

NAVIGATING  
**knowledge**  
LANDSCAPES



## **The 5th Navigating Knowledge Landscapes' International Conference, September 20th, 2021.**

Knowledge, transdisciplinarity and ethics.



# The 5th Navigating Knowledge Landscapes' International Conference, September 20th, 2021.

Knowledge, transdisciplinarity and ethics.

09:30 – 09:40	<i>Sound check : )</i>
09:40 – 09:50	<i>Welcome</i>
09:50 – 10:10	<b>Helena Machado, Susana Silva, and Claudia de Freitas, University of Minho</b>
10:10 – 10:30	<b>Maruška Nardoni, University of Ljubljana</b>
10:30 – 10:50	<b>Simona Sobotovicova, University of the Basque Country UPV/EHU</b>
10:50 – 11:00	<b>COFFEE</b>
11:00 – 11:20	<b>Mario Santisteban Galarza, University of the Basque Country UPV/EHU</b>
11:20 – 11:40	<b>Srećko Gajović and Vanja Kopilaš, University of Zagreb</b>
11:40 – 12:00	<b>Ulf Carmesud, Uppsala University</b>
12:00 – 12:10	<b>COFFEE</b>
12:10 – 12:30	<b>Franc Mali, University of Ljubljana</b>
12:30 – 12:50	<b>Anna-Lydia Svalastog, Uppsala University</b>
12:50 – 13:00	<i>Welcome, Anna Olofsson, Mid Sweden University</i>
13:00 – 14:00	<b>LUNCH</b>
14:00 – 14:30	<i>Guided tour, RCR lab, Mid Sweden University</i>
14:30 – 14:50	<b>Kristi Topi and Gentian Vyshka, University of Medicine in Tirana, Albania</b>
14:50 – 15:10	<b>Christina Nasadyuk and Alexander Sklyarov, National Medical University, Lviv, Ukraine</b>
15:10 – 15:30	<b>Matjaž Vidmar, Maruška Nardoni and Vanja Kopilaš, University of Edinburgh, University of Ljubljana, University of Zagreb</b>
15:30 – 15:40	<b>COFFEE</b>
15:40 – 16:00	<b>Elin Montelius and Jennie Olofsson, Mid Sweden University</b>
16:00 – 16:20	<b>Nikola Marković, Zoran Todorović, University of Belgrade</b>
16:20 – 16:40	<b>Vanja Kopilaš and Srećko Gajović, University of Zagreb</b>
16:40 – 17:00	<i>Summary of this day</i>

# Science communication and Covid-19 pandemic: constructing public engagement

Helena Machado, Susana Silva, and Claudia de Freitas ([hmachado@ics.uminho.pt](mailto:hmachado@ics.uminho.pt))

University of Minho

Science communication, along with appeals to public engagement in preventing the spread of disease, has been considered a cornerstone of managing the Covid-19 pandemic. Through the lens of Science and Technology Studies (STS) and using a science-as-rhetoric framework, we explore how publics have been constructed alongside the targeting of science communication in response to a global public health emergency, as well as the ways by which new publics assemble along particular matters of concern. On the basis of a survey of academic literature on “science communication” and “Covid-19”, we aim to understand three interrelated aspects: first, how “the public engagement” have been depicted and imagined within the presentation of scientific advice. Second, how publics and their participation(s) are made through the precise settings and the spaces in which science communication, within distinct disciplinary sources of knowledge and expertise, happens. Third, how objects or issues of participation framed by science communication within Covid-19 call publics into being.

Specific kinds of publics emerge, particular roles are shaped and distributed, and special kinds of knowledge are defined as in need to be communicated. A hybrid articulation between notions of “publics-in-general” (‘people out there’) and “publics-in-particular” (publics with identifiable stakes and interests, or specific risks and vulnerabilities) was found. In addition, the issues that affect and mobilize people have been taking shape and changing, and are far from being settled as well as the ways by which new publics assemble along particular matters of concern. Finally, science communication is addressed as a cultural and political phenomenon that articulates and shapes diverse emergent issue- publics in co-production with the manifestation of specific regulatory and governance solutions to deal with Covid-19 pandemic crisis. The co-production approach allows to understand the construction of public engagement in the rhetoric of science communication as relational and systemic with the wider technoscientific, social and political orders.

# Control and Communication in the Human and the API

Maruška Nardoni ([maruska.nardoni@fdv.uni-lj.si](mailto:maruska.nardoni@fdv.uni-lj.si))

University of Ljubljana

The presentation will provide a couple of reasons why European contact-tracing applications might have been bound to fail right from the start. The development of an adequate protocol framework (e.g., DP-3T first and then Google/Apple Exposure Notification Service) was saturated with discourses on privacy and decentralisation whereas the app descriptions have been reduced to the apps' functionality (e.g., proximity tracing to the Bluetooth LE technology) whilst completely ignoring social aspects of the spread of the contagion and ICT habits of vulnerable groups. Although it was agreed such digital tools should represent only a supportive means of pandemic mitigation (WHO, 2020), the thorough public campaigns around the Slovenian #OstaniZdrav app focusing on Bluetooth technology and explaining away the privacy issues point to a state of "technological solutionism". Nevertheless, this is a state common to the stakeholders of public administration and private businesses, whereas the Slovenian general public rather feared governmental control and data misuse while using such apps. In order to address those fears, the presentation will take #OstaniZdrav's API (i. e., application programming interface) connections and its privacy statements under the scope

# What impact has the COVID-19 pandemic on European Union labour market needs?

Dr. Simona Sobotovicova, ([sobotovicova.simona@gmail.com](mailto:sobotovicova.simona@gmail.com))

University of the Basque Country UPV/EHU

The COVID-19 pandemic had far-reaching effects on all areas related to European Union (EU) politics and management of asylum and migration. In order to tackle the spread of COVID-19, the EU Member States taken different measures and imposed restrictions on the admission of migrants. However, most EU countries identified specific occupational sectors that were considered essential and justified their continued admission of migrants during the COVID-19 pandemic. The main sectors identified were notably health, agriculture and transport.

To this extent, to address labour shortages, some EU Member States implemented measures to facilitate labour market access for third-country nationals as the immediate response to the health emergency. So, the EU labour market demand in key economic sectors was broadly met throughout 2020 via specific measures introduced for that purpose (e.g. regularisations, allowing legally resident third-country nationals to change sector, providing exemptions for essential workers, etc.). Some EU Member States reported more specific measures in relation to ongoing labour needs for healthcare workers.

This paper addresses the EU Member States answer to the challenges in the area of migration and asylum in the EU related to the labour migration shortages in certain key sectors, especially healthcare. It must be highlighted that in the current situation, migrant workers are more vulnerable. To this extent, the paper examines the pandemic's responses on migration and asylum control in relation with the EU labour market needs.

# Can the fight against an epidemic justify the use of facial recognition?

Mario Santisteban Galarza ([mariochubi@hotmail.com](mailto:mariochubi@hotmail.com))

University of the Basque Country UPV/EHU

The fight against COVID-19 has required restrictions that limit people's mobility in order to reduce the spread of the virus. In different countries, the compliance with these measures has been verified by the police, but also by automatic systems. From the control of home confinement in Russia, to the verification in the workplace of the use of masks by work personnel, facial recognition has been presented as an efficient way to monitor the implementation of these restrictions.

However, most governments are still reluctant to use this powerful technology to handle the epidemic. If it is misused, facial recognition can affect the right to privacy, subjecting individuals to constant surveillance. Furthermore, experts point out that if we normalize this technology, basic elements of our democratic system could be at risk. Despite this, the right to privacy is not an unlimited right, and the protection of other fundamental interests could justify the use of these systems in specific scenarios. Likewise, not all uses of this technology present a high risk for fundamental rights.

The objective of my communication is to clarify in which cases the General data protection regulation would allow the implementation of facial recognition systems. Specifically, I will try to answer the question of whether the protection of public health is a legal basis for implementing this technology.

# The possibility of acquired cognitive deficits in the context of digital society

Srećko Gajović and Vanja Kopilaš ([srecko.gajovic@hiim.hr](mailto:srecko.gajovic@hiim.hr), [vkopilas@hrstud.hr](mailto:vkopilas@hrstud.hr))

University of Zagreb

The current pandemic caused by COVID-19 disease raised a possibility of negative long-term consequences on the individual cognitive abilities. The cognitive abilities in the nowadays society are not only at risk from the putative viral infections, but as well from the environmental pollutants like endocrine disruptors. Here we wanted to discuss the imaginary scenarios where the acquired cognitive declines would be extreme and easily noticeable, which due to the connection to the viral cause and behavioral changes we referred as “zombification” of humanity.

One of the key aspects of “zombification” process is the ability and right of the affected individuals to participate in societal activities. In the context of digital society, the digital citizens are globally interconnected which influences the participants and allows them to influence others (i.e., prosumer activities where the individual is both producer and consumer of the digital content). How cognitive abilities relate to the digital activities is rather unclear. The individuals with cognitive deficits are especially vulnerable to various types of digital frauds. Moreover, being a digital citizen with access to digital technologies and connectivity is increasingly considered as an essential human right. It is puzzling if biological agents (e.g., viruses) have abilities to interfere with dynamics of digital interactions and their societal context.

# A cracking paradigm

Ulf Carmesund ([ulf.carmesund@crb.uu.se](mailto:ulf.carmesund@crb.uu.se))

Uppsala University

Academics in countries receiving migrants, are often talking about immigration as a problem. But, aren't there neglected potentials in immigration and interaction?

“Integrasjon og tillit - Langsiktige konsekvenser av høy innvandring” offentlige utredninger 2017: 2. NOU 2017:2, sees immigration, and integration, as a challenge, to basic principles of democracy, a challenge to the generous welfare state and to the rule of law. <sup>3</sup> Professor Joseph H Carens, Toronto University, has said that “the debates around immigration raise ethical questions, that many of these ethical questions are interconnected, and that a commitment to democratic principles greatly constrains the kinds of answers we can offer to these questions.” <sup>4</sup> Do these perspectives represent a cracking paradigm?

In many ways, national borders are losing in relevance. They cannot stop climate change, they can't stop the flow of information via internet. Borders may hinder but not stop migration. Behind and across old borders new social realities emerge, where smart phones and digital technology are key. Which new knowledge, new ethical standards and what potential for social well-being emerge in situations where old and new inhabitants get along well and thrive together? What can be learned from examples of well-functioning integration, in terms of its intellectual and ethical prospects? Do they point at a new paradigm?

<sup>3</sup> Brochmann, Grete: “Integrasjon og tillit - Langsiktige konsekvenser av høy innvandring” offentlige utredninger 2017: 2. NOU 2017:2, p 24-25.

<sup>4</sup> Carens, Joseph, H (2015): The ethics of immigration, Oxford University Press, p 2.

# The social and (bio)ethical implications of human genome editing technologies by extending healthy life span

Franc Mali ([franc.mali@fdv.uni-lj.si](mailto:franc.mali@fdv.uni-lj.si))

University of Ljubljana

The healthy human life span is today increasingly depending from the progress of biosciences and biomedicine. Because of tremendous progress of new biosciences in the last two decades, there is opening the door for second longevity revolution. If first longevity revolution did arise in the middle of 19. century and it was connected with historically unprecedented heights of the number of people in older age groups, than second longevity revolution in the beginning of 21 century based on new scientific discoveries could lead to extreme form of extension of human life span. Namely, the new emerging human genome editing technologies are developing in direction of maximal possible amelioration of the degenerative aging process. They did begin successfully slow aging processes, prevent or postpone age associated diseases and they are opening the possibility to substantially increase the current maximum (healthy) life span. Here, it took over the leading role CRISPR-Cas 9 technology which immediately pointed out its revolutionary applicative potential. It is far more accurate and precise human genome editing technology than older genetic intervention technologies. It will strongly contribute to various types of anti-aging therapies contributing to extension of human life span. What are social and ethical implications of these processes? Why these trends concerning the radical forms of longevity are still relatively marginalized in the context of European institutionalized bioethical discourse? In my contribution, I'll try to present some answers (they will be based on my theoretical and empirical research in last two years) on the above put questions which are arising because the current progress of bioscience and biomedicine.

# **Just a point of view? On disregard of information and warnings from COVID-19 field doctors, and the general scientific disbelief of knowledge based on qualitative texts.**

Anna-Lydia Svalastog, ([anna.lydia.svalastog@crb.uu.se](mailto:anna.lydia.svalastog@crb.uu.se))

University of Uppsala

The CORONA-19 virus spread quickly in Europe during the first half of 2020. How to understand and respond to the new situation became a key political task. As the COVID-19 virus was a new virus, knowledge was urgently needed. The public health institutes across Europe contained knowledge about former epidemics and historic pandemics, and well-known strategies of distancing and hygiene came in place. In addition models of different scenarios on how the epidemic, that evolved to a pandemic might progress were developed.

In early March 2020 the insisting warnings from inside the hospitals in northern Italy went viral. The receptions of the warnings from the doctors working in the COVID-19 hot spot included medical or public health experts that emphasized how Italy could not be compared to ones own country. The consequences of the virus were understood as knowledge with limited medical value. In this presentation I will discuss how this corresponds with a broader academic perception of a divide between qualitative and quantitative research method, where the former is conceptualised as representing subjective experiences and the later representing objective facts. Thus it makes a difference whether the experiences is understood as knowledge or is merely an individual point of view. The main argument will be that research methodological underpinnings has consequences for risk assessments in global crisis and tend to resist or delay knowledge transfer based on experience, and generate consequences for both public health and policy work.

# Fear from Covid-19 and its impact in Albania: a transversal study

Kristi Topi and Gentian Vyshka ([gvyshka@yahoo.com](mailto:gvyshka@yahoo.com))

University of Medicine in Tirana

**BACKGROUND AND AIM OF THE STUDY:** Covid-19 Pandemics has severely affected everyday human life throughout the globe. The aim of this study was to assess the impact that the Covid-19 pandemic has had on the level of anxiety in Albanian families.

**METHODOLOGY:** A transversal study was conducted with 302 participants through an online survey. The survey consisted of two sections: socio-demographic data and Fear of Covid-19 Scale (FCV-19S) (FCV-19S), a 7-question test, specifically designed to measure and assess fear and anxiety associated with the Covid-19 pandemic. The final version of this questionnaire was distributed through social media and online platforms.

**RESULTS:** 302 study participants [73.8% (n = 223) females and 26.2% (n = 79) males] participated in the study. Statistical analysis showed that 54.97% (n = 166) of the participants had mild / moderate anxiety and 45.03% (n = 136) had severe anxiety. Younger ages than 45 years old reduced the likelihood of severe anxiety by 56%. There is a tendency (P = 0.08) for men, when compared to females, to be 37% less likely as of showing severe anxiety during the pandemic.

**CONCLUSIONS:** Age is the most important factor that independently affected the anxiety state during the Covid-19 pandemic. Thus the most vulnerable group during the pandemic is the age group above 45 years old, with predominance of the female sex. Based on these results, in the future, when planning support strategies, priority should be given to this target group.

**KEYWORDS:** Anxiety state, anxiety level, Covid-19, quarantine, pandemics.

# Reflections on the Experience of Distance Biochemistry Lecturing to Foreign Students of Medicine and Pharmacy in Ukraine – Lessons Learnt by Professors

Christina Nasadyuk and Alexander Sklyarov

([nasadyukch@gmail.com](mailto:nasadyukch@gmail.com))

Lviv National Medical University

The outbreak of COVID-19 pandemic became an unprecedented challenge for the educational institutions – schools and universities with overlasting traditions and programmes of in-person classes during several days were forced to shift to the unimagined before online teaching. Suspension of in-person classes became an unacceptable reality also for medical schools with their indispensable laboratory practices and hospital clerkships.

The study reviews the experience of online Biochemistry lecturing to the foreign undergraduates at Danylo Halytsky Lviv National Medical University (Ukraine) in English and presents students' opinions about distance education obtained in the course of voluntary anonymous survey. The survey was taken by 53 (32%) of students from 164 invited.

Distance Biochemistry lecturing was provided using the virtual university platform MISA and Zoom. Dedication of the academic staff and extra hours of work allowed to perform very quickly necessary curricular adaptations, produce relevant video content on laboratory procedures, create clinical and laboratory cases for educational purposes.

According to the survey, 34% of students marked that it was the willingness of a student to study determining the quality of distance education and for 32% it was the quality of educational content. Interestingly, the opportunity to study or to have educational material in the native language as a factor determining education success was supported by only 1 respondent. 19% of students supposed that it was the personality of a teacher affecting the quality of distance learning versus less than 3% of respondents, who have chosen teacher's qualification as the determining factor. Almost half of students noted that in-person classes would increase their excellence in Biochemistry.

Among the main obstacles for the successful distance education 30% of students chose lack of academic atmosphere, 21% – less communication with the teacher, 20% – technical issues like internet instability, whereas such items as lack of communication with the group-mates, comfortable place to study or access to the library gained less than 5%. The students also stressed the importance of relevant video content and other demonstration material for the quality distance education.

Despite undisputable benefits of in-person teaching, alternative lecturing format definitely increased the teachers' creativity and facilitated the mastering of novel pedagogical and digital tools. Maintenance of student-teacher communication and availability of the appropriate demonstration materials seem to be crucial factors for the provision of quality distance education according to the students' opinions.

# "How to ask a Question? - Accommodating Interdisciplinary Perspectives in NKL Vaccination-Uptake Study"

Matjaž Vidmar, Maruška Narodni and Vanja Kopilaš ([matjaz.vidmar@ed.ac.uk](mailto:matjaz.vidmar@ed.ac.uk), [maruska.narodni@fdv.uni-lj.si](mailto:maruska.narodni@fdv.uni-lj.si), [vkopilas@hrstud.hr](mailto:vkopilas@hrstud.hr))

University of Edinburgh

University of Ljubljana

University of Zagreb

Following a very successful collective research project on policies and attitudes towards the use of facemasks as a public health protection tool, the Navigating Knowledge Landscapes (NKL) network, embarked on a second COVID-19-themed joint study on the roll out of vaccination.

Coming from a variety of scientific disciplines, the working group members participating in regular webinars worked towards (re)iteration of research questions as well as the empirical data collection exercise. Through these conversations, a fascinating internal landscape of knowledge(s), skill(s) and viewpoint(s) became a tacit space of boundary work and social worlds (re)configurations.

In this reflective paper, three core research group members reflect on personal and collective experiences of aligning disciplinary perspectives and develop a framework for collaborative research approach(es) NKL and other similar groups could follow in the future.

# The risky female body: treating oneself, losing control or choosing not to

Jennie Olofsson & Elin Montelius ([jennie.olofsson@miun.se](mailto:jennie.olofsson@miun.se), [elin.montelius@miun.se](mailto:elin.montelius@miun.se))

Mid Sweden University

The female body has been a keen object of discussion from feminist perspectives (for example, see Grosz 1994; Shildrick 1997; Butler 2011). Particularly from a post-materialist feminist point of view, the body is an active part of its own becoming (Barad, 2007; Aliamo and Hekman 2010). Recently, discussions have also concerned the female body as a risk object (Lupton 1993, Montelius 2020, Olofsson, 2021). This presentation draws particularly on the work of Lupton, who understands risk, not only as being socially constructed, but as also forming part of moral concerns. Here, focus is particularly on health risks, where those deemed at risk (for developing a disease or illness) are first and foremost seen as the ones posing a risk. We seek to expand on these insights, by investigating the drawing of acts of balance and making of boundaries that women are engaged in, particularly when it comes to food. Food is a necessity at the same time as certain food is labelled risky (Montelius, 2020). In what follows, we identify three different way of being-with (Barad 2007) food: to treat oneself, to lose control and to choose not to incorporate food. These are three different ways, not only of promoting a particular kind of body; but also of drawing boundaries to what is seen as healthy and desirable at the same time as these acts come with their own risks. This shows that the drawing of boundaries is far from a simple act; instead, the boundaries are charged differently depending on directions of certain types of food. This means that the female body and the particularity of food as well as its direction come into being in and through their joint co-constitution.

## Literature

Aliamo, Stacey och Hekman, Susan (red.) (2010) *Material feminisms*. Bloomington och Indianapolis: Indiana University Press.

Barad, Karen (2007) *Meeting the universe halfway. Quantum physics and the entanglement of matter and meaning*. Durham and London: Duke University Press.

Grosz, Elizabeth (1994) *Volatile bodies. Toward a corporeal feminism*. Bloomington och Indianapolis: Indiana University Press.

Lupton, Deborah (1993) Risk as a moral danger: The social and political functions of risk discourse in public health. *International Journal of Health Services*, 23(3), 425-435.

Montelius, Elin (2020). *Att göra det materiella virtuellt. Subjektifiering, moral och motstånd i konstruktionen av den riskfyllda mathållningen*. Diss, Mid Sweden University.

# **Kap study: Knowledge, attitudes and practices of doctors employed in secondary and tertiary facilities regarding the use of digital media**

Nikola Marković, Zoran Todorović ([zoran.todorovic@med.bg.ac.rs](mailto:zoran.todorovic@med.bg.ac.rs))

University of Belgrade

Telemedicine uses telecommunications and information technology to provide remote health services. We aimed to assess the knowledge, attitudes, and practices (KAP study) of physicians who care for patients with limited mobility in our country concerning the use of digital media. The cross-sectional study was conducted among physicians from the Clinic for Neurology of the Clinical Center of Serbia (KN KCS) and the Specialized Rehabilitation Hospital Banja Koviljača (SBR BK). Participants filled online the original questionnaire, approved by the hospital management board. Descriptive statistics and nonparametric tests were used for data processing, and the reliability of the questionnaire was assessed using Cronbach's alpha coefficient. The questionnaire was completed by 21/75 physicians (28%). Participants from both institutions confirmed that they care for patients with limited mobility (KN KCS > SBR BK;  $p = 0.03$ ). The current COVID pandemic is recognized as a situation with an increased risk of visiting a health facility (KN KCS > SBR BK;  $p = 0.005$ ). Physicians assessed that they were sufficiently informed how to use digital media, which might be helpful in communication with patients (KN KCS > SBR BK;  $p = 0.007$ ), while patients, especially the elderly and less educated, were not considered to be ready for that. Participants believed that telemedicine could reduce the burden on the healthcare system rather than improve communication with patients. Telemedicine seems beneficial, especially for patients with limited mobility, but it is necessary to conduct additional education for both health workers and patients.

# Digital citizenship in the COVID-19 pandemic

Vanja Kopilaš and Srećko Gajović ([vkopilas@hrstud.hr](mailto:vkopilas@hrstud.hr), [srecko.gajovic@hiim.hr](mailto:srecko.gajovic@hiim.hr))

University of Zagreb

Digital citizenship is the concept of responsible and useful use of digital technology. Digital citizens are involved in a multitude of digital interactions constituting digital society. The current pandemic caused by the COVID-19 disease has just increased the need for a better understanding and utilization of digital technologies. Epidemiological measures such as physical distancing and lockdown were introduced to prevent citizens from getting infected. However, by doing that, the face-to-face interactions belonging to the off-line sphere were restricted, and subsequently substituted by the virtual interactions in the online realm. This sudden, and somewhat forced, transition from the offline to the online space can have many possible implications and therefore need to be studied.

Our data obtained from all around the world consisting of responses from more than 1500 participants showed that the increased use of digital technology is associated with decreased psychological and emotional well-being. This result is rather unexpected because it goes against the sole concept of digital citizenship: responsible and useful use of digital technology. It seems that the borders between online and offline realm are blurred and open to positive but also negative effects on both sides. Moreover, the study does not clarify what is the cause and what a consequence in relation of the citizens' digital activity and psychological status. As the digital society will continue to develop, the nuances of the different digital activities serving as a digital health makers can be expected to be revealed and the underlying mechanisms understood.