

ecso.org/esc2022

PROGRAM SPEAKERS ABSTRACTS





Thursday, 8 September 2022

20:00-22:00 Skeptical Quiz

Friday, 9 September

9.00-10.00 Registration

10:00–12:00 The Skeptical Movement in Europe (Panel)

Chair: Claire Klingenberg

Massimo Polidoro, András Pintér, Pontus Böckman, Annika Harrison,

Amardeo Sarma, Claudia Preis, Alice Howarth

12:00-14:00 Lunch Break

14:00-16:00 Dealing with Uncertainty

Chair: Sergio Della Sala

Sergio Della Sala

The reliable uncertainty of science

Gábor Kemenesi

The strange relationship of humanity and pandemics in the 21st century

Communicating uncertainty in the science of climate change

16:00-16:30 Coffee Break

16:30-18:30 Science and the Environment

Chair: Tea Törmänen

Georg Steinhauser

The hazards of radiation

Johannes Kopton

"Natural" or sustainable?

Agriculture Environmentalism at the Crossroads

18:00-20:00 Dinner Break

20:00-21:15 Evening Keynote

Introduction: Claudia Preis

Florian Aigner

Why we can trust in science

Saturday, 10 September 2022

09:15-10:00 Keynote

Introduction: Claudia Preis

Massimo Pigliucci

Skepticism as a way of life

10:00-12:00 Skepticism in the Classroom

Chair: Pontus Böckman

Franck Ramus

What is evidence-based education?

Stephen Law

How to raise moral citizens

Philippe Longchamps

Teacher competence and the combat against misinformation

12:00-14:00 Lunch Break

14:00-16:00 Towards Rational European Drug Policies

Chair: Catherine de Jong

Anne Katrin Schlag

Top ten deadliest addictive substances in Europe – an overview

David Badcock The future

Rational European drug policies

16:00-16:30 Coffee Break

16:30-18:00 Making science-based decisions in politics

(Panel)

Chair: András Gábor Pintér Tea Törmänen, Giulia Conforto

19:30 Congress Dinner (+ € 28.00; advance booking)

Sunday, 11 September 2022

10:00-13:00 Conspiracy Theories

Chair: Amardeo Sarma

Ulrike Schiesser

Building bridges

How to talk to conspiracy believers

Péter Krekó

The structure of pseudo-scientific

revolutions

Holm Hümmler

5G mobile networks

The conspiracy myths and what

they really do

Jan-Willem van Prooiien

Belief in conspiracy theories

during a pandemic

Optional afternoon activities

14:00 "The Third Man" Tour Visit the Filming Locations of Orson Welles' Classic Movie; € 20,00; booking on-site only

14:30 The Historic medical library of Billrothhaus

> Guided tour; € 5,00; advance booking

on Fri, Sep 9; max. 25 persons

14:30 Sightseeing off the beaten

Discovering hidden treasures; € 16,00; booking on-site only on Fri, Sep 9; max. 15 persons





Florian Aigner

Florian Aigner is a physicist and science writer. He obtained a PhD in quantum physics at the Vienna University of Technology in 2010. Since then, Florian has worked as a science editor and journalist. He has written numerous articles in Austria, Germany and Switzerland, participated in numerous radio projects and TV shows and has written two books – the most recent of which focuses on the scientific method and the philosophy of science. Florian Aigner is a member of GWUP and has served as a board member of GWUP from 2012 to 2016.

Why we can trust in science

If it is science, it can be wrong. Only statements that can in principle be falsified in an experiment are valid in science – this is Karl Popper's principle of falsifiability. Therefore, "acetone boils at 56°C" is a scientific statement, but "I am spiritually entangled with intergalactic unicorns" is not. Popper's principle is important. It tells us to formulate all our scientific ideas in a precise and testable way. But it is not enough if we want to combat pseudoscience and magical thinking. The principle of falsifiability is often misunderstood as the claim that all science is only preliminary, that nobody can be sure about anything – and that is not what science is about. Science creates reliable results – by creating a structure of interconnected facts that support each other. While every scientific statement may be contested or refuted, the entirety of science remains humankind's most trustworthy construct.

David Badcock

Dr David Badcock is Chief Executive Officer at Drug Science (an independent organization with the mission to conduct and promote drug science, so that public knowledge can be based on reason and evidence).

The futureRational European drug policies

What can be done to reduce mortality and suffering, and damage to society due to the use of addictive substances? Coffeeshops: yes or no. XTC-shops? Methadone programs and heroin assisted treatment: yes or no. Homeless addicts: offer care or ignore? What is the rational answer? What does science say? Listening to the best that science has to offer and based on what we know from the effects of different drug policies and their effects in the fields of personal health, public health, and society, what would experts advise the European government to do to improve drug policies?

Pontus Böckman

Pontus Böckman is the President of the Swedish Skeptics Association (Vetenskap och Folkbildning) and a co-host of the European Skeptics Podcast (The ESP). He is also a board member of the European Council of Skeptical Organisations.

Giulia Conforto

Giulia Conforto is a low-carbon energy expert with background in Energy Economics and International Relations. She currently works as a Researcher at e-Think, a spin-off of the Energy Economics Group of TU Wien, where she delivers technical assistance, economic assessments and policy recommendations on low-carbon energy measures, as well as capacity building on tools for the energy transition. Previously, she gathered experiences in the multi-utilities Enel and Edison and at the United Nations initiative Sustainable Energy for All.

Annika Harrison

Annika Harrison is a History and English teacher and a skeptic from Germany. She is a member of the board of the German skeptics organisation GWUP and active in the Cologne chapter of 'Skeptics in the Pub'. She is also a co-host of the ESP (The European Skeptics Podcast).

In addition to this, she is a writer for the Skeptical Inquirer and does interviews with European skeptics and reports on events like SkepKon (German Skeptics conference), the ESC (European Skeptics Congress) or QED, as well as a member of GSoW (Guerilla Skepticism on Wikipedia).

Alice Howarth

Alice Howarth is a biologist, science communicator and skeptic from Liverpool, UK. She is the Vice President of The Merseyside Skeptics Society, Deputy Editor of The Skeptic Magazine UK, co-organiser of the UK's only skeptical conference, QED, and co-host of the podcast Skeptics with a K. She has been involved in UK skepticism for more than a decade and during that time has been part of wide scale activism campaigns, skeptical investigations and has published articles on skepticism for a number of publications including The Guardian.













Holm Hümmler

Holm Hümmler studied physics and business administration and did his Ph.D. work in high energy nuclear physics at CERN and Brookhaven National Laboratory. He is now self-employed as a management consultant, specializing in dealing with uncertainty in future planning, mostly in the healthcare sector. In his skeptical work, he writes on pseudophysics, conspiracy myths and communicating skepticism. He is a permanent member of the science communication livestream Ferngespräch.

5G mobile networks

The conspiracy myths and what they really do

Conspiracy myths around 5G mobile communication came to the attention of many people in 2020, when conspiracists linked 5G to the pandemic and network towers were set on fire in several European countries. However, irrational fears of wireless networks are even older than the earliest mobile phones, and they were systematically boosted by a right-wing campaign right before the advent of 5G, in 2019.

So what is 5G really? What does it change as far as radiation is concerned, compared to earlier networks? How realistic are the various dangers attributed to 5G by conspiracists? How do electromagnetic waves interact with living matter, and how realistic are the claims that mobile networks in general might be dangerous?



Catherine de Jong is an anaesthesiologist who works and lives in Amsterdam, the Netherlands. She is a board member (2009) and since 2016 secretary of Vereniging tegen de Kwakzalverij (Dutch Association Against Quackery) (kwakzalverij.nl) and participates in board meetings of Skepsis (skepsis.nl). She is Vice president of ECSO since 2019. She has written articles on health fraud with alternative treatments and advises people who seek help after they have been conned by alternative healers.

Gábor Kemenesi

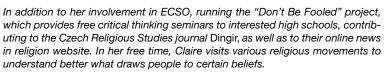
Gábor Kemenesi is a virologist and research fellow at the Virological Research Group within the Szentágothai Research Centre of the University of Pécs in Hungary. He's an expert on zoonoses, viral diseases that spread from animals to humans. He's been a member of Hungary's COVID-19 Task Force for the research of the virus and over the course of the pandemic, he became the number one goto expert in virology for Hungarian media, trying hard to educate the public, debunk myths and clear misunderstandings along the way. He published his first book in 2021 bearing the title 'Hunting for viruses – the story of SARS-CoV-2'.

The strange relationship of humanity and pandemics in the 21st century

By the 21th century, the level of globalization of humankind had reached a scale that completely reshaped the landscape of outbreaks. At the same time, many similarities can be discovered with the epidemics experienced during our history. Along these thoughts, we review the current situation and what awaits us in the near future.

Claire Klingenberg

Claire Klingenberg is the current president of the European Council of Skeptical Organisations (ECSO). She has been involved in the skeptic movement since 2013 as co-organizer of the Czech Paranormal Challenge. Since then, she has consulted on various projects, where woo & belief meets science. Claire has spoken at multiple science & skepticism conferences and events. She also organized the European Skeptics Congress 2017.









Johannes Kopton

Johannes Kopton is a systems scientist working on agricultural decision analysis at the University of Bonn. He is co-founder and chairman of the German environmental NGO Eco-Progressive Network (EcoProg). At EcoProg he works on promoting evidence-based approaches to environmental sustainability by combining science communication and agriculture environmentalism. Johannes holds an M.Sc. in Systems Engineering and Engineering Cybernetics and is active at the German Young Greens, where he advanced a pro-science stance on genetic engineering in plant breeding. After some early contacts with Rudolf Steiner's Anthroposophy, he is interested in the clairvoyant roots of organic agriculture and their influence on modern agricultural environmentalism.

"Natural" or sustainable? Agriculture Environmentalism at the Crossroads

Agriculture faces a complex challenge: more people need to be supplied with food (along with possibly feed, fuel, fiber, ...) than ever before while the environmental footprint urgently needs to be reduced in order to mitigate the climate and biodiversity crises. However, instead of measurable impacts like CO2 emissions or ecosystem toxicity, mainstream environmentalism focuses on intuitive or ideological categories like "natural" or "primal". The same can be observed on social issues like food sovereignty and gender equality, especially in development cooperation. In his talk, Johannes will explore, how modern agricultural environmentalism can emancipate itself from these ill-fated ghosts of the past.

Péter Krekó

Péter Krekó is a political scientist, social psychologist, disinformation expert. He is a senior fellow at the Washington-based CEPA think tank and a PopBack Fellow at the University of Cambridge, Earlier, he was a quest researcher at the Europe's Futures - Ideas for Action program of the Vienna-based Institute for Human Sciences (IWM), and a non-resident Associate Fellow at the Johns Hopkins University SAIS Bologna Institute of Policy Research. Peter is an associate professor with habilitation at the Department of Social Psychology at ELTE PPK. During 2016-2017. Péter worked as a Fulbright Visiting Professor in the United States at the Central Eurasian Studies Department of Indiana University. He wrote his PhD dissertation on the social psychology of conspiracy theories in 2014, and he habilitated in 2020. He has been the executive director of Political Capital since 2011. His main areas of expertise are disinformation, Russian political influence in the West, and European populism and radicalism. He was the co-chair of the EU Radicalization Prevention Network 'Prevent' until 2015. He is the owner of 'Political Capital'. He has written two books: 'Tömegparanoia', which has been published in two editions, introduces the social psychological foundations of fake news and conspiracy theories in a scientific and informative manner, and 'The Hungarian Far Right' - which he wrote together with Attila Juhász – on the politics of the Hungarian far right after the democratic transition. The latter is published by Ibiden Verlag and distributed by the Columbia University Press.

The structure of pseudo-scientific revolutions

As a result of the COVID-19 pandemic, we could observe an interesting parallel trend: the triumph of science and the triumph of pseudoscience at the same time. Scientific results (e.g. vaccines) and players (e.g. scientists) polarized societies like never before, and the attitudes toward COVID and the political and healthcare responses (e.g. lockdowns) created new social groups and identities. Motivated rejection of science and embracing pseudo-scientific conspiracy theories and practices have become rather widespread. These seemingly irrational responses (e.g., the rejection of vaccines is reducing the individual's chance for survival), are, in fact, rational, become more rational from an evolutionary psychological perspectine- In times of high anxiety and existential threats, group membership can be the guarantee of survival, and social identity is the guarantee of "psychological survival". Embracing new and emerging social identities and an increasing tribal mindset - can help the individual in anxiety management. Even if they can be extremely harmful for personal and public health alike. pseudoscientific views, conspiracy theories, and practices (with an implicit or explicit spiritual-transcendent dimension) help in making sense of the World through symbolic coping. The presentation will analyze the current "pseudoscientific revolution" that we are living in and highlight some possibilities to dilute its negative effects.







Stephen Law

Stephen Law is currently Director of the CertHE and Director of Philosophy at The Department of Continuing Education at The University of Oxford. (He was previously Reader in Philosophy and Head of Department at Heythrop College, University of London, until its closure in June 2018). He edits the philosophical journal Think, which is produced by the Royal Institute of Philosophy and published Cambridge University Press. His books include 'Believing Bullshit, How Not to Get Sucked Into an Intellectual Black Hole', and 'The Philosophy Gym: 25 Short Adventures in Thinking'. His skeptical piece 'How to Think About Weird Things' can be found at Psyche here. He has debated many Christian Apologists, often using his evil God challenge (cartoon version here: vimeo.com/186237056)

How to raise moral citizens

Stephen Law will talk about moral and religious education and the importance of developing independent critical thinkers. He will be drawing on his book 'The War for Children's Minds', about which Philip Pullman wrote: "Should be read by every teacher, every parent, and every politician." His talk will focus particularly on supposed 'culture war' between social and religious conservatives who favor more authority-based approaches in order to combat relativism, and liberals who encourage individuals to think independently and make their own judgement.



Philippe Longchamps

Philippe Longchamps is a Canadian educator from Québec who moved to Sweden in 2002. He was named Teacher of the Year in Sweden 2020 and Finalist for the Global Teacher Prize 2021. He is the co-author of two publications, 'Creativity Thinktank' (Sommer & Sommer, 2021) and 'Transformative Education' (Routledge, 2022). He works tirelessly to improve education by spreading his methods of sustainable, integrative and active teaching and learning, as well as to stress the importance of empowering teachers and the youth of the world with adequate critical thinking skills.

Teacher competence and the combat against misinformation

There is an urgent need for improved teacher training worldwide in order to better equip educators and their students with the essential critical thinking skills. This is critical to survive in an interconnected world where viral disinformation and misinformation spreads at an ever-increasing pace. By focusing on teacher competence development, we may facilitate a situation where students are immunized against gullibility, logical fallacies and cognitive biases, and armed with not only significant and necessary fact-checking skills, but also bestowed with a skeptic, yet not cynic, frame of mind. With an evidence-based mindset our students will hopefully be ready to better deal with the very real and urgent dilemmas humanity is currently facing.

András Gábor Pintér

András has been involved in the Hungarian skeptic movement since 1997 and was among those who received James Randi's Skeptical Award as a high school student at Természet Világa's student essay competition in 1999. He is among the original members of the Hungarian Skeptic Society (founded in 2006), and its president since 2020.

In 2014, he joined the international group of Wikipedia editors called "Guerrilla Skepticism on Wikipedia", led by the American skeptic Susan Gerbic, aiming to improve the online encyclopedia in support of both its own guidelines and the scientific integrity of the contents of the articles.

András was also the initiator and is a co-producer of the weekly show the European Skeptics Podcast (The ESP) that he co-hosts with Annika Harrison (Germany) and Pontus Böckman (Sweden). The podcast aims to provide a wider international reach of news, issues and local actions in different European countries.



Massimo Polidoro

Massimo Polidoro is a writer and an internationally recognized "investigator of mysteries" and began his career as James Randi's apprentice. Massimo is a co-founder of the Italian skeptics group CICAP. He is a TV personality in Italy, a Research fellow for CSI, and a columnist for its magazine, The Skeptical Inquirer, since 2002. Massimo has taught Scientific Method and Anomalistic Psychology at the University of Milan. He now teaches Science Communication to Padua's University PhD students and Science Storytelling at the Polytechnic University of Milan. The number of his ever-growing social media followers has reached nearly 500.000 subscribers on various platforms. Massimo is the author of almost 60 books. In his latest, 'Brilliant', he shares 13 lessons in critical thinking and the art of living that he learned from Randi.



Claudia Preis

Claudia Preis studied European Ethnology, German Medieval Studies and Finno-Ugric Studies at the LMU Munich and has a PhD in European Ethnology. Held positions as scientific editor, independent cultural scientist, project manager and IT specialist. Today, she is Senior Vendor Manager at Allianz Global Corporate & Specialty. She has been a member of the GWUP since 2002 and is its current Vice-Chair.







Jan-Willem van Prooijen

Jan-Willem van Prooijen currently works as Associate Professor of Social Psychology at VU Amsterdam, Senior Researcher at the Netherlands Institute for the Study of Crime and Law Enforcement (NSCR), and Endowed Professor of Radicalization, Extremism, and Conspiracy Thinking at Maastricht University. His main research interests are conspiracy theories, populism, extremism, and unethical behavior.

Belief in conspiracy theories during a pandemic

The Covid-19 pandemic has inspired many conspiracy theories, such as that the Sars-Cov-2 virus was developed by humans in the lab, that Covid-19 is caused by the radiation of 5G telecommunication networks, that governments have planned the pandemic to restrict people's freedom, and so on. The current presentation will address two questions. First, are Covid-19 conspiracy theories harmful or harmless? And second, why did the pandemic offer such fertile soil for conspiracy theories? As to the first question, results of various longitudinal studies indicate that conspiracy beliefs are not only correlated with a decrease in constructive health beliefs and behaviors (e.g., social distancing), but also predict a progressive decrease in constructive health beliefs and behaviors over time. Also, people use conspiracy theories to justify their anti-vaccination sentiments. As to the second question, the distress that many citizens experience during societal crisis situations shapes basic cognitive operations, hostile social perceptions, and extreme ideological beliefs, which all feed into conspiracy thinking. Apparently, conspiracy beliefs are a natural human response to societal crisis situations such as a pandemic, and such beliefs undermine public health.



Elisa Palazzi

Elisa Palazzi is a professor of climate science at the Department of Physics, University of Turin, and is affiliated with the Institute of Atmospheric Sciences and Climate of the Italian National Research Council. She works on the study of the climate system and Earth-System processes, with a focus on the current and expected impacts of rising temperatures in mountain regions. She has experience in science dissemination through public speeches at conferences, festival, schools and participation in TV and radio programs. She wrote two books and was author and presenter of a climate Podcast. She is CICAP's emeritus member.

Communicating uncertainty in the science of climate change

Carbon dioxide and other greenhouse gases released into the atmosphere have warmed and altered the Earth's climate. The scientific community agrees in attributing most of the warming trend recorded in the last decades to emissions from human activities since naturally produced greenhouse gases have a different fingerprint from the man-made ones. Moreover, larger and more rapid changes are expected in the coming decades in the absence of immediate and effective mitigation actions.

The above phrases define strong and well established statements. But like any science, also climate science has uncertainties, especially when considering future projections from climate models – which are by their very nature approximate representations of the climate system. In general terms, uncertainties in constructing and applying climate models are classified into initial conditions, model structure (literally how we build a model), and boundary conditions or scenario uncertainty. The latter, in particular, means that future greenhouse gas emissions, whose behavior depends on unpredictable socio-economic and technological factors, are uncertain.

Since removing model uncertainty is not possible, understanding and quantifying it becomes essential because it is related to our overall ability to propose how human activities can be modified to mitigate our effects on climate and how we can adapt to unavoidable changes.

From a practical point of view, the problem quantifying uncertainty in climate model projections is addressed using the concept of model ensemble: since one single model has its own characteristics and can reproduce better or worse than another a certain variable or process, then using a model ensemble can provide diverse information and higher confidence will be placed on results that are common to an ensemble. An ensemble provides a framework for probabilistic analyses of future climate (e.g. the most or least probable future temperature increase for a given emission scenario) and uncertainties in climate model projections are often quantified as the spread of the model ensemble.

Also, the IPCC offers a robust framework to deal with uncertainty using a specific and well calibrated language to communicate probabilistic information while quantifying uncertainty.

Communicating uncertainties also beyond the science community and suggesting how to best use them in decision making are important steps to meet the challenges posed by the climate crisis.





Massimo Pigliucci

Massimo Pigliucci is an author, blogger, podcaster, as well as the K.D. Irani Professor of Philosophy at the City College of New York. His academic work is in evolutionary biology, philosophy of science, the nature of pseudoscience, and practical philosophy. His books include 'How to Be a Stoic: Using Ancient Philosophy to Live a Modern Life' (Basic Books) and 'Nonsense on Stilts: How to Tell Science from Bunk' (University of Chicago Press). His forthcoming book is 'The Quest for Character: What the Story of Socrates and Alcibiades Teaches Us about Our Search for Good Leaders' (Basic Books). More by Massimo at philosophyasawayoflife.blog.

Skepticism as a way of life

The word skeptic literally means inquirer. And to inquire into things is good, right? But skepticism has a complex and much misunderstood history, from the Pyrrhonists who abstained from holding any opinion to modern scientific skeptics focused on criticizing pseudoscience.

In this talk I will argue that skepticism can and should be a way of life. And there is a lot more to life than just debunking nonsense.



Franck Ramus is a CNRS senior research scientist at the Laboratoire de Sciences Cognitives et Psycholinguistique, Department of Cognitive Studies at the Ecole Normale Supérieure in Paris, where he heads the Cognitive development and pathology team. His research bears on cognitive development and academic achievement in children, their disorders (developmental dyslexia, specific language impairment, autism), their cognitive and neural bases and their genetic and environmental determinants. He is also a member of the Scientific council of the French ministry of education.

What is evidence-based education?

Franck Ramus will talk about what evidence-based education is and is not, why we need scientific evidence in education, and give a brief overview of the many sources of evidence, which are too often ignored by teachers and educational policy makers alike.

Sergio Della Sala

Sergio Della Sala, MD, MSc, PhD, FRA, FBPsS, FRSE is Professor of Human Cognitive Neuroscience at the University of Edinburgh, UK. He has studied and worked in Milan (Italy), Berkeley (US), Cambridge (UK), Aberdeen (UK) and Perth (AU). His field of research is cognitive neuropsychology, in particular memory and amnesia. He authored more than 600 experimental papers in peer-reviewed journals and several books both for a scientific audience and for lay people. He is Fellow of the Royal Society (Edinburgh), Editor-in-chief of neuroscience journal Cortex and the recipient of the first Tam Dalyell prize for Excellence in Engaging the Public with Science and. He is proud to be the current president of CICAP, the Italian Skeptic association.



The reliable uncertainty of science

Science does not offer certainties but reliable instruments to minimize, understand and manage uncertainty. Science is a high expression of democracy. Science describes, does not prescribes. Science is by its very nature counterintuitive. Science is one of the knowledge instruments that we have available, not better than others, one among others; however, it has its own proper methods, which are sometimes hard to grasp. The knowledge that derives from such methods merits to be disseminated, discussed, shared. Yet, this needs dedication, and it is effortful.

We do need external evidence on which to base our communal and societal decisions. But this evidence is elusive, we all believe we know what we are talking about, yet someone's hard evidence differs from somebody else's.

Often, scientists and medics themselves, offering their opinions as if they were data, are responsible for the spreading of scientific fake news. Researchers use unreliable sources to publish their studies, including predatory outlets, which should instead be ostracised. Skeptic societies as well are not exempt from blunters. We need to raise the standard of our self-criticism capacity. We need to be alert on what we say and write, and how we do so, rather than limiting our action to reprimand others. In sum, we need to contribute to increase the level of ethics when we do science or communicate it. We should insist that science and its dissemination are guided by individual and public morality, and be immune from political influence and conflicts of interest.





Amardeo Sarma

Amardeo Sarma is an electrical engineer and founder and current Chair of the German Skeptics organisation GWUP e. V. He was previously Chairman and currently a Board Member of ECSO. Amardeo is also Fellow and Executive Member of the Committee for Skeptical Inquiry and recipient of the CSI (then CSICOP) Distinguished Skeptic Award in 1998. Amardeo Sarma is General Manager at NEC Laboratories Europe GmbH with the current main technical focus of IT security. He has written and spoken about the Shroud of Turin, dowsing, Climate Change and the skeptical movement.



Ulrike Schiesser

Ulrike Schiesser is a psychologist and psychotherapist working at the Federal Office for Cult Affaires (Bundesstelle für Sektenfragen) an Austrian state-run office who who deals with cults and various problematic developments in the field of esotericism, personality cults, authoritarian and monopolizing group structures and conspiracy theories. She does counseling of family members of conspiracy affiliated persons and public stakeholders and accompanies people through rethinking and change processes.

Building bridges

How to talk to conspiracy believers

In the last two years conspiracy theories seemed to have spread like a different kind of virus even to people, we would never have expected to be susceptible. Discussions have been unavoidable and ugly, we lost friends, saw family members drifting away and experienced an increasing radicalization.

How to respond to conspiracy narratives? Why do people believe them in the first place? Are some more susceptible to it than others? What are good conversation strategies? Should you break off contact? What if it involves close relatives? How can we connect despite different world views?

Anne Katrin Schlag

Dr Anne Katrin Schlag is a Chartered Psychologist and Head of Research at Drug Science. She completed her PhD in Psychology at the London School of Economics and Political Science, before working as Lecturer at King's College London where she developed her expertise across the spectrum of science and policy making, risk perception, risk management and risk communication. She holds Honorary Fellowships at both Imperial College London and King's College London. Dr Schlag has a keen interest in the social, ethical and moral dimensions of national and international drug policies, and related regulatory and policy-making challenges.



Within her role at Drug Science, she leads the research for the Medical Cannabis Working Group, and the Medical Psychedelics Working Group.

Top ten deadliest addictive substances in Europe An overview

Drug Science (drugscience.org.uk) is an independent, science-led charity, bringing together leading drugs experts from a wide range of specialisms to carry out ground-breaking research into drug harms and effects. By telling the truth about drugs, Drug Science engages the public, media, policy makers and academics, equipping them with the knowledge and resources to enact positive change.





Georg Steinhauser

Prof. Dr. Georg Steinhauser is alumnus of University of Vienna (MSc in chemistry 2003) and Vienna University of Technology (PhD in radiochemistry 2005). After ten years of research using the Atominstitut's TRIGA Mk II reactor, he was hired in 2013 by Colorado State University's Department of Environmental and Radiological Health Sciences for a tenure track faculty position (Assistant Professor in radiochemistry). Since 2013, he is member of the Radiation Protection Advisory Board of the Austrian Federal Minstry of Health (Strahlenschutzbeirat). In October 2015, he was hired by Leibniz University Hannover (Institute of Radioecology and Radiation Protection) as a Professor for physical radioecology. His main research focus is environmental radioactivity in Chernobyl and Fukushima as well as environmental nuclear forensics. Steinhauser has (co-)authored more than 90 publications. He is a member of the GDCh (board member of AK ARH), GÖCH, DPG, ASER, and Executive Officer of the ANS Biology and Medicine Division. Since 2016, he is editor of the Springer journal Environmental Science and Pollution Research.

The hazards of radiation

Hardly any other hazard in our lives is perceived by the public with more emotions and concern like ionizing radiation. I will try to put this picture into relation by comparing hazards and radiological events. We will learn that events the public was most afraid of turned out not to be the biggest contributor to the radiological risk.





Tea Törmänen is the Executive Director for a recently established European environmental organisation called RePlanet. She holds a MSc in Animal Behaviour and she's active in the Green party of Finland, especially in the subsection of the Greens called the Finnish Greens for Science and Technology (Viite), which aims to advance political decision making that is based on scientific knowledge. Viite combines a green value system with the methods of scientific research. Tea is the chair of the local branch of Viite and represents the greens in the inspection board of the city of Joensuu in Finland.

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