dragica Pongračič, Student, Alma Mater Europaea - ECM; Marko Vidnjevič, Assistant Professor, Alma Mater Europaea - ECM, Ningbo University of Technology

### **Emotional Safety For Older Adults**

Špela Belec; Lejla Crnolić; Nuša Limonšek; Sonja Topolovec, Students; Mihaela Kežman, Research Assistant, Alma Mater Europaea - ECM

### **Safety of Older Adults in Traffic**

Ana Mavrel Broz; Maj Drakšič; Petra Rus; Nika Tisel, Students; Jana Goriup, Emeritus Professor, Alma Mater Europaea - ECM

### **Presentation of a New Form of Institutional Care For the Elderly in Slovenia**

Metka Velepec Šajn, Student, Alma Mater Europaea - ECM

### **A Look at the Organizational Climate, Culture, Structure, Functions and Management in the Special Social Welfare Institution Dom Nine**

#### **Pokorn - Grmovje**

Lucija Jekovec, Student, Alma Mater Europaea - ECM

### **Food Safety and Older Adults**

Enja Praprotnik Malej; Ula Erhatic Bizjak; Tjaša Cehnar; Tanja Strajnsak, Students; Mihaela Kežman, Research Assistant, Alma Mater Europaea - ECM

### **Widowhood and Social Safety of Older Adults**

Lucija Jekovec; Katja Lešnik; Erna Pervič, Students; Jana Goriup, Emeritus Professor, Alma Mater Europaea - ECM

15:00 – 16:30  
(in English,  
Scholarly Panel)

**21 INDIVIDUALISED MEDICAL TREATMENT AND ASSISTIVE TECHNOLOGIES**  
(Moderator: Tadej Strojnik, Professor, Alma Mater Europaea - ECM)

**Neurosurgical Approaches to Skull Reconstruction**

Tadej Strojnik, Professor, Alma Mater Europaea - ECM; Maša Strojnik, M.D., University Medical Centre Maribor; Tomaž Brajljih, Assistant Professor; Igor Drstvenšek, Professor, Faculty of Mechanical Engineering, University of Maribor

**Our Experiences With Patient Specific Implants For Facial Reconstruction**

Nataša Ihan Hren, Professor; Miha Verdenik, Teaching and Research Assistant, Faculty of Medicine, University of Ljubljana; Igor Drstvenšek, Professor, Faculty of Mechanical Engineering, University of Maribor

**Virtual Planning in Maxillofacial Surgery: From Surgical Tools to Subperiosteal Implants**

Tadej Dovšak, M.D., PhD; Vojko Didanovič, M.D., PhD; Luka Prodnik, M.D., PhD; Matic Koren, M.D., PhD, University Medical Centre Ljubljana

**Metals in Biomedical Applications: Processing and Characterization**

Igor Drstvenšek, Professor; Snehashis Pal, Researcher; Tomaž Brajljih, Lecturer, Faculty of Mechanical Engineering, University of Maribor

**Cobalt Chromium 3D Printed Patient Specific Bone Implants**

Christian Fang, Professor, Queen Mary Hospital, The University of Hong Kong

**Reconstruction of a Major Sternal Destruction After Open-heart Surgery Using a 3D-printed Titanium Custom-made Prosthesis**

Miha Antonič, Assistant Professor, Faculty of Medicine, University of Maribor; Urška Intihar, M.D., PhD; Jernej Železnik, M.D., PhD; University Medical Centre Maribor; Tomaž Brajljih, Lecturer, Faculty of Mechanical Engineering, University of Ljubljana; Radovan Hudak, Professor, Technical University of Košice; Igor Drstvenšek, Professor, Faculty of Mechanical Engineering, University of Maribor

17:00 – 18:00  
(in English,  
Scholarly Panel)

**22 EDUCATION OF THE HEALTH PROFESSIONAL IN THE 21st CENTURY**  
(Moderator: Monika Sobočan, Lecturer, Alma Mater Europaea - ECM)

Hojka Gregorič Kumperščak, Professor, Faculty of Medicine, University of Maribor  
Monika Sobočan, Lecturer, Alma Mater Europaea - ECM  
Nejc Kozar, Researcher, Faculty of Medicine, University of Maribor  
Sara Plakolm, Psychologist, University Medical Centre Maribor

9:00 – 11:00 **23 ARCHIVAL SCIENCES: 8th INTERNATIONAL SYMPOSIUM OF ARCHIVISTS**  
 (in English, (Moderators: Dieter Schlenker, Assistant Professor, Director, Historical Archive of the EU; Miroslav Novak, Associate Professor; Zdenka Semlič Rajh, Associate Scholarly Panel) Professor, Alma Mater Europaea - ECM)

**Welcome Speeches**

Peter Pavel Klasinc, Professor, Alma Mater Europaea - ECM  
 Ludvik Toplak, Professor, President, Alma Mater Europaea - ECM  
 Dieter Schlenker, Director of the EU Historical Archive, Assistant Professor, Alma Mater Europaea - ECM  
 Charles Farrugia, Director of the National Archives of Malta and Member of the IO at the International Council of Archives  
 Bojan Cvelfar, Assistant Professor, Director, Ministry of Culture, Archives of the Republic of Slovenia  
 Nina Gostečnik, Directress of the Maribor Regional Archives

**Dignity in Archive Theory and Practice**

Eric Ketelaar, Emeritus Professor, University of Amsterdam

**Restitution of Dignity? Victims of Nazi-regime In the Description of Archival Holdings...**

Dennis Hormuth, Chair, University Archive Hamburg

**Emotions in Archives**

Charles Farrugia, National Archivist, National Archives of Malta

**Ensuring the Dignity of Archives and Archive Services**

Jelka Melik, Associate Professor, Alma Mater Europaea - ECM

**The Dignity of the Archivist Through the Prism of the State and Modern Technological Development**

Miroslav Novak, Associate Professor, Alma Mater Europaea - ECM

**DISCUSSION**

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11:15 – 12:30 **24 ARCHIVAL SCIENCES: 8th INTERNATIONAL SYMPOSIUM OF ARCHIVISTS**  
 (in English, (Moderators: Dieter Schlenker, Assistant Professor, Director, Historical Archive of the EU; Miroslav Novak, Associate Professor; Zdenka Semlič Rajh, Associate Scholarly Panel) Professor, Alma Mater Europaea - ECM)

**Social and Technological Changes Need New Archiving Skills...**

Stefano Allegrezza, Professor, University of Bologna

**Provenance, Original Order, and an Answer to Why: The Role of Empathy in Archival Science**

Karen Trivette, PhD Candidate, Alma Mater Europaea - ECM

**Quality Management in Archives - Implementing the ISO 9001 Standard in Public Archival Institutions**

Dieter Schlenker, Assistant Professor, Director, Historical Archive of the EU

**Professionalism and Dignity of Ukrainians in Conditions of War and Danger  
From the Experience of Modern Archival Practice**

Marina Paliienko, Professor, Department of Archival Science, Taras Shevchenko National University of Kyiv

**Professional Diligence For the Archivist in an Age of Information Abundance...**

Francis Garaba, Manuscript Librarian and Honorary Lecturer, Lutheran Theological Institute in Pietermaritzburg

**DISCUSSION**

14:05 – 15:30  
(in Slovenian,  
Scholarly Panel)

**25 ARCHIVAL SCIENCES: 8th INTERNATIONAL SYMPOSIUM OF ARCHIVISTS**

(Moderators: Dieter Schlenker, Assistant Professor, Director, Historical Archive of the EU; Miroslav Novak, Associate Professor; Zdenka Semlič Rajh, Associate Professor, Alma Mater Europaea - ECM)

**Code of Ethics in Archives: Roadmap of Good Archival Practice and Raising Awareness of Professional Archivists**

**Maria Papanikolaou, Archivist and Records Manager at the European Molecular Biology Laboratory (EMBL), Heidelberg, Executive member of ICA Programme Commission-PCOM**

**Archiving Records on VHS Cassettes**

Aleksander Lavrenčič, Head of TV Archives, RTV Slovenija, PhD Candidate, Alma Mater Europaea - ECM

**Analysis of Online Applications For Access to Archive Materials on a Sample of European State and Regional Archives**

Ivančica Sabadin, IT Coordinator, Pokrajinski arhiv Koper, PhD Candidate, Alma Mater Europaea - ECM

**Content Challenges in Big Data Processing**

Dimitrij Reja, Archivist, Ministry of Infrastructure, Republic of Slovenia, PhD Candidate, Alma Mater Europaea - ECM

**Ensuring Dignity For Archives and Archive Services**

Sandra Marković, Archivist, State Archive of Montenegro

**Archival Digital Curation and Digital History In the Context of Cultural Heritage**

Robert Parnica, Senior Reference Archivist at the Vera and Donald Blinken Open Society Archives, Central European University

**DISCUSSION**

**10:00 – 10:45**     **26 AUTISM**  
 (in English, Expert Panel)     (Moderator: Vladimir Trajkovski, Professor, Ss. Cyril and Methodius University in Skopje)

**A Model of Support and Help In The Field of Autism For Employers In Slovenia**  
 Jana Ponikvar, CEO; Ksenija Bratuš Albreht, Head of Employment Rehabilitation, Šentprima- Institute For Rehabilitation and Education

**National Research On Autism Prevalence In Slovenia**  
 Barbara Žnidarko, Teacher of Special and Rehabilitation Pedagogy; Janja Kranjc, Educational Psychologist; Patricija Lovišček, Director, Zveza za avtizem Slovenije

**Review of Educators' Needs For Additional Knowledge About Autism In Slovenia**  
 Irena Marinič, Special and Rehabilitation Pedagogue, Osnovna šola Kozara Nova Gorica, Slovenia

**Relationship Between Special Interests and Orientation To Happiness In Adults With Autism Spectrum Disorder**  
 Aleš Zavrl, Teacher, Zavod za gluhe in naglušne Ljubljana

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**10:45 – 12:00**     **27 AUTISM**  
 (in English, Scholarly Panel)     (Moderator: Vladimir Trajkovski, Professor, Ss. Cyril and Methodius University in Skopje)

**Recreating an Autism Identity**  
 Digby Tantam, Professor, University of Sheffield, Founder, Existential Academy

**Knowledge of Autism Spectrum Disorders In Emergency Services**  
 Urška Mikuž; Marta Macedoni Lukšič, Assistant Professor, Inštitut za avtizem Ljubljana, Slovenia; Jernej Vidmar, Assistant Professor, University of Ljubljana, M.D., UKC Maribor, Klinika za pediatrijo, Enota za otroško in mladostniško psihiatrijo

**Social Skills Important For The Functioning In School: Teacher's And Special Educator's Perspective**  
 Branislav Brojčin; Slobodan Banković, Professors, Faculty of Special Education and Rehabilitation, University of Belgrade; Ivana Vasilevska Petrovska, Vice-president, Macedonian Scientific Society for Autism; Marina Antonijević; Aleksandra Bukovica, Experts, Primary School "Miloje Pavlović"; Vladimir Trajkovski, Professor, Institute for Special Education and Rehabilitation, Faculty of Philosophy, Ss. Cyril and Methodius University

**Age of Autism Spectrum Disorders (ASD) Diagnosis and Associated Factors**  
 Irena Stojanovska; Vladimir Trajkovski, Professor, Institute for Special Education and Rehabilitation, Faculty of Philosophy, Ss. Cyril and Methodius University

**Ancient Origins of Autism Susceptibility Genes**  
 Emily L. Casanova, Assistant Professor, Loyola University, New Orleans

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**12:00 – 13:30**     **28 AUTISM - ROUNDTABLE**  
 (in English, Scholarly Panel)     (Moderator: Vladimir Trajkovski, Professor, Ss. Cyril and Methodius University in Skopje)

Trevor Parmenter, Emeritus Professor Medicine, University of Sydney  
 Fred R. Volkmar, Professor, Yale University  
 Nicola Martin, Professor, London South Bank University  
 Paola Molteni, Researcher, Università Cattolica del Sacro Cuore  
 Jakob Åsberg Johnels, Professor, University of Gothenburg



9:00 – 9:30  
(in English,  
Scholarly Panel)

### 29 HEALTH SCIENCES

Moderator: Nataša Štandeker, Lecturer, Alma Mater Europaea - ECM)

#### Perceptions of Hospital Service Users About Nursing Care Provided

Julian Kraja, Lecturer; Zamira Shabani, Professor, University of Shkodra "Luigj Gurakuqi", Faculty of Natural Sciences; Arlinda Ramaj, Specialist at Epidemiological and Environmental Health Department, Tirana Health Care Unit

#### Knowledge and Beliefs About The Covid-19 Infection and Vaccination Among People of Shkodra Region

Zamira Shabani, Professor; Arketa Guli, Lecturer; Emiljano Pjetri, Lecturer; University of Shkodra "Luigj Gurakuqi", Faculty of Natural Sciences; Nertila Podgorica, Lecturer, UMIT - Private University for Health Sciences, Medical Informatics and Technology

9:30 – 10:00  
(in Slovenian,  
Scholarly Panel)

### 30 HEALTH SCIENCES

(Moderator: Suzana Bračič Tomažič, Lecturer, Alma Mater Europaea - ECM)

#### The Role and Emotions of Nursing Staff In Coercive Measures and Emergency Psychiatric Conditions

Šefik Salkunić, Lecturer, Alma Mater Europaea - ECM; Anja Plemenitaš Ilješ, M.D., PhD, UKC Maribor, Slovenia; Hojka Gregorič Kumperščak, Associate Professor, M.D., University of Maribor, UKC Maribor

#### Especially Dangerous Viral Infectious Diseases of Animals Still Greatly Threaten Europe: An Overview of Last Two Decades

Ivan Toplak, Professor, Veterinary Faculty, University of Ljubljana

15:00 – 16:30  
(in Slovenian,  
Expert Panel)

### 31 HEALTH SCIENCES

(Moderator: Edvard Jakšič, Senior Lecturer, Alma Mater Europaea - ECM)

#### Recognition and Measures of Emergency Medical Services In Spine Injuries In A Environment

Simon Šemrl, Lecturer, Alma Mater Europaea - ECM; Mitja Ploj, Healthcare Technician, Reševalna postaja Maribor

#### Improving Icu Survivorship With Family-centred Care

Peter Kamničar, Lecturer, Alma Mater Europaea - ECM

#### Survival and Recovery After Icu: A Patient's Perspective

Peter Kamničar, Lecturer, Alma Mater Europaea - ECM

#### Prevalence of Cigarette Smoking Among Nursing Students

Mitja Bagari, Teaching Assistant, Alma Mater Europaea - ECM

#### Interpersonal Relationships Among Healthcare Employees During The Covid Epidemic In The General Hospital Murska Sobot

Melani Čontala, Employee in the Emergency Center; Nataša Kreft, Assistant Director for Nursing; Bojana Jerebic, Head Nurse of the Surgical Department, SB Murska Sobot

#### Association Between Health Literacy and Prevalence of Obesity, Arterial Hypertension and Diabetes Mellitus

Metka Lipič Baligač, Lecturer, Alma Mater Europaea - ECM; Božica Lovrić, Lecturer, General County Hospital Požega

16:30 – 17:30  
(in Slovenian,  
Student Panel)

### **32 HEALTH SCIENCES**

(Moderator: Edvard Jakšič, Senior Lecturer, Alma Mater Europaea - ECM)

#### **The Importance of Family Medicine In The Healthcare System**

Lara Volk, Student; Edvard Jakšič, Senior Lecturer, Alma Mater Europaea - ECM

#### **The Problem of Cancerous Diseases In Slovenia**

Larisa Šabec, Student; Edvard Jakšič, Senior Lecturer, Alma Mater Europaea - ECM

#### **The Potential of Cannabinoids, Specifically Cannabidiol, in Treatment of Endometriosis and the Management of Symptoms**

Tatjana Lončar, Student, Alma Mater Europaea - ECM

#### **Cervical Spine Injury**

Simon Šemrl, Lecturer; Nino Kralj, Andraž Mlakar, Darja Šparakl, Žiga Turin, Students, Alma Mater Europaea - ECM

11:00 – 12:00  
(in English,  
Scholarly Panel)

**33 HUMAN RIGHTS, SUSTAINABILITY AND DIGITAL AGE**  
(Moderator: Verica Trstenjak, Professor of European Law)

**Sustainability and Human Rights**

Alberto De Franceschi, Professor, University of Ferrara

**Paying for health data?**

Nikolaus Forgo, Professor, University of Vienna

**Blockchain and EU Activities**

Rok Žvelc, Legal Officer, European Commission

**Human-Centered Artificial Intelligence**

Marinka Žitnik, Assistant Professor, Harvard University

**DISCUSSION**

13:00 – 14:00  
(in English,  
Scholarly Panel)

**34 RESILIENCE OF THE POST-COVID LEGAL SYSTEM:  
ANALYSES FROM THE PERSPECTIVES OF DIFFERENT FIELDS**  
(Moderator: Elena-Simina Tănăsescu, Judge, The Constitutional Court of Romania)

**Law and Technology In The Post-Covid Society: New Challenges and Opportunities**

Kitti Mezei, Research Fellow; Boldizsár Szentgáli-Tóth, Senior Research Fellow, Centre for Social Sciences Institute for Legal Studies Hungarian Academy of Sciences Centre of Excellence

**Covid-19 and The Restriction of Fundamental Rights**

Nóra Bán-Forgács, Junior Research Fellow; János Mécs, Centre for Social Sciences Institute for Legal Studies Hungarian Academy of Sciences Centre of Excellence, Hungary

**Constitutional Standards Inside and Outside Normalcy**

Fruzsina Gárdos-Orosz, Director, Senior Research Fellow, Centre for Social Sciences Institute for Legal Studies Hungarian Academy of Sciences Centre of Excellence

**The Games of The Pandemics and The Law**

Viktor Olivér Lőrincz, Junior Research Fellow, Centre for Social Sciences Institute for Legal Studies Hungarian Academy of Sciences Centre of Excellence

**Unprecedented Perspectives of Comparative Constitutional Law:**

**Constitutional Court Case Law During The Covid19 Pandemic**

Boldizsár Szentgáli-Tóth, Senior Research Fellow; Bettina Bor, Research Fellow, Centre for Social Sciences Institute for Legal Studies Hungarian Academy of Sciences Centre of Excellence

14:00 – 16:00 **35 ELECTION LAW IN EUROPE**  
(in English, Scholarly Panel) (Moderator: Jurij Toplak, Professor of Law, Alma Mater Europaea - ECM)

**Introductory Address**

Viola Heutger, Professor, Rector Magnificus, University of Aruba

**Election Law in Hungary**

János Mécs, PhD, Eötvös Loránd University

**Election Law in Bosnia**

Nedim Hogić, PhD, New York University

**Draft EU Regulation and Political Advertising**

Andrei Richter, Professor, Comenius University in Bratislava

16:00 – 17:30 **36 HOW INVESTMENT LAW UNDERMINES CLIMATE ACTION**  
(in English, Scholarly Panel) (Moderator: Lea Di Salvatore, Researcher, Columbia Center on Sustainable Investment)

Nicolás Perrone, Professor, Universidad de Valparaíso

Kyla Tienhaara, Professor, Queens University

Christina Eckes, Professor, University of Amsterdam

Clémentine Baldon, Founding Lawyer, Baldon Avocats

**DISCUSSION**

18:00 – 19:00 **37 LEGAL AND BUSINESS ARGUMENTATION IN AMENDING PUBLIC  
PROCUREMENT CONTRACTS**  
(in Slovenian, Scholarly Panel) (Moderator: Marko Novak, Professor of Law, MLC - Fakulteta za management in pravo)

Aleksij Mužina, Associate Professor, MLC - Fakulteta za management in pravo

Luka Martin Tomažič, Assistant Professor, Alma Mater Europaea - ECM

Tanja Boršič, In-house Counsel, Holding slovenskih elektrarn

**DISCUSSION**

14:00 – 16:00 **38 DIGITALISATION AND ICT USE AMONG OLDER ADULTS**  
(in English, Scholarly Panel) (Moderator: Peter Seljak, Assistant Professor, Alma Mater Europaea - ECM)

Barbara Grintal, Assistant Professor, Alma Mater Europaea - ECM

Voyko Kavcic, Associate Professor, Alma Mater Europaea - ECM

Lucie Vidovičová, Assistant Professor, Masaryk University

**DISCUSSION**

10:00 – 11:30  
(in English,  
Scholarly Panel)

**39 SOCIAL INNOVATIONS - DEVELOPMENT OF SOCIAL INFRASTRUCTURE**  
(Moderator: David Bogataj, Professor, Alma Mater Europaea - ECM)

**The Possibilities of Independent Living from the Perspective of People with Disabilities and Professionals**

Natalia Lisiak Šegota; Daniela Bratković; Renata Pinjatela; Faculty of Education and Rehabilitation Sciences, University of Zagreb

**Road Traffic Safety in Elderly Adults With Dementia**

Voyko Kavcic, Associate Professor, Wayne State University

**Social Infrastructure Upscaling Through Education Rejuvenation Mission: A Case Study From Kerala, India**

Jamal Abshana; T. R. Rajeemol, PhD Candidates; Joseph M. K., Associate Professor, Rajagiri College of Social Sciences

**Development of Communities For The Elderly In Europe**

Suzanna Mežnarec Novosel, Research Assistant, PhD Candidate, Alma Mater Europaea - ECM

**Housing For Lgbtq+ Older Adults - Case of Regnbågen**

Mihael Nedeljko, PhD Candidate, Alma Mater Europaea - ECM

**Development of an Age-friendly Environment in Rural Areas Through 8 World Health Organization Domains - Domain: Transport And Mobility; Literature Review**

Borut Vidmar, PhD Candidate, Alma Mater Europaea - ECM

**Smart Homes in Providing Safety For Older Adults**

Franjo Liška, PhD Candidate, Alma Mater Europaea - ECM

10:00 – 12:00 **40 SARCOPENIA - Meeting for E-sarc Consortium**  
(in English, Expert Panel)  
(Moderator: Katarina Puš, PhD Candidate, ZRS Koper, Alma Mater Europaea – ECM)  
**Welcome by Hogeschool Vives: Introductory Activities for Participants**

14:00 – 15:45 **41 SARCOPENIA**  
(in English, Expert Panel)  
(Moderator: Uroš Marušič, Associate Professor, ZRS Koper)  
**E-Sarc: Development of a Tailor-made Comprehensive Training Concept on Sarcopenia For Healthcare Workers**  
Lien Van der Broeck, Researcher, FoodLab Coordinator; Annelien Desplenter, Researcher, Hogeschool Vives

**Nutritional Aspects in the Prevention and Treatment of Sarcopenia**  
Annelien Desplenter, Researcher; Lien Van der Broeck, Researcher, FoodLab Coordinator, Hogeschool Vives

**Dealing With Sarcopenia in Community Dwelling Elderly in Belgium**  
Sahar Kharaghanipour; Cindy Lermytte, Staff Members of Yellow White Cross Belgium

**Diagnosing and Treating Sarcopenia – Perspectives From Denmark**  
Niklas Grundt Hansen, Physical Therapist at Danish Physiotherapeutic Society; Katrine Storm Piper, Department of Occupational Therapy and Physiotherapy, Copenhagen University Hospital, Rigshospitalet

**Sarcopenia: General Practitioners and Their Needs**  
Paula Cengiz; Maria Pencheri; Tong Zhu, Experts, EQUIP

15:45 – 16:30 **42 SARCOPENIA**  
(in English, Scholarly Panel)  
(Moderator: Uroš Marušič, Associate Professor, ZRS Koper)  
**Fighting Sarcopenia With Resistance Training: The Dual Benefits of Exercise**  
Katarina Puš, PhD Candidate, ZRS Koper, Alma Mater Europaea – ECM; Boštjan Simunič, ZRS Koper, Professor

**Assessing Musculoskeletal Health in Older Adults Using Tensiomiography**  
Boštjan Šimunič, Principal Research Associate, Institute for Kinesiology Research, ZRS Koper; Katarina Puš, PhD Candidate, ZRS Koper, Alma Mater Europaea – ECM; Armin Paravlić, Professor, Faculty of Sport, University of Ljubljana

17:00 – 19:00 **43 SARCOPENIA**  
(in English, Expert Panel)  
(Moderator: Katarina Puš, PhD Candidate, ZRS Koper, Alma Mater Europaea – ECM)  
Boštjan Simunič, Principal Research Associate, ZRS Koper  
Sebastjan Kristovič, Associate Professor, Alma Mater Europaea - ECM  
Gregor Venišek, Head of Geriatric Medicine department, UKC Maribor  
Annelien Desplenter, Researcher, Staff at FoodLab, Hogeschool Vives  
Katrine Storm Piper, Physical Therapist at Danish Physiotherapeutic Society

**DISCUSSION**

## LAW

TUESDAY, 14 MARCH 2023

14:00 – 16:00  
(in English,  
Scholarly Panel)

### **44 ELECTION LAW IN EUROPE**

(Moderator: Jurij Toplak, Professor of Law, Alma Mater Europaea - ECM)

#### **ECHR and the Right to Free Elections**

Anja Seibert-Fohr, Professor, University of Heidelberg, Judge,  
European Court of Human Rights

#### **Election Law in Spain**

Jordi Barrat Esteve, Professor, Universitat Rovira i Virgili

#### **Election Law in Croatia**

Djordje Gardašević, Professor, University of Zagreb

- 9:00 – 10:00  
(in English,  
Scholarly Panel)
- 45 STRATEGIC COMMUNICATION MANAGEMENT**  
(Moderator: Daria Mustić, Assistant Professor, University of Zagreb)
- The Impact of Virtual Media Communication on Modern Communicators**  
Vesna Baltezarević, Professor, Megatrend University
- No Fake: News! Educating Primary and Secondary School Students By Practising Journalism**  
Gerald Hühner, PhD, Institut Discimus Lab
- Social Media As A Tool For Simplifying Scientific Topics and Improving The Learning Experience**  
Daria Mustić, Assistant Professor, Faculty of Graphic Arts, University of Zagreb;  
Božidar Veljković, Professor, Alma Mater Europaea - ECM
- The Development of Media Technologies As A Basic Characteristic of Modern Communication**  
Zdravko Šordjan, Professor, Alma Mater Europaea - ECM
- 
- 10:00 – 11:00  
(in English,  
Scholarly Panel)
- 46 STRATEGIC COMMUNICATION MANAGEMENT**  
(Moderator: Daria Mustić, Assistant Professor, University of Zagreb)
- New Ways of Political Communication**  
Radoslav Baltezarević, Professor, Megatrend University
- Privacy Policies of Digital Platforms and The Overlooked Facts; A Critical Look**  
Ayşegül Akaydin Aydin; Nur Emine Koç, Professor, Istanbul Aydin University
- Non-Financial Reporting As The Way of Communication Between Financial Sector and Public**  
Manuela Bukovec, PhD Candidate, Alma Mater Europaea - ECM
- The Role of Stereotypes In Interpersonal Communication With Refugees In The Republic of Croatia**  
Ljiljana Mutić, Teacher, Public Open University Zagreb (POUZ); Tanja Grmuša, Professor, Zagreb School of Business
- 
- 11:00 – 12:00  
(in English,  
Scholarly Panel)
- 47 STRATEGIC COMMUNICATION MANAGEMENT**  
(Moderator: Daria Mustić, Assistant Professor, University of Zagreb)
- Digital Exhaustion After and During Pandemic Period: Examples In Turkey University Education**  
Nur Emine Koç, Professor, Istanbul Aydin University
- The Impact of System Errors During The Gameplay of Games of Chance On Players and Crisis Communication of Providers of Games of Chance On Social Media**  
Lucija Dujmović, PhD Candidate, Alma Mater Europaea - ECM
- Far Right Politics and the Mobilizations Against LGBT+ in Turkey**  
Muge Oztunc, Assistant Professor, Istanbul Aydin University; Burcu Gumus, Assistant Professor, Dogus University
- What Are The Consequences of An Uninformed Public For A Sector?**  
Ivana Belić, PhD Candidate, Alma Mater Europaea - ECM



- 12:00 – 13:00  
(in English,  
Scholarly Panel)
- 48 STRATEGIC COMMUNICATION MANAGEMENT**  
(Moderator: Daria Mustić, Assistant Professor, University of Zagreb)
- Journalist's Interpretation of Vaccination During The Covid 19 Pandemic**  
Dubravka Jakšetić, PhD Candidate, Alma Mater Europaea - ECM
- The Impact of New Media Use On The Work Efficiency of Employees**  
Romana Lebar, PhD Candidate, Alma Mater Europaea - ECM
- Correlation of Media and Science On The Istrian Peninsula**  
Edita Šanović Bolković, PhD Candidate, Alma Mater Europaea - ECM
- Dignity and Health Care In A New Era**  
Stjepan Petričević, PhD Candidate, Alma Mater Europaea – ECM
- 
- 09:00 – 10:15  
(in English,  
Scholarly Panel)
- 49 STRATEGIC COMMUNICATION MANAGEMENT**  
(Moderator: Daria Mustić, Assistant Professor, University of Zagreb)
- Inspirational Motivation as a Driver of Managing Social Projects in a Turbulence Environment**  
Sergey Bushuyev, Victoria Bushuieva, Denis Bushuiev, Natalia Bushuyeva, Professors, Kiev National University of Construction and Architecture
- Digital Channels As a Marketing Method In Slovenian Social Entrepreneurship**  
Sabrina Simonovich, PhD Candidate, Alma Mater Europaea - ECM
- Interpersonal Communication as a Predisposition For Lifelong Learning of the Unemployed**  
Ivan Talijančić, PhD Candidate, Alma Mater Europaea - ECM
- Aspects and Methods of Communication in Relation to the Digitized Everyday Life of Young People**  
Tjaša Glažar, PhD Candidate, Alma Mater Europaea - ECM
- E-Consultation as a Way of Communicating with the Public in Adopting Regulations in the Republic of Croatia**  
Irena Klepac Mustačić, PhD Candidate, Alma Mater Europaea – ECM
- 
- 10:15 – 11:00  
(in English,  
Scholarly Panel)
- 50 STRATEGIC COMMUNICATION MANAGEMENT**  
(Moderator: Daria Mustić, Assistant Professor, University of Zagreb)
- The Impact of Media Releases On The Health of People With Anxiety Disorder**  
Tihana Đumić, PhD Candidate, Alma Mater Europaea – ECM
- Addressing the Local Through Digital**  
Maruša Mavsar, PhD Candidate, Alma Mater Europaea – ECM
- Digital Marketing, Demographics and Cannabis Use**  
Nives Lamçe, PhD Candidate, Besnik Fetaj, Professor, South East European University
- 
- 11:00 – 11:45  
(in English,  
Student Panel)
- 51 STRATEGIC COMMUNICATION MANAGEMENT**  
(Moderator: Daria Mustić, Assistant Professor, University of Zagreb)
- The Role of Personal Branding As A Contribution To Creating Positive Impact In Society: Examples of Grof Darkula and Pamela Perkić**  
Vanja Krznarić, Student; Vanja Krznarić, Student; Tanja Grmuša, Assistant Professor, Fakultet hrvatskih studija, Sveučilište u Zagrebu
- Surveillance Culture Effect on Turkish Society**  
Yunus Yücel, Student, Istanbul Aydin University

## PHYSIOTHERAPY

WEDNESDAY, 15 MARCH 2023

- 10:00 – 12:00      **52 SARCOPENIA - Meeting for E-sarc Consortium**  
(in English,      (Moderator: Katarina Puš, PhD Candidate, ZRS Koper, Alma Mater Europaea – ECM)  
Expert Panel)      **Workshop by Hogeschool Vives**
- 
- 14:00 – 16:30      **53 SARCOPENIA - Meeting for E-sarc Consortium**  
(in English,      (Moderator: Katarina Puš, PhD Candidate, ZRS Koper, Alma Mater Europaea – ECM)  
Expert Panel)      **Sarcopenia Screening Tool by Alma Mater Europaea - ECM**

9:00 – 9:45  
(in English,  
Scholarly  
Panel))

#### **54 LAW**

(Moderator: Luka Martin Tomažič, Assistant Professor, Alma Mater Europaea - ECM)

##### **Should The Law Fight Against Deepfake?**

Gergely Gosztonyi, Professor, Eötvös Loránd University Faculty of Law;  
Gergely Ferenc Lendvai, PhD Candidate, Faculty of Law, Pázmány Péter  
Catholic University

##### **It Is About Preserving Slovenian Culture - Teran Case (t-626/17)**

Vita Petek, Teaching and Research Assistant, Faculty of Tourism, University  
of Maribor

##### **Voting Matters: An Analysis of The Use of Electoral-Assistive Devices Through The Lens of The UN Convention On The Rights of Persons With Disabilities**

Adriana Caballero-Pérez, PhD Candidate, Maastricht University

10:00 – 11:15  
(in Slovenian,  
Scholarly  
Panel))

#### **55 HATE SPEECH, SOCIAL MEDIA AND DIGITALISATION**

(Moderator: Miha Šepec, Associate Professor, University of Maribor)

Suzana Žilič Fišer, Associate Professor, FERI, University of Maribor  
Tilen Štajnpihler Božič, Assistant Professor, Faculty of Law, University of Ljubljana  
Martin Jančar, Judge, District Court of Ljubljana  
Primož Križnar, Legal Advisor on Cybercrime, Supreme State Prosecutor's Office  
Jan Stajnko, Teaching and Research Assistant, Faculty of Law, University of Maribor

#### **DISCUSSION**

14:00 – 16:00  
(in English,  
Scholarly Panel))

#### **56 ELECTION LAW IN EUROPE**

(Moderator: Jurij Toplak, Professor of Law, Alma Mater Europaea - ECM)

##### **Election Law in Italy**

Carlo Fusaro, Professor, University of Firenze

##### **Election Law in Austria**

Anna Gamper, Professor, University of Innsbruck

##### **Election Law in Romania**

Elena-Simina Tanasescu, Professor, University of Bucharest

##### **Election Law in Serbia**

Maja Nastić, Professor, University of Niš

16:00 – 16:45  
(in English,  
Scholarly Panel)

**57 WEB AND INFORMATION TECHNOLOGIES**

(Moderator: Matej Mertik, Associate Professor, Alma Mater Europaea - ECM)

**A Metaverse Education in Primary School: Creative and Collaborative Learning in Virtual Environments in Brazil and Italy**

Daniele Agostini, Lecturer, University of Trento; Jorge Franco, Lecturer, University of Sao Paolo; Chiara Ferronato, Official, Italian Ministry of Education

**Media and Information Literacy In The Age of Digitalization**

Tanja Muha, Director, Agencija za komunikacijska omrežja in storitve RS (AKOS)

**Estimating the Economic Impact on the Business through the Internet of Things (IoT)**

Matin Mousavian, Analyst, Telecommunication Company of Iran (TCI);  
Mohammad Mahoud, Professor, 3M-CEPM R&D Institute

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16:45 – 17:15  
(in English,  
Scholarly Panel)

**58 WEB AND INFORMATION TECHNOLOGIES**

(Moderator: Matej Mertik, Associate Professor, Alma Mater Europaea - ECM)

**Transient Pattern of Interspecies Communication**

Andrea Gogová, Independent Researcher, PhD

**Deep Movement With the AI: Embodied Ethic Imaginations in a Virtual Environment With One Orange Feather Flight**

Tatjana Christelbauer, Lecturer, ACD

- 9:00 – 10:00  
(in English,  
Scholarly Panel)
- 59 CULTURAL FORMATIONS AND CULTURAL MEMORY**  
(Moderator: Anja Hellmuth Kramberger, Assistant Professor, Alma Mater Europaea - Institutum Studiorum Humanitatis)
- Nature Religion In Slovenia In Comparative Perspective**  
Cirila Toplak, Professor, University of Ljubljana, Faculty of Social Sciences
- On The Question of A Dignified Handling of Human Remains In Archeology**  
Anja Hellmuth Kramberger, Assistant Professor, Alma Mater Europaea - Institutum Studiorum Humanitatis
- Dignity and Natural Rights**  
Luka Martin Tomazic, Assistant Professor, Alma Mater Europaea - ECM
- Everyday Life In The Nazi Stammlager Camp 18 D**  
Daniel Siter, Young Researcher, Alma Mater Europaea - Institutum Studiorum Humanitatis & International Research Centre for Second World War Maribor, Slovenia
- 
- 10:00 – 10:15  
(in Slovenian,  
Scholarly Panel)
- 60 CULTURAL FORMATIONS AND CULTURAL MEMORY**  
(Moderator: Anja Hellmuth Kramberger, Assistant Professor, Alma Mater Europaea - Institutum Studiorum Humanitatis)
- The New European Bauhaus as an Opportunity to Revitalize Cultural Heritage in Rural Areas**  
Mojca Sfiligoj, PhD Candidate, Alma Mater Europaea - Institutum Studiorum Humanitatis
- 
- 10:30 – 11:30  
(in Slovenian,  
Scholarly Panel)
- 61 BOOK PRESENTATION: ROGAŠKA SLATINA POD KLJUKASTIM KRIŽEM (2nd EDITION)**  
(Moderator: Gašper Pirc, Researcher, Alma Mater Europaea - Institutum Studiorum Humanitatis, ZRS Koper)
- Daniel Siter, Young Researcher, Alma Mater Europaea - Institutum Studiorum Humanitatis & International Research Centre for Second World War Maribor, Slovenia

- 10:00 – 10:20  
(in English,  
Student Panel)
- 62 NEUROSCIENCE OF MOVEMENT**  
(Moderator: Uroš Marušič, Associate Professor, ZRS Koper)
- Exploring the Effectiveness of Enriched Environments as a Tool For Enhancing the Development of Preschool Children in Slovenia**  
Naomi Cvetko, Student; Luka Šlosar, Assistant Professor, ZRS Koper, Alma Mater Europaea – ECM
- 
- 10:20 – 12:00  
(in English,  
Expert Panel)
- 63 NEUROSCIENCE OF MOVEMENT**  
(Moderator: Uroš Marušič, Associate Professor, ZRS Koper)
- Benefits of Using the Sports Club as an Enriched Environment For People With Disabilities: The Example of the Sports Club "Aetoi Thessalonikis"**  
Konstantinos Chatzinikolaou, Assistant Professor, Laboratory of Motor Behavior and Adapted Physical Activity, School of Physical Education and Sport Science, Aristotle University of Thessaloniki, Greece; Paraskevas Alvanos, Researcher, AETOI Thessalonikis
- Promoting Physical Literacy in Greek Preschoolers: Assessment and Recommendations**  
Tatiana Chalkidou, Assistant Professor; Paraskevas Alvanos, Researcher, AETOI Thessalonikis
- Implementation of HAPCH Project at Primary School Ormož**  
Urška Stanko, Teacher, Osnovna šola Ormož
- Health & Academic Performance With Happy Children (HAPCH): Introducing the HAPCH Project Research Protocol**  
Luka Šlosar, Assistant Professor, Alma Mater Europaea - ECM; ZRS Koper
- 
- 14:00 – 15:00  
(in English,  
Scholarly Panel)
- 64 NEUROSCIENCE OF MOVEMENT**  
(Moderator: Uroš Marušič, Associate Professor, ZRS Koper)
- Understanding Cognition Through Neurophysiological Measures of Brain Activity Under Improved Ecological Validity Conditions**  
Manca Peskar, PhD Candidate, Institute for Kinesiology Research, ZRS Koper; Biological Psychology and Neuroergonomics, Department of Psychology and Ergonomics, Faculty V: Mechanical Engineering and Transport Systems, Technische Universität Berlin
- Cortical Contributions During Different Types and Intensities of Movement**  
Tjaša Ocvirk, PhD Candidate, Functional Brain Mapping Laboratory, Department of Basic Neurosciences, University of Geneva, Switzerland; Human Physiology and Sports Physiotherapy Research Group, Faculty of Physical Education and Physiotherapy, Vrije Universiteit Brussel
- Future Directions in Neuroscience of Movement**  
Uroš Marušič, Associate Professor, Institute for Kinesiology Research, ZRS Koper; Alma Mater Europaea - ECM
- CLOSING REMARKS**

## HUMANITIES

THURSDAY, 16 MARCH 2023

9:30 – 10:30  
(in English,  
Scholarly Panel)

**65 ETHICAL DILEMMAS IN THE AGE OF DIGITAL REPRESENTATION OF REALITY**  
(Moderator: Luka Trebežnik, Alma Mater Europaea - ECM)

**Media and Ethical Problems: Facebook-Cambridge Analytica Scandal**  
Erdem KOÇ, Associate Professor, Turkey Ministry of Education

**Transparency as a Principle and Requirement: What Do We Demand When We Demand Transparent AI**

Jonas Miklavčič, PhD Candidate, Faculty of Theology, University of Ljubljana

**The Use of English Borrowings in the Social Media in Kosovo**

Enes Ismeti, PhD Candidate; Arta Toçi, Professor, South East European University

**Film and Cinema of Emotions**

Uroš Zavodnik, Assistant Professor, Alma Mater Europaea, Dance Academy

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10:30 – 11:30  
(in English,  
Scholarly Panel)

**66 HERITAGE, CULTURE AND IDENTITY**  
(Moderator: Luka Trebežnik, Alma Mater Europaea - ECM)

**Political Engagement of Cultural Heritage and Processes of Democratization of Slovenian Society**

Verena Perko, Assistant Professor, Faculty of Arts, University of Ljubljana

**The Role of Media Reports in Democratisation of Archaeological Heritage Management– the Case of Slovenia**

Jelka Pirkovič, Assistant Professor, Faculty of Arts, University of Ljubljana, Faculty of Slovenian and International Studies, New University

**Two 'Types' of Sodom's Sin in Dante's Divine Comedy**

Ignac Navernik, PhD Candidate, Alma Mater Europaea - Institutum Studiorum Humanitatis

**Olfactory Heritage In Slovenian Museums**

Mojca Ramšak, Professor, University of Ljubljana

14:00 – 15:00  
(in Slovenian,  
Student Panel)

**67 HIGH SCHOOL RESEARCH**

**in partnership with II. gimnazija Maribor**

(Moderator: Katja Holnthaner Zorec, II. gimnazija Maribor; Luka Martin Tomažič, Assistant Professor, Alma Mater Europaea - ECM)

**Microorganisms on Toothbrushes**

Tim Šinko, Student, II. gimnazija Maribor

**Formulation of Natural Extract *Hyssopus Officinalis* As a Support Therapy For Covid-19, Using Green Technologies**

Matic Mohorko, Student, II. gimnazija Maribor

**Presence of Sarcopenia In Active and Non-active Elderly Population**

Špela Polutnik, Student, II. gimnazija Maribor

**Connection Between Stress, Depression, Anxiety and Cortisol in Hair of Adolescents**

Filip Dugonik, Student, II. gimnazija Maribor



14:00 – 19:00  
(in English,  
Scholarly Panel)

**68 PERPETUAL PEACE IN EUROPE: BACK TO THE FUTURE?**

**in partnership with Science and Research Centre Koper**

(Moderators: Lenart Škof, Professor, Alma Mater Europaea - ECM, ZRS Koper;  
Klaus-Gerd Giesen, Professor, Université Clermont Auvergne)

**The Great Return of the Baroque Arsenal: A Critical Analysis of Atlantic Remilitarization**

Christophe Wasinski, Lecturer, Université Libre de Bruxelles

**Normative Standards, Human Condition, and the Artificial Intelligence in the Europe at the Crossroads**

Gašper Pirc, Researcher, Alma Mater Europaea - Institutum Studiorum Humanitatis, ZRS Koper

**Geopolitics of Peace**

Thomas Hippler, Professor, University of Normandy

**The Decolonizing Kant**

Klaus-Gerd Giesen, Professor, Université Clermont Auvergne

**Perpetual Peace Is For the Dead, Justice Is For the Living**

Eduardo Mendieta, Professor, Penn State University

**Perpetual Peace in Historical European Cooperation Designs: Patterns to Consider**

Čirila Toplak, Professor, Faculty of Social Sciences, University of Ljubljana

**Spinoza, Kant, and World Peace as the Cosmopolitan Virtue of Human Freedom**

Nyathmar de Oliveira, Pontifical Catholic University at Porto Alegre

## PHYSIOTHERAPY

FRIDAY, 17 MARCH 2023

10:00 – 12:00 **69 PHYSIOTHERAPY**  
(in English, Expert Panel) (Moderator: Katarina Puš, PhD Candidate, ZRS Koper, Alma Mater Europaea – ECM)

### Workshop for BRAIN Consortium

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12:00 – 13:00 **70 PHYSIOTHERAPY: FroomCare PRO - inovativno digitalno orodje za fizioterapevte**  
(in Slovenian, Expert Panel) (Moderator: Miha Jurečič, Expert, Faculty of Economics, University of Ljubljana)  
Grega Nahtigal, Founder, CEO, DTs HUB  
Darko Đurić, Founder, CEO, DTs HUB,  
Manca Škoda, Expert Group Lead, DTs HUB  
Matjaž Kragelj, Head of IT Development, Ministry of the Economy, Tourism and Sport, Republic of Slovenia

### DISCUSSION

## PROJECT MANAGEMENT

FRIDAY, 17 MARCH 2023

13:00 – 14:00 (in English, Scholarly Panel)	<b>71 PROJECT MANAGEMENT</b> (Moderator: Reinhard Wagner, Assistant Professor, Alma Mater Europaea – ECM) <b>WELCOME SPEECH</b> Reinhard Wagner, Assistant Professor, Alma Mater Europaea – ECM <b>INVITED SPEAKER</b> <b>Industry 5.0 – Concept, Challenges, and Outlook</b> Niko Spicek, PhD Candidate, Alma Mater Europaea – ECM, Project Leader, BMW Group
14:00 – 14:45 (in English, Scholarly Panel)	<b>72 PROJECT MANAGEMENT</b> (Moderator: Reinhard Wagner, Assistant Professor, Alma Mater Europaea – ECM) <b>Communication Screenshot in Projects of Multicultural Diversity</b> Walid Nassar, PhD Candidate, Alma Mater Europaea – ECM <b>Trust and Control in Hybrid Work Project Teams</b> Mario Paptic, PhD Candidate, Alma Mater Europaea – ECM <b>Influence of Trust on Project Success in Virtual Project Environment</b> Melita Posavac, PhD Candidate, Alma Mater Europaea – ECM
14:45 – 15:30 (in English, Scholarly Panel)	<b>73 PROJECT MANAGEMENT</b> (Moderator: Gunnar Lühr, Professor of Construction Management and Construction Project Management, TH Köln) <b>Contribution of the Communication in Addressing the Cultural Challenges in the Investigative Journalism Projects</b> Walid Nassar, PhD Candidate, Alma Mater Europaea – ECM; Constanta-Nicoleta Bodea, Professor, Bucharest University of Economic Studies <b>Critical Success Factors in Hybrid Project Management</b> Emmanouil Papadakis, PhD Candidate, University of Macedonia \ Schoox; Loukas Tsironis, Associate Professor, University of Macedonia <b>How to Create and Maintain Trust in Hybrid Project Teams? Presentation of a Case Study</b> Brigitta Vereczkei, PhD Candidate, Alma Mater Europaea – ECM
15:30 – 16:15 (in English, Scholarly Panel)	<b>74 PROJECT MANAGEMENT</b> (Moderator: Gunnar Lühr, Professor of Construction Management and Construction Project Management, TH Köln) <b>INVITED SPEAKER</b> <b>Change Management in the Construction Industry: Theory and Experiences</b> Gunnar Lühr, Professor of Construction Management and Construction Project Management, TH Köln

9:45 – 10:00  
(in English)

**75 TOWARDS NEW EUROPEAN RENAISSANCE: FOR HUMANE SOCIETAL ORDER**  
in partnership with Science and Research Centre Koper  
(Moderator: Peter Volasko)

**WELCOME SPEECH**

Klaus Mainzer, University Professor, President, European Academy of Sciences and Arts, President of the Scientific Committee of the It's About People Conference

Martin J. Kemp, Professor Emeritus; Honorary Fellow of Trinity College, University of Oxford

Paul Richard Bloom, Professor, Chair in Philosophy, Loyola University Maryland  
Steve Fuller, Auguste Comte Chair in Social Epistemology, University of Warwick

Michele Ciliberto, Professor, Scuola Normale Superiore Pisa

Igor Škamperle, Professor, Faculty of Philosophy, University of Ljubljana

Frane Adam, Professor, Faculty of Social Studies, University of Ljubljana

Rachel Armstrong, Professor, KU Leuven

Sharon Rider, Professor, Uppsala University

Lenart Škof, Professor, Alma Mater Europaea - ECM, ZRS Koper

**DISCUSSION**

10:00 – 10:45  
(in English)

**76 KEY SOCIETAL AND ETHICAL MESSAGES OF THE RENAISSANCE**  
(Moderator: Peter Volasko)

Martin J. Kemp, Paul Richard Bloom, Steve Fuller, Michele Ciliberto, Igor Škamperle, Frane Adam, Rachel Armstrong, Sharon Rider, Lenart Škof

**DISCUSSION**

10:45 – 11:30  
(in English)

**77 WHICH OF ITS SOCIETAL AND ETHICAL ACHIEVEMENTS CAN SERVE AS INSPIRATION TODAY?**  
(Moderator: Peter Volasko)

Martin J. Kemp, Paul Richard Bloom, Steve Fuller, Michele Ciliberto, Igor Škamperle, Frane Adam, Rachel Armstrong, Sharon Rider, Lenart Škof

**DISCUSSION**

11:30 – 12:30  
(in English)

**78 HOW COULD WE TRANSFORM THIS INSPIRATION INTO SOCIETAL PARADIGM SHIFT TODAY?**  
(Moderator: Peter Volasko)

Martin J. Kemp, Paul Richard Bloom, Steve Fuller, Michele Ciliberto, Igor Škamperle, Frane Adam, Rachel Armstrong, Sharon Rider, Lenart Škof

**DISCUSSION**

14:00 – 15:00  
(in English)

**79 IS THE SCOPE OF MANIFESTO COMPREHENSIVE ENOUGH FOR THE SOCIETAL PARADIGM SHIFT?**  
(Moderator: Peter Volasko)

Martin J. Kemp, Paul Richard Bloom, Steve Fuller, Michele Ciliberto, Igor Škamperle, Frane Adam, Rachel Armstrong, Sharon Rider, Lenart Škof

**DISCUSSION**

15:00 – 15:45  
(in English)

**80 HOW CAN WE BEST IMPLEMENT MANIFESTO IN OUR SOCIETIES?**

(Moderator: Peter Volasko)

Martin J. Kemp, Paul Richard Bloom, Steve Fuller, Michele Ciliberto, Igor Škamperle, Frane Adam, Rachel Armstrong, Sharon Rider, Lenart Škof

**DISCUSSION**

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16:00 – 17:00  
(in English)

**81 PRESENTATION OF THE MANIFESTO AND FURTHER ACTIVITIES**

(Moderator: Peter Volasko)

Martin J. Kemp, Paul Richard Bloom, Steve Fuller, Michele Ciliberto, Igor Škamperle, Frane Adam, Rachel Armstrong, Sharon Rider, Lenart Škof

**DISCUSSION**

# STUDY PROGRAMS ACCREDITED AT AMEU ECM

UNDERGRADUATE STUDIES	GRADUATE STUDIES	DOCTORAL STUDIES
SOCIAL GERONTOLOGY	SOCIAL GERONTOLOGY	SOCIAL GERONTOLOGY
HUMANITIES	HUMANITIES	HUMANITIES
MANAGEMENT	PROJECT MANAGEMENT	STRATEGIC COMMUNICATION MANAGEMENT
	EUROPEAN BUSINESS STUDIES PROJECT MANAGEMENT	PROJECT MANAGEMENT
PHYSIOTHERAPY	HEALTH SCIENCES Nursing, Public Health, Physiotherapy, Integrative Health Sciences, Autism	PHYSIOTHERAPY
NURSING		
ARCHIVES MANAGEMENT	ARCHIVES AND RECORDS MANAGEMENT	ARCHIVAL SCIENCES
	ENVIRONMENTAL STUDIES	
DANCE, CHOREOGRAPHY	DANCE STUDIES	
WEB AND INFORMATION TECHNOLOGIES	WEB SCIENCE AND TECHNOLOGY	APPLIED ARTIFICIAL INTELLIGENCE