

**ENRIO 2021 CONGRESS ON
RESEARCH INTEGRITY PRACTICE**

**BOOK OF
ABSTRACTS**



27-29th September 2021

Organisers: Finnish National Board on Research Integrity TENK and the European Network of Research Integrity Offices (ENRIO) in collaboration with Aalto University

Congress programme

Workshop Day & Virtual Posters Display

27th September 2021

Day 1: Tuesday, 28th September 2021

Time (CEST)	Stream 1	Stream 2
9:45-11:00 CEST	Session 1. Opening session at the ENRIO studio Chair: ENRIO host Satu Lipponen	
	Welcome to the congress! Greetings from the organisers: Riitta Keiski , Chair of Finnish National Board on Research Integrity TENK, Finland Sanna-Kaisa Spoof , President of the European Network of Research Integrity Offices ENRIO, Finland Ilkka Niemelä , President of Aalto University, Finland Daniele Fanelli , London School of Economics and Political Science, UK: <i>What new challenges lie ahead for research integrity officers?</i>	

<p>11:00-12:00 CEST</p>	<p>Session 2. Institutional responsibility and research funding Chair: Krista Varantola</p>	
	<p>Lex Bouter, Vrije Universiteit Amsterdam, the Netherlands. <i>What research institutions can do to foster research integrity</i></p> <p>Isidoros Karatzas, Research Ethics and Integrity Sector, European Commission. <i>Research integrity priorities in Horizon Europe: preparing for the new challenges</i></p>	
<p>12:00- 13:00 CEST</p>	<p style="text-align: center;">Lunch break</p>	
<p>13:00- 14:00 CEST</p>	<p>Session 3. Authorship issues in research publishing Chair: Hjördis Czesnick</p>	<p>Presentations 1. European perspectives of research misconduct Chair: Loreta Tauginienė</p>
	<p>Pekka Louhiala, University of Tampere, Finland. <i>Who is an author?</i></p> <p>Elizabeth Moylan, Research Integrity and Publishing Ethics at Wiley, UK. <i>Why does authorship matter?</i></p>	<p>Tamarinde Haven*, Joeri Tjink, Brian Martinson, Lex Bouter, Frans Oort, Amsterdam, NL and Minnesota, US. <i>Explaining variance in perceived research misbehaviour: Results from a survey among academic researchers in Amsterdam</i></p> <p>Katharina Miller, Partner & Gender Expert, Path2Integrity. <i>Overview of sanctions for research misconduct within European Union: a legal perspective</i></p> <p>Sandra Bendiscioli, EMBO, Germany. <i>Options for a more consistent governance of research integrity in Europe</i></p>

14:00- 15:00 CEST	Presentations 2. National research integrity systems: France, Estonia and Ukraine Chair: Urša Opara Krašovec	Presentations 3. Developing best practices for a healthy research culture Chair: Siret Rutiku
	<p>Caroline Strube*, Joëlle Alnot, Romain Pierronnet, Catherine Tessier and Nathalie Theret, OFIS, ONERA, RESINT and RNCD, France. <i>Research integrity and ethics training in France: a national overview</i></p> <p>Margit Sutrop*, Marten Juurik, Kristi Lõuk, Mari-Liisa Parder and Katrin Velbaum, University of Tartu, Estonia. <i>How to engage the whole research community in the writing of the code of research integrity: Estonian experience</i></p> <p>Ülle Must*, Education and Youth Board, Estonia, and Valentyna Andrushchenko, Centre for Science-Technical Information and Innovation Progress Facilitation in Ukraine, Ukraine. <i>Unpacking the Ukrainian paradox</i></p>	<p>Giorgia Adamo* and Cinzia Caporale, National Research Council, Italy. <i>Preventing and managing research misconduct: the experience of the CNR Research Ethics and Integrity Committee</i></p> <p>Tobias Grimm, German Research Foundation (DFG), Germany. <i>Good practice publishing as part of research integrity practice</i></p> <p>Andreas Görlich, German Research Foundation (DFG), Germany. <i>What makes a good CV? Challenges and responsibilities for a research funding organization</i></p>
15:00-15:15 CEST	Coffee break & virtual posters	
15:15-15:30 CEST	ENRIO studio takes a look at research integrity in technology and arts: Interview with Ossi Naukkarinen , Vice President of Research, Aalto University	
15:30-16:30 CEST	Session 4. EU data protection laws and research integrity Chair: Annette Birkeland	Presentations 4. Conflicting interests, multiple actors: Challenges in research misconduct investigations
	David Erdos , University of Cambridge, UK. <i>Academic expression, knowledge facilitation and the General Data Protection Regulation</i>	Marten Juurik, University of Tartu, Estonia. <i>Conflict of interests and conflict of loyalties in the context of handling cases of misconduct: the example of implementing the Estonian Code of Conduct for Research Integrity</i>

	<p>Maria Rehbinder, Aalto University, Finland. <i>Artistic expression, artistic research and informing the data subject</i></p> <p>Helena Eronen, University of Eastern Finland, Finland. <i>Data protection issues at the UEF Committee on Research Ethics</i></p>	<p>Jennifer Van Aswegen, Social Policy Ireland, Ireland. <i>Authorship accountability and research governance: Public policy and research integrity in a time of crisis - A case study from Ireland</i></p> <p>Vidar Enebakk, National Committee for Research Ethics in the Social Sciences and the Humanities, Norway. <i>How can co-production in research challenge the integrity of research?</i></p>
16:30-17:30 CEST	<p>Session 5. Research integrity training track (1) Chair: Nicole Föger</p>	
	<p>Tricia Bertram Gallant, Academic Integrity Office, University of California, USA. <i>Cultivating a barrel of good apples: Research integrity cultures & training</i></p> <p>Michael Gommel and Gerlinde Sponholz, Team Scientific Integrity, Germany. <i>Research integrity trainings: Successes and challenges</i></p> <p>Mervi Heikkinen et al, University of Oulu, Finland. <i>Research ethics working group at a university - multidisciplinary community to facilitate responsible conduct of research</i></p>	
17:30-17:45 CEST	<p>ENRIO studio</p>	

Day 2: Wednesday, 29th September 2021

9:30-10:30 CEST	<p>Session 6. Whistleblower protection Chair: ENRIO host</p>	
	<p>Sanna-Kaisa Spoof, General Secretary of TENK and President of ENRIO, Finland. <i>Who are the whistleblowers who report research misconduct and do they all need protection?</i></p> <p>Nicole Föger, Austrian Agency for Research Integrity, Austria. <i>Eight months digital whistleblower platform: lessons learned</i></p> <p>Panel discussion Hjördis Czesnick, German Research Ombudsman Office and vice chair of ENRIO, Germany Pablo Fernandez, UKRIO and vice president of ENRIO, UK Nicole Föger, Austrian Agency for Research Integrity, Austria Sanna-Kaisa Spoof, General Secretary of TENK and President of ENRIO, Finland</p>	
10:30-11:30 CEST	<p>Session 7. Open science and research integrity Chair: Maura Hiney</p>	
	<p>Henriikka Mustajoki, National Open Science in Finland, Federation Finnish of Learned Societies, Finland. <i>Open science – a key to responsible research and research integrity</i></p> <p>Olivier Le Gall, French advisory board for research integrity (OFIS), France. <i>Bibliodiversity, open science and research integrity</i></p>	

11:30-12:30 CEST	Lunch break	
12:30-13:30 CEST	Session 8. Ethical Assessment in Social Sciences and Humanities: Bridging Gaps with Additional Guidelines Chair: Erika Löfström	Presentations 5. Setting the foundations for a healthy research culture Chair: Pablo Fernandez
	<p>Rauna Kuokkanen, University of Lapland, Finland. <i>Relational accountability of indigenous and Sámi research ethics</i></p> <p>Elisabeth Staksrud, University of Oslo and the National Committee for Research Ethics in the Social Sciences and the Humanities, Norway. <i>Why do we need specific ethical guidelines for Internet research?</i></p> <p>Lene Os Johannessen and Nils Anfinset, Norwegian National Research Ethics Committees, Norway. <i>Research on human remains – research ethics, integrity and practice</i></p>	<p>Fenneke Blom, Dorien van der Schot and Lex Bouter, the Netherlands. <i>The first five years of the Netherlands Research Integrity Network (NRIN) – lessons learnt and future perspectives</i></p> <p>Rea Roje* , Vicko Tomić, Ivan Buljan and Ana Marušić, on behalf of the SOPs4RI consortium. <i>Development and implementation of research integrity guidance documents: explorative interviews with research integrity experts</i></p> <p>Mervi Heikkinen, University of Oulu, Finland. <i>What if intersectional gender-responsibility was a focus for research integrity in European universities?</i></p>
13:30-14:30 CEST	Session 9. Research integrity training track (2) Chair: Nicole Föger	Presentations 6. Research ethics in the 2020s: Citizen science, big data and AI Chair: Edwin Constable
	<p>Daniel Pizzolato* and Kris Dierickx, KU Leuven, Belgium. <i>Mentors as inspirational role models and on their role in promoting a responsible research climate</i></p> <p>Julia Priess-Buchheit and Rebecca Fischer, Hochschule für angewandte Wissenschaften Coburg, Germany. <i>Experiences of Path2Integrity to Foster Research Integrity in Europe</i></p> <p>Sonja Bjelobaba and Stefan Eriksson, Uppsala University, Sweden. <i>Courses in Research Ethics at Uppsala University</i></p>	<p>Per Sandin, Uppsala University, Sweden. <i>Research Integrity and Research Ethics in Citizen Science</i></p> <p>Helene Ingierd*, Sean Dexter Denham, Trine B. Haugen, Ivar Kolstad, Rune Nydal, Hannah Monsrud Sandvik and Ingrid S. Torp, Norway. <i>Big Data-research: Big Opportunities and Big Challenges</i></p> <p>Øyvind Mikkelsen*, Lene Os Johannessen, and Helene Ingierd, Norway. <i>Reflections on Research Ethics in Artificial Intelligence: Input from the National Deliberation Report Norway</i></p>

14:30-15:00 CEST	Coffee break	
15:00-16:00 CEST	Session 10. From the constellation of EU funded projects Chair: Panagiotis Kavouras	Presentations 7. Practical aspects of research integrity work Chair: Michael Gommel
	<p>Dr. Agnieszka Dwojak-Matras* and Dr. Katarzyna Kalinowska, Educational Research Institute IBE, Poland. <i>Doing positive integrity: How to promote good science by involving role-models? The Path2Integrity Experience</i></p> <p>Natalie Evans*, Giulia Inguaggiato, Marc van Hoof, Fenneke Blom and Guy Widdershoven, Amsterdam UMC, the Netherlands. <i>Building an online open source toolbox for research integrity education and training</i></p> <p>Joeri Tijdink on behalf of the SOPs4RI consortium. <i>Recommendations to institutions and funders on dealing with breaches of research integrity – Insights from the SOPs4RI project (H2020)</i></p> <p>Tom Lindemann, European Network of Research Ethics Committees / EUREC Office. <i>The Research Integrity Education Cluster in the EU's Science with and for Society Programme: Upgrading Educational Practices</i></p>	<p>Katharina Beier*, University of Göttingen, and Helga Nolte, University of Hamburg, Germany. <i>Conditions and challenges of ombuds work: Insights from an explorative survey amongst ombudspersons at German research performing institutions</i></p> <p>Mari-Liisa Parder, University of Tartu, Estonia. <i>Using dilemma game for research integrity. The case of Estonian Code of Conduct for Research Integrity</i></p> <p>Sirpa Aalto*, Egle Gedrimiene, Elina Hyrkäs, Miki Kallio and Jaana O. Liimatainen, University of Oulu, Finland. <i>Promoting Open Science in the Academic Community - How to Change the Attitudes?</i></p>
16:00-17:00 CEST	Session 11. Insights into research integrity in Europe Chair: Riitta Keiski	
	Ulrike Beisiegel , President Emerita of the University of Göttingen, Germany. <i>Research integrity as a long-lasting challenge for the scientific system - 20 years' experience in the German system</i>	

	Krista Varantola , Chancellor Emerita, University of Tampere, Finland. <i>Responsible research – who is responsible? Reflections on current developments</i>	
17:00-17:15 CEST	ENRIO studio: Closing words	

*: Presenter

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*: Presenters



Part 1

ABSTRACTS BY INVITED SPEAKERS



Ulrike Beisiegel, Professor Emerita, former President of the University of Göttingen, former Chair of the German Ombudsman Board, Germany

Ulrike Beisiegel received a PhD in Biochemistry (1979) and carried out post-doctoral research in Dallas/Texas. Between 1996-2010 she was Professor of Biochemistry in Hamburg and President of the University of Göttingen from 2011 to 2019.

2005-2010 chairwoman of the DFG-Ombudsman; 2006-2012 member of the Advisory Board to the German Government. Honorary doctorates: 1996 University of Umea (Sweden); 2015 University of Edinburgh (UK).

Research integrity as a long-lasting challenge for the scientific system – 20 years' experience in the German system

Session: Wednesday 29th September 2021, 16:00-17:00 CEST

The first Recommendation for Safeguarding Good Scientific Practice in Germany appeared in 1997. The process of implementation was accompanied by institutional and individual denial. In 2013 the recommendation was revised on the basis of 15 years' experience. The available documentation of processed cases indicated, that we still only see a small part of the problem.

Until today, more and more institutions have implemented procedures for safeguarding of good scientific practice, however, the idea has not yet fully permeated the scientific institutions. Therefore we still need to increase the visibility, use prevention measures and train scientist to reach comprehensive research integrity.

Lex Bouter, Professor of Methodology and Integrity, Vrije Universiteit Amsterdam, the Netherlands

Lex Bouter has a tenured chair in Methodology and Integrity at the Vrije Universiteit Amsterdam. He was professor of Epidemiology since 1992, served his university as rector between 2006 and 2013, and is the founding chair of the World Conferences on Research Integrity Foundation. For more information see [Personal page](#).

What research institutions can do to foster research integrity

Session: Tuesday, 28 September 2021, 11:00-12:00 CEST

Traditionally research integrity focused on detecting and sanctioning research misconduct. But recently it has become clear that promoting responsible research practices and preventing questionable research practices, like p-hacking, HARKing (Hypothesizing After the Results are Known) and selective reporting, harm the validity and the trustworthiness of research much more. Especially the ongoing replication crisis has shown that more transparency and the adoption of open science practices are essential. Only when the important stakeholders (researchers, research institutes, funding agencies, and scholarly journals) collaborate closely meaningful progress can be made. The lecture will focus on the core role research institutions have.

Dr David Erdos, Faculty of Law and Trinity Hall, University of Cambridge, UK

Academic expression, knowledge facilitation and the general data protection regulation

Session: Tuesday, 28 September 2021, 15:30-16:30 CEST

This presentation provides an overview of the GDPR and highlights how its wide scope and myriad duties can pose challenges and even threats to academic work. These issues are partially dealt with by the limited and safeguarded “knowledge facilitation” regime for archiving in the public interest, scientific and historical research and statistics (Article 89). However, many issues remain live for humanities and social science work which are especially acute as regards critical inquiries and covert methodologies undertaken in the public interest. Reconciliation is in principle achieved by the inclusion of “academic” expression alongside journalism within the special expression regime (Article 85(2)). However, challenges remain including a lack of sufficient clarity as regards the priority of Article 85(2) over Article 89 and the adoption of principled and balanced understandings by relevant actors.

Helena Eronen, Data Protection Officer, University of Eastern Finland, Finland

Data protection issues at the UEF Committee on Research Ethics

Session: Tuesday, 28 September 2021, 15:30-16:30 CEST

Dr. Daniele Fanelli, Department of Methodology, London School of Economics and Political Science, Committee on Research Integrity for the Luxembourg Agency for Research Integrity (LARI). Research Ethics and Integrity Committee in Italy’s National Research Council (CNR), UK

What new challenges lie ahead for research integrity officers?

Session: Tuesday, 28 September 2021, 9:45-11:00 CEST

Nicole Föger, Managing Director of the Austrian Agency for Research Integrity, Austria

Nicole Foeger is Managing Director of the Austrian Agency for Research Integrity and involved in all RI activities on the national level. From 2012 until 2018 she was the elected Chair of ENRIO. Since 2018 she is member of the Governing Board of the World Conferences of Research Integrity Foundation.

Eight months digital whistleblower platform: lessons learned

Session: Wednesday, 29 September 2021, 9:30-10:30 CEST

The Austrian Agency for Research Integrity (OeAWI) offers a whistleblower platform on its website since end of the last year. The platform offers a secure way of communication with the agency. The communication via a virtual and encrypted mailbox allows whistleblowers to stay anonymous if they wish. Researchers and member organisations of the OeAWI can get advice in all matters of research integrity as well as submit allegations of research misconduct and breaches of good scientific practice to the office. The agency received over 40 inquiries during these 8 months. I will present lessons learned.

Olivier Le Gall, Chair of the French Advisory Board for research integrity (board of OFIS), France

Bibliodiversity, open science and research integrity

Session: Wednesday 29th September 2021, 10:30-11:30 CEST

Tricia Bertram Gallant, Director, Academic Integrity Office, University of California, USA

Tricia Bertram Gallant, Ph.D., is an internationally known expert on academic integrity. She has served over 16 years in various leadership positions for the International Center for Academic Integrity (ICAI), and has managed the Academic Integrity Office at the University of California, San Diego since 2006. Tricia is an active writer on the topic as well, perhaps best known for [Academic Integrity in the Twenty-First Century: A Teaching and Learning Imperative](#) (Wiley's Jossey-Bass, 2008), [Cheating in School: What We Know and What We Can Do](#) (Wiley-Blackwell, 2009), [Creating the Ethical Academy: A Systems Approach to Understanding Misconduct & Empowering Change in Higher Education](#) (Routledge, 2011), and as section editor and author for the [Handbook of Academic Integrity](#) (Springer, 2015). Tricia has worked with faculty, staff and students on academic integrity at institutions around the world, including in Australia, Canada, Chile, Egypt, Jamaica, Mexico, Montenegro, Singapore, the UK, Ukraine, and the United States.

Cultivating a barrel of good apples: Research integrity cultures & training

Session: Tuesday, 28 September 2021, 16:30-17:30 CEST

Universities are quick to blame the “one bad apple” whose research misconduct may “spoil the bunch”. However, research on organizational misconduct suggests that it may be the environment, or the situation, that spoiled that apple in the first place. Accordingly, this keynote highlights the environmental characteristics that cultivate cultures of research integrity (rather than misconduct) and discusses the training that should be implemented to prevent misconduct and repair harm after misconduct occurs.

Isidoros Karatzas, Research Ethics and Integrity Sector, European Commission (EC)

Research integrity priorities in Horizon Europe: preparing for the new challenges

Session: Tuesday, 28 September 2021, 11:00-12:00 CEST

Rauna Kuokkanen, Research Professor, Arctic Indigenous Studies, University of Lapland, Finland

Rauna Kuokkanen is Research Professor of Arctic Indigenous Studies at the University of Lapland, Adjunct Professor of Indigenous Studies and Political Science at the University of Toronto and a 2021-2022 Fulbright Arctic Initiative Fellow. Her most recent book is the triple prize-winning *Restructuring Relations: Indigenous Self-Determination, Governance and Gender* (Oxford UP, 2019).

Relational accountability of indigenous and Sámi research ethics

Session: Wednesday 29th September 2021, 12:30-13:30 CEST

Indigenous research ethics guidelines have gained ground in the past three decades. From the community-level principles of respectful research relations to national guidelines such as AIATSIS Code of Ethics for Aboriginal and Torres Strait Islander Research in Australia, ethical research from an Indigenous perspective involves the theory and practice of relational accountability. In my talk, I briefly explain this concept and consider how it informs Sámi research ethics guidelines in Scandinavia.

Pekka Louhiala, Professor of Philosophy of Medicine and Medical Ethics, University of Tampere, Finland

Pekka Louhiala has one foot in medicine and one in philosophy. He has taught at the University of Helsinki for 20 years and works currently at the University of Tampere in a fixed term position as Professor of Philosophy of Medicine and medical ethics. He has published on various topics in the area, most recently on the philosophy of placebo effects.

Who is an author?

Session: Tuesday, 28 September 2021, 13:00-14:00 CEST

Authorship of scientific publications is defined in various guidelines and recommendations. Yet, disputes of authorship are perhaps the most common problem related to research integrity and ethics. In my presentation I will discuss various aspects related to authorship and present also some real-world cases for joint discussion with the audience.

Elizabeth Moylan, Publisher, Research Integrity and Publishing Ethics at Wiley, UK

Why does authorship matter?

Session: Tuesday, 28 September 2021, 13:00-14:00 CEST

Henriikka Mustajoki, Head of Development, National Open Science in Finland, Federation Finnish of Learned Societies, Finland

Open science – a key to responsible research and research integrity

Session: Wednesday 29th September 2021, 10:30-11:30 CEST

Maria Rehbinder, Aalto University, Finland

Artistic expression, artistic research and informing the data subject

Session: Tuesday, 28 September 2021, 15:30-16:30 CEST

Sanna-Kaisa Spoof, PhD, Secretary General, Finnish National Board on Research Integrity TENK; President, European Network of Research Integrity Offices ENRIO

Who are the whistleblowers who report research misconduct, and do they all need protection?

Session: Wednesday, 29 September 2021, 9:30-10:30 CEST

All suspicions of research misconduct should be studied for the sake of the quality and credibility of science. This is also in the interests of those of researchers facing allegations and their employers. The violations of the responsible conduct of research can be identified only through an investigative process created for the purpose. In many countries, notification of allegations of research misconduct are possible only if the notifier's own name is used. To remain anonymous, a notifier might bypass the official process and go straight to the media.

The European Code of Conduct for Research Integrity by ALLEA recommends that the parties to an investigation into research misconduct must be protected. Whistleblower protection is mainly about not inflicting negative repercussions on the career of a researcher who has made an official notification of their suspicions.

Who are the so-called whistleblowers who report research misconduct, and do they all need to be protected? Consequently, in Finland, the national research integrity office TENK has extensive and up-to-date information on whistleblowers. Confidential information from the ENRIO network confirm that the situation is the same in other European countries as well.

Krista Varantola, Chancellor Emerita, University of Tampere, Finland

Responsible research – who is responsible? Reflections on current developments

Session: Wednesday 29th September 2021, 16:00-17:00 CEST

What do we mean when we talk about responsible research culture and research integrity? Who is responsible, who is not, and what are they responsible for? Why do we need guidelines on research integrity, does not good research behaviour come automatically to a competent researcher?

After all, isn't bad or wrong research behaviour actually a contradiction in terms? If researchers know that their research is based on fraud or false claims, can the results be called research? Science and scholarship are meant to advance our knowledge and understanding of the world and be based on the honest endeavours of our former and current colleagues.

In other words, if any research is deliberately misleading, it does not advance our understanding of anything, but causes only harm and waste of time and money for those who trusted it and based their own ideas on it.

On the other hand, why would any serious researcher want to invest in breaking the internalized rules of what is proper conduct of research, produce fake news and risk losing the respect of colleagues?

I will be idealistic in my talk, a traditionalist who still believes in the freedom of research, and reflect on what promotes and what prevents good research behaviour. I will comment on the roles of different actors – both internal and external - in the current research climate and also discuss the role of guidelines on research integrity as essential instruments for promoting a healthy research culture.



Part 2

**PRESENTATION
ABSTRACTS**

Promoting open science in the academic community - How to change the attitudes?

Sirpa Aalto*, Egle Gedrimiene, Elina Hyrkäs, Miki Kallio, Jaana O. Liimatainen, University of Oulu, Finland

Session: Wednesday, 29 September 2021, 15:00-16:00 CEST

According to the [report](#) on open science and research in Finland in 2019, researchers still need substantial support on issues related to open science. Promotion of open science is in many ways challenging: for instance, it may create conflicts of interest in the academic community. There is still much uncertainty among researchers what it means to own and open your data, or how to deal with authorship. Also, unclear interpretation of European data protection law can create problems in conducting research. Researchers need education in matters concerning data management and open science, which in turn contribute to the promotion of openness in universities.

Our presentation will concentrate on how the team of Data Specialists at the University of Oulu is promoting and supporting the change of research culture. University of Oulu is a multi-disciplinary university, which means that the Data Specialists represent different fields of science. Some problems are specific to a certain field, but some are common for several fields of science. We will also discuss what kind of improvements our practices need in order to respond to the demands of researchers, and what are the incentives for researchers to change their attitudes and habits towards open science.

References

https://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/161990/OKM_2019_45_Atlas%20of%20Open%20Science%20and%20Research%20in%20Finland.pdf?sequence=1&isAllowed=y

Preventing and managing research misconduct: the experience of the CNR Research Ethics and Integrity Committee

Giorgia Adamo* and Cinzia Caporale, Interdepartmental Center for Research Ethics and Integrity (CID Ethics), National Research Council of Italy (CNR), Italy

Session: Tuesday, 28 September 2021, 14:00-15:00 CEST

The prevention and management of research misconducts and other irresponsible practices is a crucial issue for research integrity and for a public research institution such as the National Research Council of Italy. To date, a wide range of paradigms and methodologies exist to manage such cases or promote integrity. Amidst such plethora of approaches, it has become increasingly important to identify the best practices that have gradually emerged as the most effective ones. To this end, in this talk, we present a set of practical insights based on the experience gathered in the last ten years by the Research

Ethics and Integrity Committee appointed by the CNR President and, in particular, in the last four years by the "Research Integrity Unit" (RIU) of the Committee's Scientific Secretariat. The CNR has been the first Italian institution with codified procedures for the analysis and evaluation of alleged research misconducts. Furthermore, the Committee has also been the first in Italy to publish detailed guidelines for research integrity.

This talk includes three parts. In the first, we briefly describe the two RIU objectives, namely the preventive and post-publication analysis of scientific articles submitted or published by CNR researchers. In the second part, then, we detail the procedures and informatics tools employed in the analysis of presumed cases of research misconduct in order to evaluate images/data/texts. Finally, we conclude by distilling a set of best practices that, based on our experience, ought to guide the management of alleged cases of research misconduct, and by describing the training modules dedicated to CNR researchers on this topic.

References

CNR Research Ethics and Integrity Committee: www.cnr.it/en/ethics

Guidelines for Research Integrity, (2015; updated 2019):

www.cnr.it/sites/default/files/public/media/doc_istituzionali/ethics/guidelines-for-research-integrity-2019.pdf

Research Ethics and Integrity trainings for doctoral students in France: a national overview

Joëlle Alnot, former director of the French office for research integrity, University of Lorraine, France

Romain Pierronnet, member of French council for research integrity, University Paris-Est Créteil, France

Caroline Strube*, member of the research integrity office of the CNRS, France

Catherine Tessier, research integrity and research ethics officer at ONERA, France

Nathalie Theret, research integrity officer at the University of Rennes 1, France

Session: Tuesday, 28 September 2021, 14:00-15:00 CEST

In France, the ministerial decree on doctoral studies issued in 2016 stipulates that *“doctoral schools must ensure that each doctoral student receives training in research ethics and research integrity”*. More than three years later, it has seemed relevant to draw up a sufficiently exhaustive map of research ethics and research integrity trainings and specific programs, in order to better identify and improve them. To this end, a working group involving members of the French network of research integrity officers and of the French doctoral schools’ network, together with the French office for research integrity has designed an online survey that was sent to all the French higher education and research institutions, research integrity officers, and doctoral schools in late 2019. 109 responses were collected at the end of January 2020.

For this presentation to an international audience, we have chosen to limit the sample analysis to the 51 universities having completed the survey.

As a main result, the survey shows that 94% of the 51 responding universities have implemented research ethics and research integrity training initiatives, which confirms that these educational programs are now widely deployed. There are various teaching approaches and modes of delivery including lectures (73%), small group seminars (52%), local online trainings / massive online open courses (50%) and practical workshops (42%).

In addition, the survey highlights the contents addressed during these training sessions. Topics such as best and bad research practices, authorship and links/conflicts of interest are dealt with in more than 75% of the 48 universities providing trainings, while topics such as alert procedures, peer review practices and research responsibility issues are less frequently focused on.

The authors wish to thank

- Anne Fogli, research integrity officer at the University of Clermont Auvergne and Thomas Coudreau, head of French doctoral schools network, for their fruitful comments

- Dora Chertier and Tessa Enock Levi, project officers at the French office for research integrity for their help in setting up and analyzing the survey.

Conditions and challenges of ombuds work: Insights from an explorative survey amongst ombudspersons at German research performing institutions

Dr. Katharina Beier* (Ombuds Office for Good Scientific Practice, University of Göttingen, Helga Nolte (Ombuds Office, University of Hamburg), Germany

Session: Wednesday, 29 September 2021, 15:00-16:00 CEST

Background: In Germany, the investigation of allegations of scientific misconduct is at the discretion of appointed ombudspersons, who perform this task as volunteers besides their duties in research, education and academic management. The updated *Guidelines for Safeguarding Good Research Practice* by the German Research Foundation (DFG 2019) reiterate the call made in the previous Memorandum (DFG 2013) that research institutions should support ombudspersons in the performance of their duties.

Aim: Since little is known about the conditions of ombudspersons' work, we conducted an explorative survey. Specifically, we enquired ombudspersons at German research performing institutions about the availability of relieving measures, e.g. reduction of teaching duties and administrative and/or personnel support. In addition, we were interested in ombudspersons' assessment on the reconcilability of their academic and ombuds duties and asked for suggestions to improve their work.

Methods: 648 ombudspersons received the survey (requiring free-text answers) via email. After deleting identifiable information quantitative and qualitative analyses were performed.

Unsolicited, many participants provided additional information that was included into qualitative evaluation.

Results: The response rate was 25%. The majority of respondents indicated that they have no release from other academic tasks (88%). Only a minority reported to receive some kind of administrative (31%) and/or personnel support (20%). On the one hand, several ombudspersons doubted the need for any support; on the other hand, as many as 43% reported difficulties in balancing their ombudsperson duties with regular academic responsibilities. Training in mediation, conflict management and exchange with other ombudspersons were amongst the most frequently expressed wishes to improve their work.

Discussion/Conclusion: The survey provides initial insights into the conditions of ombuds work at German research institutions and related challenges. Against this background, we discuss ways to

professionalize the work of ombudspersons, addressing in particular the establishment of ombuds offices as a way to provide effective support.

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Acknowledgements

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Options for a more consistent governance of research integrity in Europe

Sandra Bendiscioli, Senior Policy Officer, EMBO, Germany

Session: Tuesday, 28 September 2021, 13:00-14:00 CEST

The COVID-19 pandemic has clearly shown that international scientific collaboration and data sharing are essential to the advancement of science, and that trust in the integrity of researchers' data and results is crucial¹. However, worldwide and in Europe, the approaches to research integrity (RI) are inconsistent, and there is heterogeneity in the definition of research misconduct or questionable research practices². The effect is that breaches of RI are handled inconsistently, allegations are not always followed up, and the validity of scientific results is jeopardized. Moreover, the inconsistency of systems is an obstacle to handling cross-border cases of research misconduct.

I will present the findings of an EMBO policy analysis of options to reach a more coordinated governance of RI in Europe³. The project focused on the establishment of a pan-European RI body with an advisory, investigative, or oversight role. We analysed its possible status and funding sources, and the advantages and disadvantages of each option. We also explored which existing international groups or organisations could lead the establishment of any of the above bodies.

Among the findings is that a pan-European body would indeed bring more consistency and objectivity in the handling of RI issues and would be particularly helpful for institutions with no support, internally or at national level. Moreover, such a pan-European body could play an important role in cross-border cases. Discussions with relevant European organisations, groups, institutions are ongoing to define the needs, concerns, and objections to the creation of a pan-European body. The aim is to trigger discussions on how to reach a more coordinated approach to protect the principles of responsible research and combat its breaches and so contribute to a collaborative, transparent and reproducible European research.

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Courses in research ethics at Uppsala University

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Session: Wednesday, 29 September 2021, 13:30-14:30 CEST

The education in research ethics at a university is the stamina that secures that researchers, PhD students, supervisors, and the administration at the university have knowledge about research ethics and good research practice. In 2020, Uppsala University has started a project on research ethics courses. The aim of the project was: (1) to identify needs for training in research ethics and to make an inventory of existing courses in research ethics; (2) to develop quality assured courses or modules in research ethics for employees (doctoral students and the faculty) at Uppsala University; and (3) to present and make available the entire range on the university's web.

The main challenge of the project was the size and the diversity of the university. Uppsala University has 40,000 students and 5,000 researchers and teachers divided into three disciplinary domains: humanities and social sciences, medicine and pharmacy, and science and technology. These in turn consist of 9 faculties and nearly 50 departments in total.

As the development of a single course in research ethics would not be appropriate for such a heterogeneous university, the pedagogical model was to develop general modules that combined with discipline-specific modules and workshops can comprise a range of courses. This innovative modular approach has opened for different types of courses: individual self-study courses, online courses with asynchronous and synchronous meetings, blended courses where modules are used as a part of the flipped classroom combined with the campus-based activities such as case studies. As these courses are tailored to the specific needs of particular disciplines, levels, and research methods, they have customized learning outcomes, learning activities, and assessment (Biggs, 1996, 2003).

We will present the outcomes of the project, discuss the modular approach that was used, show the developed modules and courses, and discuss some of the obstacles dealt with underway. Some of these obstacles, such as the challenges regarding how to build a community of practice (Wenger, 1998) in such different types of courses, were expected. However, the project was also – both positively and negatively – affected by the shift towards working completely online due to the covid-19.

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The first five years of the Netherlands Research Integrity Network (NRIN) – lessons learnt and future perspectives

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Session: Wednesday, 29 September 2021, 12:30-13:30 CEST

When the topic of research integrity (RI) came on the agenda of the scientific community, only a handful of people were working in the field. Their endeavours were fragmented: most of these people did not know about each other's work or existence, and were often alone in their institution. In 2014 the plans to start a network of people interested in research integrity came to life when the first coordinator of the Netherlands Research Integrity Network (NRIN) was appointed. The portfolio of NRIN developed gradually during its first year and contains open symposia on RI research and on RI education next to closed meetings for confidential councillors for RI, chairs of standing RI committees, RI policy advisors and RI curriculum developers. NRIN also maintains a website, has an active Twitter habit and sends out newsletters.

In the past five years, NRIN quickly developed from a toddler to what we believe now is the end stage of adolescence. Adult NRIN is there to stay, and is longing for more brothers and sisters in other countries. Therefore, we aim to share our lessons learnt from five years of NRIN, hoping to stimulate the conception and growth of similar networks.

The lessons learnt and recommendations that will be presented will cover organisational issues, strategies for cooperation, communication and social media utilization, building and maintaining a website that is fit for the purpose, attracting sponsors and grants, and ensuring sustainability. In addition, the plans and dreams for the next 5 years of NRIN will be sketched, including the challenges we foresee for this young adult.

Experiences of Path2Integrity to foster research integrity in Europe

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Session: Wednesday, 29 September 2021, 13:30-14:30 CEST

Path2Integrity is one out of three current Horizon 2020 projects on learning research integrity. This project concentrates on a dialogical approach, using role-playing and storytelling. The developed Path2Integrity learning cards are student-centred instructions with the aim to foster a culture of research integrity and trust in research (P2ILC programme). They are designed for secondary school students (16 years and older), undergraduates, graduates and early career researchers.

The session will bring together and synthesise feedback and evaluation results gathered in the first 16 months of the P2ILC programme. The feedback was conducted in 14 workshops, categorised in 1) ill-fitting comments that do not fit with the overall project goal Path2Integrity or a learning objective of a single learning card, 2) interesting comments for single learning cards, 3) justified and valuable comments for the P2ILC programme (namely, for all learning cards). On top of that the session will show evaluation results, which were conducted in a qualitative pilot-study with four

groups with 6-7 participants graduating in education. This data was collected by group discussions with four impulse questions. The analysis reveals which narrations the students used on research integrity.

Evaluation results and feedback show that there is a need to adapt the P2ILC programme. The results show that some students do not identify themselves as researchers and support the outlining of a distinction between the different contexts of research education and citizen education. Secondly, it supports a short handbook, which will accompany the learning cards. And finally, it supports the implementation to reflect on the competencies each learning card features. A review of the results and actions will be followed by a discussion of the implications for the programme itself and for research ethics and research integrity education in general.

*Please be aware that some paragraphs in this abstract are copied passages from the Path2Integrity proposal as well as from internal project papers.

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How can co-production in research challenge the integrity of research?

Vidar Enebakk, Director of The National Committee for Research Ethics in the Social Sciences and the Humanities (NESH), Norway

Session: Tuesday, 28 September 2021, 15:30-16:30 CEST

This presentation addresses a series of challenges concerning co-production between politics, management and research. It is based on a specific case in public health research which has been discussed in various ethical committees in Norway, yet with diverging conclusions. The case illustrates how tricky it can be in practice to assess research integrity in interdisciplinary projects with multiple actors and conflicting interests.

In 2013 the Norwegian government issued a new initiative to reduce sick leave and sickness benefits by making medical consultations more effective. The project was organized by the Norwegian Labour and Welfare Administration (NAV), and the Ministry of Labour and Social Affairs provided a special legal regulation allowing researchers to follow the project. The results were published in a report and in a scientific article, indicating that the political initiative was not very efficient after all.

Meanwhile, the national ethical committees were contacted by a medical doctor, required to participate in the research project, who suddenly found himself under investigation by NAV and charged with misconduct. What was the responsibility of the researchers in this process?

The case raised a series of questions: Who is responsible for handling the case? Is it medical and health research? Is it actually research at all? Where is the border between scientific investigation and criminal investigation? And is it research misconduct? If so, who is responsible for what?

As the case was unfolded in various ethical committees, different legal, ethical and professional aspects were addressed. Eventually, NAV was reported to the Norwegian Data Protection Authority for possible breaches of the individual right to privacy.

The presentation aims to highlight both challenges and possible solutions for handling research ethics and research integrity in this kind of co-production between politics management and research.

Building an online open-source toolbox for research integrity education and training: VIRT²UE on The Embassy of Good Science

Natalie Evans*, Giulia Inguaggiato, Marc van Hoof, Fenneke Blom and Guy Widdershoven, Amsterdam UMC, the Netherlands

Session: Wednesday, 29 September 2021, 15:00-16:00 CEST

The VIRT²UE Train-the-Trainer program aspires to support contextualized research integrity teaching across Europe through a blended learning training program composed by offline and online materials. These together represent a toolbox that trainers can use to train researchers in their own context by adapting the material to different target groups, disciplines and cultures. For this reason, the training program is flexible, combining various individual online components and group exercises aimed at fostering researchers' virtues.

The toolbox includes: a) online courses, which are meant for individual learning and which provide an introduction to research integrity issues and concepts and b) five participatory exercises fostering reflection on personal experiences and values.

These training materials together represent a complete training programme. However, each individual element of the toolbox can be used separately and included in already existing training programmes or combined with other VIRT²UE materials in a different way than the one suggested in the VIRT²UE training guide to build different training programmes tailored to specific needs of a certain target audience or cultural context.

To ensure maximum reach and flexibility each component of the training has been presented through step-by-step instructions, and made available through The Embassy of Good Science, an online Wiki-platform aiming to function as a hub for all those who want to learn and provide education on how to do good science. The Wiki functionalities of the platform offer the possibility to constantly update and modify the content and will enable the community of trainers to adapt the material according to specific needs and contexts.

By developing new innovative training materials and by providing trainers the opportunity to adapt and share training tools, the VIRT²UE project aims to involve trainers across Europe in the co-creation of a collaboratively curated toolbox which, initially based on the results of the project, can potentially grow and become an open laboratory for trainers and educators across Europe and beyond.

Acknowledgment of funding: The Virt2ue and Entire projects have received funding from the European Union's Horizon 2020 research programme under grant agreements N 741782 and N 787580.

Research integrity trainings: Successes and challenges

Michael Gommel and Gerlinde Sponholz, Team Scientific Integrity, Germany

Session: Tuesday, 28 September 2021, 16:30-17:30 CEST

Since 2009, members of Team Scientific Integrity have trained over 9,000 researchers in Research Integrity/Good Scientific Practice in more than 800 multi-day events across Europe. In institutions where we have been training for many years, positive changes can be observed more and more frequently, concerning everyday practices, certain important knowledge and also an increased awareness of and interest in good scientific practice. Challenging are situations where the discrepancy between required practice and reality is particularly large, or when adapting the teaching content to the everyday life and level of the participants' responsibility becomes necessary.

What makes a good CV? Challenges and responsibilities for a research funding organization

Dr. Andreas Görlich, German Research Foundation (DFG), Germany

Session: Tuesday, 28 September 2021, 14:00-15:00 CEST

Publication and third-party funding pressure in the national science systems encourage poor scientific practice. Beyond publications, other performance dimensions should also be included in the evaluation of scientific projects and researchers. Funding organizations have a huge responsibility, but also great power to ensure a fair, reliable, and transparent review process. As a major European funding organization, we give clear reviewer guidelines and try to shape a good evaluation process. For instance, CVs submitted together with grant applications, must list no more than ten publications, with the idea in mind, to set “quality over quantity”. Still, a great number of reviewers evaluate proposals substantially based on the number of publications and impact factors, even though most researchers would agree that this is not best practice. Surely, particularly early career researchers will then ask, “How will you judge me if not by impact factor?” To answer this question we have implemented a work group that will design a standardized CV, which will ban all types of metrics like impact- or h-factors, while at same time giving space for other research relevant activities like teaching duties or public outreach.

In this presentation, I will discuss relevant and irrelevant aspects of a CV. What information should, and should not be in a CV in order to have a fairer and less publication-focused review process? This CV should have all the necessary information to come to a comprehensive and unbiased judgement of a researcher’s accomplishments, while at same time not being too extensive and unreadable. The challenge here lies also in the fact that we fund projects in all fields of science and the humanities. A standardized CV should hence be similarly valuable and adequate in astrophysics as in social sciences.

It is unlikely that we as a single funding agency will change the whole system and no reviewer can be prevented from searching for h-factors or other metrics on various databases on the internet. At least we will make a clear statement on best practice for grant evaluations that might be reckoned as a good example for others.

Good practice publishing as part of research integrity practice

Dr. Tobias Grimm, German Research Foundation (DFG), Germany

Session: Tuesday, 28 September 2021, 14:00-15:00 CEST

As a major European funding organisation, DFG is funding more than 30,000 scientific projects per year, spanning all fields of science and the humanities. DFG’s 49 review boards, each representing a particular scientific area, guarantee an informed and fair peer review. Being interested in the different publication cultures as represented by the proposals submitted to DFG we conducted a survey, which was sent to and returned by all DFG programme officers overseeing the individual review boards. We found that there exists a broad spectrum of publication forms. At the same time, most review board managers also reported a dominance of the peer-reviewed journal article. We hypothesize that a variety of incentives not or only loosely related to disseminating scientific

findings drive a metrics-oriented publishing brought to perfection by journal articles and their impact factor.

Publishing one's ideas and results is a central element of the research process. Hence, the format and place of publishing should – with regard to good research practice – be selected with care and should already be thought of at the early beginning of project planning. What audience am I aiming at and what publication channel would suit it? How comprehensive should the report be? How do I organize ownership, authorship, intellectual property issues? Can I realize Open Science aspects? How will accompanying data, media content or code be annotated, stored, presented and archived? What kind of quality assurance will be adequate?

To cope with all this, researchers need training and support. Best practice publishing criteria do exist (FAIR-principles, DOAJ Principles of Transparency and Best Practice in Scholarly Publishing etc.) and should be built upon. We propose a canon of key criteria to support research and dissemination-oriented best practice publishing. Researchers should seek the most appropriate ways of publishing and funders should acknowledge and even require it. These attempts would strengthen the quality of published research and diminish delays, barriers and waste in scientific publishing.

DFG has put into place a working group to develop measures and assistance to foster best practice publishing and to further refine its informed research assessment practices.

Explaining variance in perceived research misbehavior: Results from a survey among academic researchers in Amsterdam

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Session: Tuesday, 28 September 2021, 13:00-14:00 CEST

Breaches of research integrity have sparked interest in the factors that may help explain when research misbehavior is more likely to occur. Often three clusters of factors are distinguished: individual factors, climate factors and publication factors. Our research question is: to what extent can individual, climate and publication factors explain the variance in frequently perceived research misbehaviors? We used validated measurement instruments for these three clusters of factors to survey academic researchers in Amsterdam. Results showed that individual, climate and publication factors combined explain 32% of variance in perceived frequency of research misbehavior. The cluster accounting for the greatest percentage of explained variance was the research climate (23%). The research climate here refers to perceptions of specific dimensions of the academic organization, such as the existence of research-related norms and socialization activities into responsible research practices within a department, or the quality of resources an institute has available to support researchers in their work. Our results underscore the important role of the research climate in undermining responsible research practices and suggest that the frequency of

research misbehaviors might be lowered by putting more emphasis on ethical departmental norms and creating an open departmental atmosphere.

What if intersectional gender-responsibility was a focus for research integrity in European universities?

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Session: Wednesday, 29 September 2021, 12:30-13:30 CEST

The gender dimension is an increasingly important research policy area internationally. Gender dimension in research is included in the Responsible Research and Innovation (RRI) policy. Furthermore, the applicants of Horizon Europe funding are requested to inform of their institutional gender equality plan as well as include an analysis of a gender dimension of the proposed research project. Gender dimension in research means that as part of the research design it is systematically controlled for throughout the research process without necessarily being the main focus of analysis. Thus, gender dimension could be addressed in all phases of a research project.

In this presentation, I will elaborate of intersectional gender-responsibility as a focal point of research integrity. The intersectional gender-responsibility in research builds on the Human Right for Science. It is about co-creating knowledge and scientific excellence in research and conducting RRI in the aim to produce knowledge relevant in different sectors of society.

Horizontal and vertical segregation in European Universities is persistent varying among disciplines and subject areas, with the greatest imbalance being in the natural sciences and technology. A concern of the quality, legitimacy and credibility of research within society is voiced if academic knowledge production presents only narrow interests of the surrounding society (e.g. Bergman & Rustad, 2013). Furthermore, often unconscious assumptions on gender have been considered as an obstacle for fair research evaluation questioning equal access, success and retention opportunities for all. Moreover, arguments for gender-responsibility (Schiebinger et al, 2011-2020), epistemic justice and epistemic contribution as central human capability (Fricker, 2015) are presented, but how they should and could be implemented in research practice if they would be implemented at all? I will elaborate an approach to a Gender Impact Assessment (GIA) of new research proposals co-designed in H2020-funded project "RESET – Redesigning Equality and Scientific Excellence Together".

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Research ethics working group at a university – multidisciplinary community to facilitate responsible conduct of research

Mervi Heikkinen*, Anne Keränen, Satu Pitkäaho, Minna Ruddock, Sirpa Aalto, Aki Manninen, Hely Häggman, Minna Soini-Kivari, Antero Metso, Heidi Huttunen, Aija Ryyppö, Pertti Tikkanen, and Riitta Keiski, University of Oulu, Finland

Session: Tuesday, 28 September 2021, 16:30-17:30 CEST

The University of Oulu ethics working group was founded by the decision of the Rector in the autumn of 1997. The Rector appointed the current working group in September 1, 2018 for a three-year term until August 31, 2021. The tasks of the ethics working group include, among other things, facilitating discussion about the University's values and ethical questions and finding ways of making these values visible in the University's work. During the current term the special duties of the ethics group are related to the promotion of education and training on ethics and research integrity and elaboration of ethical questions relating to open science and research.

In this presentation, we will describe the approach developed at the University of Oulu to facilitate multidisciplinary discussion on research ethics that consist of features as defined pre-emptive ethics by Mustajoki & Mustajoki (2017) applied to our research institution. By using meeting memos as data and content analysis, memory work and collective writing as our methods we will share the results of our practical experience during 3 years of work in the ethics working group. The analysis illustrates various dimensions of the research ethics as professional competence. The results encourage to seek opportunities to develop jointly international training on professional research ethics.

The solid foundation of research integrity with clear principles creates an institutional ethos to conduct responsible research and innovation. However, the research environment changes e.g. due to digitalization, globalization, profilation and harmonization, and therefore it is important to constantly cultivate 'the ethical senses' of the research community. A research ethics working group – a multidisciplinary community of committed researchers and staff members is a valuable forum for its participants and a way forward to contribute to a progress of research ethics practices locally, nationally and internationally.

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Big Data-research: Big Opportunities and Big Challenges

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Ingrid S. Torp, The National Committees for Research Ethics, Norway

Session: Wednesday, 29 September 2021, 13:30-14:30 CEST

Big Data research challenges the ethical frameworks and assumptions that apply to researchers and ethics review boards. The Norwegian National Research Ethics Committees have thus identified the need for a review of the challenges posed by Big Data and their implications for research ethics. In 2020, an interdisciplinary working group produced a report on Big Data-research and research ethics. The group has focused on three main questions: How does Big Data change research? Which norms are tested? How should researchers and other actors in the research system meet new opportunities and challenges?

Based on discussions within and experiences from Norway's various research ethics committees, and dialogue with relevant research communities, the report presents the core ethical challenges identified and investigates how Big Data research tests three clusters of research ethics norms: (1) Norms that constitute good scientific practice, related to the quest for accurate, adequate and relevant knowledge, and norms that govern that the relationship to other researchers: For example, how do we ensure the fitness of data collected for specific purposes and within specific contexts when the data are repurposed? (2) Norms regulating the use of individuals' and groups' personal data: How can informed consent requirements be met if the researcher collecting information does not know what the data will be used for long term? (3) Norms regulating the consequences and use of research in society: For example, Big Data, in combination with machine learning, is often used to make decisions or guide decision makers. How do we ensure that Big Data-based research directly or indirectly benefits society? We present recommendations for ethically sound Big Data research, based on the main conclusions in the report.

Research on human remains – research ethics, integrity and practice

Lene Os Johannessen and Nils Anfinset, The National Committee for Research Ethics on Human Remains (The Norwegian National Research Ethics Committees), Norway

Session: Wednesday, 29 September 2021, 12:30-13:30 CEST

Research on human remains brings forth complex and varied research ethical issues. Human remains, being both nature and culture, subjects and objects, represent both the person of whom the remains were a part and is a source of knowledge about past societies and its people. Further,

research on human remains is a highly interdisciplinary field involving studies within archaeology, anthropology, bioarchaeology, the history of disease, paleoepidemiology, and genetics. The scientific methods are ever-improving and the knowledge gained is ever-increasing; by sampling the skeletal material for some mgs a researcher can gain insight into an individual's age-at-death, sex, disease history, diet, genetics, place of origin, mobility, etc. The rapid development undoubtedly leads to great improvements within the research field. However, it also puts the material under stress and adds fuel to races between researchers, research groups and institutions.

As a resource and contributor on the various ethical challenges that arise in the field, Norway has an advisory body, The National Committee for Research Ethics on Human Remains. The committee gives advice to researchers, research institutions and the government, and evaluates relevant research projects on ethical issues. The range of cases submitted to the committee shows that there is an increasing need for guidance, particularly for research involving destructive sampling of human remains and remains that represent ethnic, religious or minority groups. E.g.:

i. when a PhD student proposed to take destructive tests of human remains that other researchers were working on, the committee considered issues related to respect for the rarity of the material and respect for other researchers¹.

ii. when a research group proposed to DNA sample crania collected from Easter Island in the 1950s, the committee evaluated how the research group handled principles such as respect for the descendants, respect for the minority group represented and a consideration of the context and provenance of the discovery².

This presentation will reflect on some particularly significant aspects that challenge research integrity and ethics practice within the field and discuss the committee's role as a national, independent committee with an advisory function.

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Conflict of interests and conflict of loyalties in the context of handling cases of misconduct: the example of implementing the Estonian code of conduct for research integrity

Marten Juurik, Centre for Ethics of University of Tartu, Estonia

Session: Tuesday, 28 September 2021, 15:30-16:30 CEST

The handling of misconduct allegations is often framed in terms of *confidentiality* and *transparency*: whether the names and details of each case should be public or not? However, this does not say much about how the investigation itself is being conducted. Even if the cases are dealt with *in confidence*, the number of persons involved in the actual investigation may vary. This leads to the question: who should be informed of the handling of misconduct allegations.

The concepts of *conflict of interests* and *conflict of loyalties* are examined more closely in relation to this type of communication. The examples are based on the recent implementation of the Estonian

Code of Conduct for Research Integrity at the University of Tartu. During the implementation arose questions concerning the role of deans and heads of institutes and departments and to what extent they should be included in the investigation of misconduct allegations. On the one hand, it was proposed that perhaps they should solve some of the allegations on their own. On the other hand, it was proposed that even if they cannot solve some cases due to conflicts of interests, they should still be informed about the process of investigation. The question of who should be informed cannot be analysed using only the concept of *conflict of interests*. In addition, the concept of *loyalties* is used to illustrate the inherent ethical dilemmas concerning the decisions of who should be informed and to what extent. To further illustrate the differences and similarities between the concepts of *interests* and *loyalties*, two additional roles, the advisor of research ethics and the complainant, are examined in relation to their communicative procedures and their potential dilemmas.

The research integrity education cluster in the EU's science with and for society programme: Upgrading educational practices

Tom Lindemann, European Network of Research Ethics Committees / EUREC Office, Germany

Session: Wednesday, 29 September 2021, 15:00-16:00 CEST

Fostering a culture of research integrity conducive to good scientific practice depends to a crucial extent on proper education and training. VIRT2UE, EnTIRE, Path2Integrity and INTEGRITY are projects receiving funding from the EU Horizon 2020 Science with and for Society programme that develop innovative educational tools, materials and programmes to support effective research integrity education in and beyond Europe. VIRT2UE, Path2Integrity and INTEGRITY create training programmes and learning materials for different target groups, ranging from secondary school students to researchers of all career stages. EnTIRE has taken the lead in founding the Embassy of Good Science, an interactive, community-driven wiki-platform which facilitates communication about research integrity among all stakeholders and provides access to a large variety of resources, cases and guidelines.

Assisted by the European Commission, the four projects have started to build a European research integrity education cluster to learn from each other and thereby maximise their impact. Major aims of the cluster include identifying complementarities, realising potentials for synergies and highlighting the unique characteristics of each project. The presentation provides further information about the cluster, outlines how VIRT2UE, EnTIRE, Path2Integrity and INTEGRITY support fostering a culture of research integrity and invites stakeholders to contribute to the projects.

First, the presentation gives an overview of the four projects and maps how they relate to each other. For that purpose, it outlines their commonalities and differences along three dimensions: 1) didactical approach, 2) philosophical approach to research integrity and 3) primary target groups. In a second step, the presentation explains how the projects can support educational practices of 1) universities and research institutes, 2) research-intensive companies, 3) research integrity offices, 4) research ethics committees and 5) other educational institutions, like secondary schools. Finally, the presentation invites stakeholders to draw on and add to the projects to thoroughly embed them in the wider research community.

References

For further information on the European research integrity cluster and the four projects, please consult the following websites:

https://www.path2integrity.eu/show/2899_ri_cluster

www.embassy.science

www.embassy.science/training

www.path2integrity.eu

www.h2020integrity.eu

Doing positive integrity: How to promote good science by involving role-models? The Path2Integrity Experience

Agnieszka Dwojak-Matras* and Katarzyna Kalinowska, Educational Research Institute (IBE), Poland

Session: Wednesday, 29 September 2021, 15:00-16:00 CEST

The theme of the speech will be based on the experience of the Path2Integrity team members in developing a social campaign for building a culture of research integrity. At the beginning we will briefly present our projects' objectives and then the assumptions and goals of the campaign, highlighting the key messages of the campaign materials (implemented through videos, posters, flyers). Then we will discuss the problems we encountered while designing our research integrity promotional strategies and present some of them, mainly those relating to the difficulty of formulating a positive message about research integrity. As researchers of research integrity, we are surrounded by examples focusing on negative practices that point out misconduct. During the presentation, we will focus on the Path2Integrity campaign, which, on the contrary, is geared towards seeking and highlighting positive messages about the responsible conduct of research using role-models. We will also indicate some challenges regarding the design and the format of the materials, which we have overcome and resolved based on a conducted evaluation.

In providing suggestions for how to promote good science, we will analyse the statements and attitudes of the scientists who have become the faces of the campaign – role-models who were interviewed on their paths to integrity. We will focus on their experiences of positive scientific practices, as well as on promoting constructive ways of avoiding bad behaviours.

Finally, we also would like to discuss the important factors that need to be considered while fostering positive attitudes and integrity – encouraging everyone to use the presented materials, familiarise themselves with the campaign and share it in their academic communities.

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Reflections on research ethics in artificial intelligence: Input from the national deliberation report Norway

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Lene Os Johannessen, The National Committee for Research Ethics in Science and Technology and the Norwegian National Research Ethics Committees, Norway

Helene Ingierd, the Norwegian National Research Ethics Committees, Norway

Session: Wednesday, 29 September 2021, 13:30-14:30 CEST

The growing number of reports on ethics and AI indicates a strong awareness of the need for ethical reflection on this technology. The research ethics aspects of AI, on the other hand, are in their infancy, and The National Committee for Research Ethics in Science and Technology (NENT) in Norway has identified a need to explore these implications of the development of the technology. During 2018/2019 NENT have been working on a deliberation report on research ethics in artificial intelligence research in Norway. The main target groups were researchers, research institutions and other contributors who define the guiding principles of or are involved in AI research. NENT invited relevant AI research communities, including universities, research institutes and industry, in the form of a consultation round from June to August 2018 and a workshop held in February 2019 as part of this project. The purpose was to map the key possibilities and research ethics challenges identified by the Norwegian research communities. In addition, NENT did a survey on what has been done within this area both in Norway and abroad, as well as identifying relevant international documents to date [1-8]. The outcome of the work was a national deliberation report on research ethics in artificial intelligence research in Norway [9]. In this oral presentation we will present the Norwegian deliberation report and the nine research ethics challenges that were identified. Further we will present insight and experience of the process and work behind the report, as well as some preliminary feedback on the deliberation report received in the time after launching. The ambition is to reach out for and facilitate high-quality and responsible AI research.

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Overview of sanctions for research misconduct within European Union: a legal perspective

Katharina Miller, Master of Laws (Luxembourg), Path2Integrity

Session: Tuesday, 28 September 2021, 13:00-14:00 CEST

In 2013, a study (Godecharle et al, 2013) showed that there was no union in Europe on how to define misconduct. Now, 8 years later, the author will give an overview on the current legal perspective of sanctions for research misconduct within the 27 European Union (EU) member states.

Firstly, it will be discussed and compared how research misconduct is defined in the member states and if the definitions are established by a legal text or if they are provided by guidelines. If they are provided by guidelines then these guidelines will be compared with compliance with the All European Academies (ALLEA) Code of Conduct from 2017.

Secondly, the different types of sanctions or legal remedies or their non-existence shall be compared and discussed.

As a conclusion, the author will show if the European landscape is going in the same direction – or if there is still no union within Europe.

Unpacking the Ukrainian paradox

Ülle Must*, Education and Youth Board, Estonia

Valentyna Andrushchenko, Centre for Science-Technical Information and Innovation Progress Facilitation in Ukraine, Ukraine

Session: Tuesday, 28 September 2021, 14:00-15:00 CEST

The aim of the paper is to provide an overview of the situation regarding the use of ethical principles in Ukrainian higher education and research institutions. As we consider ethics as a key element in the implementation of open science, gender and science education (RRI), we covered the topic by including all these elements in the study, held June-November 2019. The study consisted of two parts: a) Overview about the state-of-art: analysis of legislation, scientific literature, and social media; b) Internet survey (Survey Monkey). The survey was sent to a team of experts (H2020 NCPs, R&D personnel in ministries and research bodies, top 50 universities in Ukraine). The questionnaire consisted of six blocks: a) The main driver for RRI; d) Expected benefits from RRI; e) Supportive factors and barriers in the implementation of RRI; f) Examples of implementation of RRI elements in organization.

In the presentation we present the first results of the study, the work will continue in a new project, which will be carried out in the period 2021-2024.

Acknowledgements: The study has become possible thanks to the development cooperation grant No. 85-2018-A of the Estonian Ministry of Foreign Affairs.

Using dilemma game for research integrity. The case of Estonian Code of Conduct for research integrity

Mari-Liisa Parder, TÜ eetikakeskuse / Centre for Ethics, University of Tartu, Estonia

Session: Wednesday, 29 September 2021, 15:00-16:00 CEST

This paper discusses how dilemma method can be used for discussions about research integrity. We propose this as an efficient method for highlighting the differences between disciplines and for agreeing on the best solution for the discussed situation. Instead of focusing on the differences this method focuses on finding the common ground. We propose this as a good example to be used for agreeing on the principles for research integrity, but also for training the science integrity advisors and for overall promotion of research integrity.

The discussion is based on the example of the Estonian Code of Conduct for Research Integrity¹, which was signed in November 2017 by 21 research institutions, Estonian Ministry of Education and Research and the Estonian Research Council. The Centre for Ethics at the University of Tartu and a work group formed by the Estonian Research Council prepared the document. Before signing the agreement there was a national feedback round during which more than 150 suggestions for improvement were made. During this process different disciplines gave different examples of what is acceptable in research and what is not. The method of dilemma game was used in order to highlight the conflicting values behind principles, to facilitate discussions and to highlight points of deliberation. Different real-life cases were collected during the consultation round that were developed into dilemmas. During the development the main decision-point was chosen and the timeline leading to the decision point was laid out.

References

1 The text of the Estonian Code of Conduct for Research Integrity is available <https://www.eetika.ee/et/estoniancode-conduct-research-integrity>

Mentors as inspirational role models and on their role in promoting a responsible research climate

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Session: Wednesday, 29 September 2021, 13:30-14:30 CEST

Besides suppressing misconduct, empowering scientists' awareness on the topic of research integrity (RI) by providing RI-related education through adequate training is becoming increasingly important. Scientific misconduct is not just reduced to intentional bad practices of some scientists, but it may occur due to lack of knowledge and training. Besides the increasing numbers of RI training sessions, supervisors have always had a central role in fostering RI culture and educating early-

career researchers. This study aims to investigate the mentors' understanding and ethos in their daily practice and their perception regarding their role as RI educators.

We will carry out a review on mentorship and supervision and about their role in fostering a RI culture. The process will follow different steps: 1) search of the literature in different databases; 2) selection of articles based on inclusion and exclusion criteria; 3) analysis of the results. We developed the search strategy based on concepts such as research integrity, responsible conduct of research, mentor, supervisor and role model.

The search retrieved 1162 papers. Duplicates, title, abstract and paper screening excluded 1.128, leaving 34 articles. After the snowballing process, we identified 40 articles. We clearly identified as crucial the role of mentors in transmitting ethical and professional values through explicit everyday teaching and acting as a role model. Moreover, mentors have an important social responsibility component in shaping future generations of researchers' behaviour and fostering a responsible research climate. However, failing their role might have important downsides in terms of fostering RI and good research practices.

This study will be important to have a broad overview of the role of mentors as RI educators and to help develop a normative framework to guide mentors in fostering a RI culture among early-career researchers.

Development and implementation of research integrity guidance documents: explorative interviews with research integrity experts

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Vicko Tomić, ST-OPEN, University of Split, Croatia

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Session: Wednesday, 29 September 2021, 12:30-13:30 CEST

To promote research integrity (RI) and prevent research misconduct and other detrimental research practices, many RI guidance documents and procedures are developed and implemented in research organizations. This study aimed to explore stakeholders' opinions on different RI guidance documents, factors that influence the implementation of these documents, and ideas for needed changes and improvements in the RI field. We conducted semi-structured interviews with 23 RI experts from different backgrounds (researchers, members of research committees, funders, policy-makers, and industry members) and analyzed the data using the reflexive thematic analysis approach. As a result, three main themes were developed. The first theme addressed RI experts' knowledge and perceptions on RI guidance documents (mainly standard operating procedures (SOPs) for RI) and the impact of these documents on RI promotion. The second theme considered factors that have a positive or negative impact on RI implementation, while the third theme referred to ideas for improvements and considered the roles of funders and journals in promoting RI. The participants considered both general and step-by-step RI guidance documents necessary. They emphasized the importance of tailoring these documents and RI education to the researchers' needs by taking disciplinary, organizational, and research specifics into account. Further, the participants named several challenges that need to be addressed in future for improving RI promotion and

implementation – harmonization of RI approaches, development of RI documents in cooperation with researchers, development of incentives based on the RI requirements, and increased engagement of funders and scientific journals and publishers in RI promotion.

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Research integrity and research ethics in citizen science

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Session: Wednesday, 29 September 2021, 13:30-14:30 CEST

This presentation introduces a new three-year research project founded by the Swedish Research Council Formas. The aim of the project is to identify and resolve issues pertaining to research integrity and research ethics in citizen science.

The term 'citizen science' (CS) refers to practices where non-scientists are engaged in scientific research in different ways. A wide definition of CS is that it is 'a range of collaborative activities between professional scientists and engaged laypeople (citizens) in the conduct of research' (Resnik, Elliot & Miller 2015). Another definition states that CS is knowledge production by, and for, non-scientists (Ottinger 2010). Although the practice itself is not new, there has been an extensive growth of CS during the recent decades, mainly due to developed information and communication technologies. However, issues pertaining to research ethics and research integrity lag behind (Rasmussen & Cooper 2019), which this project seeks to remedy.

Some main research questions are

- What are the moral and legal responsibilities of participants in CS projects, from both scientists as well as non-scientists?
- How is research integrity understood and upheld in CS projects?
- How can good research practice and scientific misconduct be understood in CS projects?

Some points of inquiry for the project can be (non-exhaustively) listed under the headings of Accountability and Engagement: Among the accountability issues we ask how credit (authorship, acknowledgements, remuneration) is to be allocated and understood in CS, how responsibility and blame should be allocated when things go wrong, and what principles concerning ownership of collected materials and acknowledgement for participation ought to apply. Engagement issues include how voluntariness and informed consent is to be understood when the distinction between researcher and non-researcher is blurred.

A concrete outcome of the project, in addition to research articles, will be tentative ethical guidelines that will be disseminated via the new web portal medborgarforskning.se. Such have hitherto been lacking. The project is conducted in collaboration with the Vinnova-supported ARCS project (ARenas for Cooperation through citizen Science).

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Why do we need specific ethical guidelines for Internet research?

Professor Elisabeth Staksrud, Department of Media and Communication, Faculty of Humanities, University of Oslo, and Chair of the National Committee for Research Ethics in the Social Sciences and the Humanities (NESH), Norway

Session: Wednesday, 29 September 2021, 12:30-13:30 CEST

This presentation will engage with issues surrounding the ethics of doing research with and about users of digital technologies in public, personal and private spaces online. Building on experiences from developing ethical guidelines for Internet research nationally and internationally, the presentation is organized around key ethical consequences of and challenges with collecting data from online sources, and how they go beyond established ethical considerations.

The starting point will be empirically grounded insights from the media and communications field, seeing how people's participation online, and their engagement with digital technologies, creates new opportunities for researchers to collect immense amounts of data on the individual's life and actions. This raises critical questions regarding the responsibility of researchers. What constitutes a truly informed consent when dealing with online users where age is not apparent? What is our responsibility towards third parties, online friends and other interactions? This presentation tackles these difficult questions head-on and illuminates the particular dilemmas and apparent cul-de-sacs such research faces. Suggestions for new pathways are provided, as are topics for further discussions within the researcher community at large. Specifically, the presentation will address the following four overarching challenges giving examples from research from different academic disciplines:

- 1) The distinction between public and private, and how informants may not always realize that the information they have posted online, or information posted about them, is available and accessible in the public domain including sexual messages and images.
- 2) Concerns for children and other vulnerable groups: how to ensure that those you recruit are as old as they say they are
- 3) Responsibility to inform and obtain consent, when your corpus is based on thousands of Internet users' activities in social media
- 4) Responsibility for confidentiality and anonymity: how to ensure the anonymity of your informants when their identity may be just a google away.

How to engage the whole research community in writing of the code of conduct for research integrity: Estonian experience

Margit Sutrop, Marten Juurik, Kristi Lõuk, Mari-Liisa Parder and Katrin Velbaum, University of Tartu, Estonia

Session: Tuesday, 28 September 2021, 14:00-15:00 CEST

This paper focuses on the Estonian case study and elaborates on the challenges of engaging all the research institutions of the country in writing and implementing of the Code of Conduct for Research Integrity. The Estonian Code¹ was signed in November 2017 by 21 research institutions, Estonian Ministry of Education and Research and the Estonian Research Council. The document was prepared by the Centre for Ethics at the University of Tartu in cooperation with the Estonian Research Council.

The current document highlights the activities of research institutions, pointing out the responsibility of researchers and research institutions, which helps to emphasize that responsibility for ethical research lies with everyone who is active in research. Researchers alone cannot ensure research integrity, therefore that researchers could behave ethically, the necessary conditions have to be created at the level of the organization and the system. By joining the Estonian Code, the research institutions confirmed that they respect the main values of research and the principles of action described in the text of the Estonian Code.

The task of the research institution is to elaborate detailed procedural rules which help to increase awareness in the organization about the principles of research integrity, to monitor the research environment and, if necessary, to interfere and to deal with the cases of misconduct. During two rounds of national feedback consultations more than 150 suggestions for improvement were made. Lively response and heated discussion on some issues showed that different research disciplines and research institutions may have different understandings of what is considered to be acceptable and what is not. In this paper it will be outlined where the main disagreements and points of discussion arose and how consensus was reached among the research community. It will also be described how the further implementation of the Code of Conduct for Research Integrity has been carried out in different universities and what have been the main challenges. This case study is part of H2020 project "PRO-RES".

Recommendations to institutions and funders on dealing with breaches of research integrity – Insights from the SOPs4RI project (H2020)

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Session: Wednesday, 29 September 2021, 15:00-16:00 CEST

Background: Dealing with breaches of research integrity (RI) in a fair and transparent way is necessary for fostering RI (Fanelli, Costas & Lariviere, 2015). While some European institutions and funders have made much progress on developing policies on dealing with breaches of RI, others are

¹ The text of the Estonian Code of Conduct for Research Integrity is available at <https://www.eetika.ee/et/estonian-code-conduct-research-integrity>

lagging behind (Resnick, Rasmussen & Kissling, 2015). Additionally, knowledge on which policies are most effective in dealing with breaches of RI is currently fragmented, as different European countries have different ways of approaching the topic (Resnick, Rasmussen & Kissling, 2015). More evidence-based guidance is needed for institutions to develop and strengthen their policies on dealing with breaches of RI (Bosch, 2011).

Aim: In the SOPs4RI project, we aim to explore *what* guidelines, documents and policies are effective in dealing with breaches of RI and *how* they can be implemented successfully by institutions and funders.

Methods: We prioritized, mapped, explored and assessed currently existing knowledge on dealing with breaches of RI at RPOs and RFOs, using scoping reviews, interviews and a Delphi study. This led to the first selection of documents that can help institutions and policy makers in dealing with breaches of RI. Currently, we are running eight focus groups with research stakeholders in various European countries (Netherlands, Croatia, UK, Denmark, Greece). Each focus group focuses on research stakeholders within a broad disciplinary area of research (i.e. biomedical, social and natural sciences, and the humanities). During the focus groups, we ask participants to share insights on how institutions can effectively deal with breaches of RI. We plan to analyze the data using thematic content analysis in April-July 2020.

Expected output: We will present a list of high-quality documents that came out of our study and can help RPOs and RFOs to implement good policies on how to deal with breaches of RI. Based on the results of the focus groups, we will present a set of recommendations to research institutions and funders on how to implement these practices throughout Europe.

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Authorship accountability and research governance: Public policy and research integrity in a time of crisis - A case study from Ireland

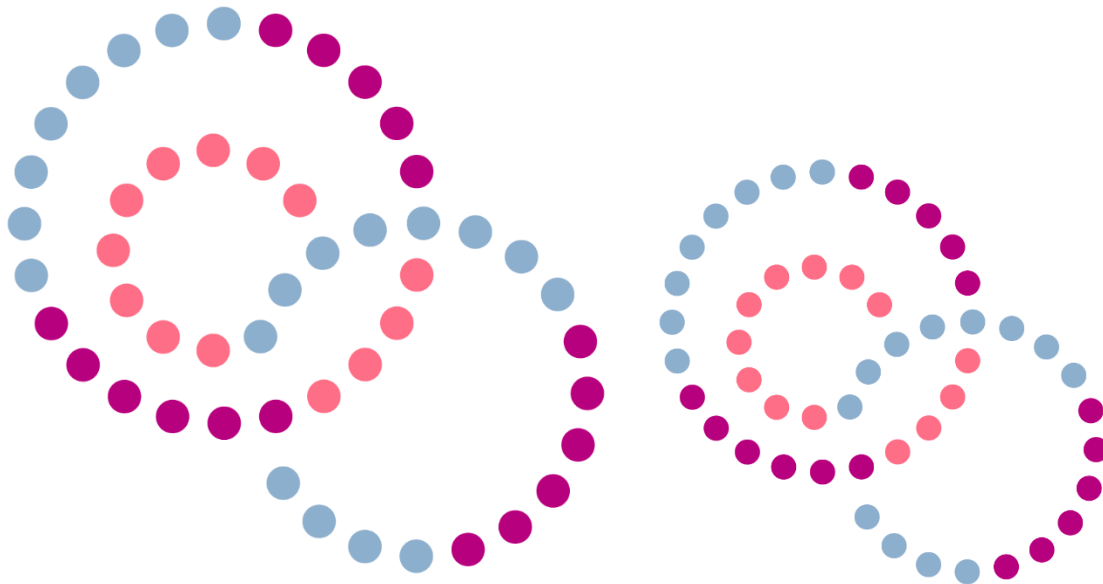
Jennifer Van Aswegen, Social Policy Ireland, Ireland

Session: Tuesday, 28 September 2021, 15:30-16:30 CEST

A year of living with Covid-19 has demonstrated the need for reliable trustworthy research to inform public policy decisions and implementation strategies, as policy makers are faced with not only Covid-specific problems, but old 'wicked' problems revealed anew through the lens of the pandemic crisis, such as social inequality and distribution. Research performing organisations across all sectors, including the public, charitable, profit and non-profit sectors have a key role to play in informing, shaping and implementing policy decisions, across the spectrum of social policy. The need for greater collaboration between academics and policy makers has been highlighted recently

at national and international level compounded by recent events that have shone a light on the critical role of research integrity in forming policy instruments such as government guidelines.

This story presents a timely and important case study of authorship misconduct within publicly funded charitable research performing organisation operating within the higher and further education sector in Ireland. The central aim of the paper is to highlight a policy gap within the Irish public sector governance framework. By deconstructing instance of misconduct through the perspective and principles of research integrity, the paper aims to offer lessons to a) research community; b) research funding organisations and c) policy makers. Specifically, the paper aims to draw lessons from this case study in order to inform the role of government departments in ensuring research integrity is embedded within the public sector governance framework, including the commissioning of research within the non-profit sectors. The study approaches the case at the intersection of educational policy studies and academic integrity and examines the role of integrity and accountability in establishing trust and confidence in educational research outputs and policy implementation through the mechanism of research integrity governance. Drawing on this case study, the implications for policy makers are identified and the urgent need for embedding the national policy statement in research integrity within the public sector governance framework is presented to ensure the highest standards of oversight and scrutiny in commissioning and undertaking research for educational practice.





POSTER ABSTRACTS

Revised rules of procedure for dealing with research misconduct by a funding organization

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The poster presents the German Research Foundation's Rules of Procedure and puts emphasis on important changes adopted in the latest revised version in 2019. The document consists of regulations on the scope, the matters of scientific misconduct as well as the procedure and possible sanctions.

One major innovation of the revised version consists in strengthening the basic idea of presumed innocence. This happened with the aim to achieve a better balance between the interests of the person who raises an allegation of research misconduct (whistleblower) and the individual against whom the allegation is directed. The circumstances of the individual case should be weighed up at each stage of the proposal process, especially before a grant is awarded. This includes an assessment of whether a review process or examination by the review boards is (still) possible or would be biased. This may reduce the number of (anonymous) allegations that are not made in good faith but rather with the aim of causing harm to individuals, because such accusations would no longer have an externally visible impact.

In the revised Rules of Procedure, the circumstances constituting research misconduct have been defined in more detail and expanded, especially to include non-disclosure of conflicts of interest and favoritism; a preamble referring to procedural principles has been added and the personal applicability of the Rules of Procedure in the case of funding proposals submitted by universities or non-university research institutions has been expanded, too.

Activating institutional change towards Responsible Research & Innovation and Open Science

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Open Science (OS) and Responsible Research & Innovation (RRI) seek to achieve a cultural change in our research environment. Although moving forward, OS and RRI seem still not widely implemented, presenting a gap between the actual and the potential role of open responsible research.

In a literature review, the [FIT4RRI project](#) analysed what trends drive OS and RRI forward and what barriers prevent their implementation in current systems. Critical trends like hyper-competition or shrinking funds affect research practices negatively. These trends oppose values like quality, diversity or transparency which are driving RRI and OS.

Additionally, a comparison of different sectors and national contexts showed substantial variation across sectors: The type of research and stakeholder relationships is very important for the performance of RRI and OS – particularly how established or novel these sectors are.

Based on this analysis we conducted four co-creation experiments to observe how to support institutional change. Project partners engaged different interest groups in the design and implementation of a research project, e.g. by organizing focus groups. This effort led for example to a brand-new Responsible Research Center at one university.

The findings on necessary changes to organizational frameworks which allow better embedding of RRI and enable enhanced values for quadruple helix actors (academia, industry, policy makers & society) are currently summarized.

Moreover, a central project result are guidelines with recommendations on how to initiate and foster institutional change. These are complemented by a set of online courses to support academia and industry in initiating open and responsible practices. Among others they include an introduction to RRI, RRI in industry, public engagement, and ethics.

The poster will present these main findings and mutual learnings from the co-creation experiments. It will also present the online courses and the guidelines as useful resources for the initiation of institutional change.

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Ethics evaluation of Horizon 2020 grant proposals

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Background: Ethics evaluation of research proposals is an important part of ensuring the quality of funded research. Systematic evaluation of ethics issues started in Horizon 2020 EU research framework but there is little evidence on the outcomes of the ethics review of grant proposals. Our objective was to assess the ethical issues identified by applicants and ethical requirements from ethics evaluation panels for grant proposals for Maria Skłodowska-Curie Actions (MSCA) and European Research Council (ERC).

Methods: We analysed anonymized datasets for 3,054 MSCA individual fellowships (IF), 417 MSCA Innovative Training Networks (ITN), and 1,465 ERC from 2016 to 2019.

Results: Most of the identified ethics issues by both applicants and ethics experts were in the ethics categories related to humans; protection of personal data; environment, health and safety; and non-EU countries. Ethics experts identified twice as many ethics issues compared to applicants across funding schemes, years, and high- vs low-research performing countries. ERC grants had the highest number of ethics requirements per proposal, compared to ITN and IF grants. The majority of requirements had to be fulfilled after grant agreement.

Conclusions: Many applicants for highly competitive H2020 funding schemes lack awareness of ethics issues raised by their proposed research. There is a need for better training of researchers at all career stages about ethics issues in research, more support to researchers from research organizations to follow the funding agencies requirements, as well as further development and harmonization of the ethics appraisal process during grant assessment.

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Disclaimer: All views expressed in this description are strictly those of the authors and may in no circumstances be regarded as an official position of the Research Executive Agency or the European Commission.

Retrospective analysis of the peer review evaluation of the Marie Curie research funding programme over a period of 12 years

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Background: Evaluation of research grants should ensure that the best projects are funded and that there is no research waste. The EU's Framework Programmes for Research and Innovation evaluation process has evolved over time in that attempt. For the Marie Curie research funding programme, changes were observed in 2014 – with a reduction of the number of evaluation criteria - and in 2016 – with some calls moving from in-person to virtual consensus meetings for expert reviewers. In this study, we assessed how these changes affected expert evaluation.

Methods: We analysed the data on scores for over 75,000 Marie Curie proposals from 2007 to 2018 from three type of grants. We assessed the Consensus Report (CR) scores and the average of Individual Evaluation Reports (IER) scores about the quality of the proposal, and the average deviation (AD) indices as a measure of the dispersion of reviewers' evaluations. We used interrupted time series analysis to compare the CR scores and AD indices across years, type of grants and scientific panels.

Results: For all three types of grants, there was a minor shift (less than one point on a scale from 0-100) in CR scores and AD indices when moving from in-person to remote consensus meetings, and there were small differences across different scientific panels. Proposals which had greater disagreement between reviewers had lower CR scores, across all type of grants and panels.

Conclusion: Changes in the assessment of Marie Curie proposals did not affect the review process outcomes, which remained stable over time.

Disclaimer: All views expressed in this description are strictly those of the authors and may in no circumstances be regarded as an official position of the Research Executive Agency or the European Commission.

Creating a conscientious environment of research integrity

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As occurs throughout Latin America, in Brazil there is mounting awareness that implementing research integrity (RI) by institutions cannot be further delayed. National councils dealing with ethical procedures for patients in clinical trials and for animal care are well established but other issues have not been legally addressed. Thus, a nationally based roadmap for the process does not exist and we must rely on procedures from countries with more advanced experience. We have had the opportunity of implementing the Office for RI in a non-profit Hospital involved in research and education (Nursing, Medicine), a process being built step by step to ensure acceptance and

compliance by researchers, physicians, and hospital staff. Starting in 2017 in the form of a three-person committee to get to a full office in December 2019, we have gained experience through preemptive auditing (from 9 audits in 2017 to 79 in the past year) of ongoing projects and recently published studies. In the course of these audits the more common flaws were identified and relayed to researchers under strict confidentiality, aiming to build acceptance and familiarity with the process. Today, in addition to randomized auditing, we carry out routine monitoring of graduation student projects (to speed up the learning curve) and government-funded studies, offer individual counselling where needed, give lectures on all subjects of interest at undergrad and graduation levels, and promote discussions in clinical meetings of all hospital departments. We also decided to go paperless and use Redcap, available at our institution. This secure web application is being increasingly used in Brazil and serves not only to create indicators and transparency but also to familiarize researchers with conducting trials under rigorous adherence to GCP. Finally, to establish our guidelines for research compliance and deal with research misconduct we have based our choices on European guidelines, which take into account a diversity of cultural backgrounds. Though one country only, the Brazilian population is culturally very diverse, with a high level of internal migration that must be taken into account if we aim to achieve success in conveying ethical concerns, guidelines, and institutional rules to guarantee RI.

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Renewing ethical boards of the University of Helsinki

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The University of Helsinki is assessing the duties of its own ethical review committees for the period beginning in 2022. The university currently has three ethics committees, operating on the basis of national guidelines (Finnish National Board on Research Integrity TENK) or reviewing research that falls out of the scope of legislation (laws governing experimental animals and medical research). Researchers have wished improvements to the services related to research ethics and to extend ethical review to other types of research, e.g., AI research. Feedback from researchers and their active participation in Lean workshops is crucial in the development of services and operations.

The Finnish System of Research Integrity Advisers

Iina Kohonen and Minna Aittasalo, Finnish National Board on Research Integrity TENK

Institutional guidelines and policies on research integrity education – Insights from the H2020 SOPs4RI project

Krishma Labib and Joeri Tjindik on behalf of the SOPs4RI consortium

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Background: To foster research integrity (RI), institutions are responsible for providing RI education (ALLEA, 2017). Successful RI education requires continuous efforts consisting of multiple approaches (e.g. courses, informal discussions) and targeting all research stakeholders. To implement continuous RI education, institutions need guidance on how to make RI education successful. In the SOPs4RI project, we aim to develop guidelines for research institutions on how to develop and implement successful RI education.

Methods: We have used a multi-stage guideline development process, consisting of different empirical steps, and involving various research stakeholders. First, we conducted a scoping review and interviews with 23 RI experts to identify existing best practices on RI and factors influencing their implementation. Next, we employed a Delphi study among 68 policy experts to obtain consensus on topics to include in RI policies. Subsequently, we conducted focus groups with 147 research stakeholders to explore their views on RI education policies. We then organized co-creation workshops with 16 RI experts to develop institutional guidelines on RI education.

Results: The created guidelines target 3 groups: 1) bachelor, master and PhD students, 2) post-doctorate and senior researchers, and 3) RI support staff. The guidelines emphasize the importance of providing continuous and enticing RI education for all target groups, although the form of education and incentives used to motivate participants varies. For instance, full courses are appropriate for PhD students, whereas senior researchers can rather follow smaller workshops on a specific RI element (e.g. open science). Stakeholders iterated that successful RI education requires strong institutional commitment to RI. Furthermore, they highlighted that while developing policies on RI education, institutions should not create unwanted bureaucracies and burdens for researchers.

Conclusion: Our guidelines provide an overarching strategy that institutions across Europe can use to develop and implement successful RI education policies, and thereby foster RI.

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The adaptation of institutional regulations of ethics committees to national recommendations

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The presentation will focus on the main results of the study on the congruence of the regulation of ethics committees of Lithuanian Research and Higher Education Institutions (HEIs) with the National Guidelines for the Approval, Embedding and Monitoring of Academic Codes of Ethics for HEIs (Recommendations) that were adopted in 2015 by the Office of the Ombudsperson for Academic Ethics and Procedures in Lithuania (Office). The aim of the study was to evaluate the congruence of the regulation of ethics committees at HEIs and the (pre-)conditions of embedding the principles of transparency and objectivity within their standard operating procedures. The study allowed to identify how some performance principles (e.g., confidentiality, impartiality) described in the Recommendations are exposed in practice. Such practices were divided in two periods – before the adoption of the Recommendations (until 2015) and then after the adoption of the Recommendations (since 2015).

The methods that were applied in the study embrace qualitative content analysis of 98 documents (e.g., institutional codes of ethics and regulations of ethics committees) and literature review (e.g., secondary sources).

Robert Merton's typology (1968) was used as the main rationale for the data analysis. As major findings of the study, we have discovered that HEIs adapt to the Recommendations in two main different types of modes: normative (conformity) or non-normative (innovation).

As main conclusion reached interpreting the results, it is important to note that it is evident that the role of ethics committees in Lithuania has been undergoing transformations, making wilful efforts to adapt but also to act in more self-regulatory manners (e.g., to adapt their regulation in a more interpretative or innovative ways) and, accordingly, to foster the advancement and performance quality in general sense.

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The protection of genetic data for research purposes in the European Union

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Health information about an individual, his offspring and his family members are contained in genetic data. For that reason, when processing genetic data for research or clinical purposes adequate privacy safeguards must be envisaged.

To date, there is not a comprehensive European legislation that specifically regulates the use of genetic testing or protects against the misuse of genetic information by private companies (health insurance and employers).

However, there are some relevant regulatory frameworks and benchmarks that deserve attention. This paper aims at analyzing and evaluating the current regulatory position in the EU (particularly

from a non-discrimination and data protection perspective) and at assessing the adequacy of EU legislation in protecting patients' rights against misuse of genetic information.

In 2016 the EU decided to update its data protection framework with the adoption of a new General Data Protection Regulation.

This paper will first analyze the protection of genetic data at international (International Declaration on Human Genetic Data) and regional level (the Additional Protocol to the European Convention on Biomedicine concerning Genetic Testing for Health Purposes, Recommendation CM/Rec(2019) on the protection of health-related data). Then it will highlight the current EU data protection framework, with a particular focus on the recent reform of data protection laws and the new Data Protection Regulation.

It will also evaluate the efficacy of this EU data protection regime in safeguarding genetic information, considering whether a complementary framework is necessary in order to provide appropriate protection of genetic data in Europe.

Identifying best strategy for fostering academic integrity: Qualitative comparative analysis

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The lack of institutional framework that supports academic integrity culture was identified as one of the main reasons for the alarming rate associated to the student cheating (Boehm, 2008). Previous research has examined how different institutional practices oriented to academic improvement—such as promotional activities, disciplinary policy, training, faculty assistance, communication, honor code — help institutions to reduce academic turpitude (e.g. Kibler, 1993; Bush, 2000; Boehm, 2008). For instance, scholars agree about the importance of effective communication, that clearly defines the institution's expectations of students, for combating academic dishonesty (Roth and McCabe, 1995; Clifford, 1998; Kibler, 1998; Gambill, 2003). The contradicting findings were found regarding the role of severity of the sanctions. More precisely, while Tom and Borin (1988) suggest that the probability of cheating decreases with more severe penalties for cheating, McCabe and Trevino (1997) find the opposite. Furthermore, Hall (1996) reveals that honor code has imperative role in decreasing students' attitude towards cheating. In addition, Gambill (2003), using information from liberal art institution, demonstrates that training, communication, honor code, sanctions and effective classroom management could be considered as beneficial initiatives for combating students' cheating.

However, relying only on one practice, for instance honor code, is not sufficient to prevent academic dishonesty, hence institutions should employ various practices related to academic integrity that foster academic integrity culture (Boehm, 2008). Yet, previous literature mainly examines how particular (individual) academic integrity practice discourages academic dishonesty. Very little is known, how different practices for promoting academic integrity interplay in order to create a more holistic strategy that enhance academic integrity culture.

Actually, the synergy between different academic integrity practices is needed to meaningfully encourage academic integrity culture. Therefore, we adopt a qualitative configurational analysis (QCA), on the sample of students from University of Montenegro, to extend previous studies by identifying which combinations of academic integrity practices can be considered as the most

effective strategy for fostering academic integrity. As stressed by Gambil (2003), identifying best strategy for a specific institution will give valuable direction to other institutions that want to reconsider their academic integrity strategies.

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Robustness of grant evaluation

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Most funding agencies rely on peer review to evaluate grant applications and proposals, but research into the use of this process by funding agencies has been limited. We explored if two changes to the

organization of peer review for proposals submitted to various funding actions by the European Union had an influence on the outcome of the peer review process. The first change came in 2014, when FP7 gave way to the Horizon 2020 (H2020) programme: one consequence of this was that the number of evaluation criteria applied to assess applications was reduced from four or more to three: excellence, impact, and implementation. The second change was the replacement of in-person meetings by virtual meetings for a number of funding actions. Based on an analysis of more than 75,000 applications to three actions of the Marie Curie programme over a period of 12 years, we find that the changes in the evaluation process from FP7 to H2020 had little impact on the outcome of the peer review process, measured as the agreement of reviewers, which seem to be robust and resistant to organizational changes. Our results also indicate that other factors, such as the type of grant or area of research, have a larger impact on the outcome.

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Disclaimer: All views expressed in this description are strictly those of the authors and may in no circumstances be regarded as an official position of the Research Executive Agency or the European Commission.

How to find the right tool at the right time? Collecting and characterizing existing and freely available research integrity educational resources

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Besides the development of guidelines and codes of conduct, formal and informal trainings are other possible ways to promote research integrity (RI)¹ within the scientific community. An important element of formal RI training sessions is the presence of well-structured educational resources. Considerable amounts of educational resources have been already developed in the last years. Therefore, it seems to be no urgent need to develop new resources. Instead, there is a need to make those resources easily and clearly identifiable via a well-defined system of characterization. The aim of the study is to collect and to characterize educational resources, helping institutions and research teams to develop their own training using pre-existing educational material.

We collected RI educational resources using as main inclusion criteria the possibility to find them freely available online. We used Google as the main search engine, elaborating on an implemented version of an already used list of keywords². We did not consider in our search blogs and newspaper articles. For the categorization process, we selected 21 different criteria in order to clearly identify each resource within our collection as well as future resources.

We developed a grid made by 237 educational resources that give us a full description of each collected resource. Our collection is mainly made by video and online trainings, mainly from the US and Europe. The resources are mostly not customized, presenting the big three (falsifications, fabrication, and plagiarism) as the most addressed topics.

Creating a RI collection of educational resources might help institutions and trainers in developing new training without the need to develop new tools and might help if there are lacunas to be filled.

Moreover, the characterization we provide may help researchers and students in dealing with daily RI-related issues, looking for the right tool at the right time.

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Revised guidelines for safeguarding good research practice by a funding organization – Embedding a new culture of research integrity

Dr. Sonja Ochsenfeld-Repp (Head of Division) and Martin Steinberger (Director/Head of Unit Research Integrity), Equal Opportunities, Research Integrity and Cross-Programme Development division of German Research Foundation (DFG), Germany

Only the research community itself can safeguard good research practice, primarily with organizational and procedural regulations. Research Integrity is the basis for trust-worthy research. Factors such as the digital turn in the Sciences and Humanities, changes in publishing and legislation, and debates surrounding whistleblowing and predatory publishing have triggered far-reaching changes in research practices, prompting the need for a thorough revision of our guidelines for safeguarding good research practice. The new Code of Conduct now addresses current global issues, defines new standards in research practices and fosters a positive approach to research integrity. Rather than concentrating on breaches of good research practice, the Code focuses on the professional ethics of researchers. It is structured according to a 'three-level model', which is designed to reflect the different levels of abstraction within the text. The printed version of the Code includes levels one and two; the third level is recently available as a dynamic online portal (<https://wissenschaft-liche-integritaet.de/>, English version will follow in 2022). The focus of this commentary is on discipline-specific quality assurance measures applying for each step of the research process. The content has been and will be compiled in a series of dedicated expert workshops. Hence, close links with universities and non-university research institutions are particularly important, for the various stakeholders gaining ownership of the topic of research integrity. The guidelines are supposed to have a structuring effect and to contribute to the further development of standards in the respective national research system. To qualify for funding by our organization, all universities and non-university research institutions must implement both, level one and two of the guidelines in the Code in a legally binding manner.

Gift or guest authorship among supervisors and students

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This presentation will share some insights related to unethical authorship investigated by the Office of the Ombudsperson for Academic Ethics and Procedures in Lithuania (Office). It is mainly aimed

to focus on cases related to gift or guest (honorary) authorship occurred in publishing a paper co-authored by a student and his/her supervisor as well as other scientists. Hence, boundaries of supervisor's functions and authors' contribution will be discussed.

As main method to investigate the issue was chosen at least 4 cases related to the Honorary authorship at the Office that have been examined during the year 2019. Therefore, the source of data is the investigations of certain violations of academic ethics carried out by the Office.

There are many different fields which may vary in their common practice, and particularly in this case, information in the abstract was collected in field in social sciences.

It was concluded that both students, supervisors and reviewers would take gift or guest authorship as a regular practice for a few reasons. First, it is considered as a kind of gratitude for helping a student while writing a final paper. Second, supervisors feel entitled to be listed among authors because they were not able to isolate their functions of the supervisors and interfere with an autonomous work of the undergraduate.

It is still a common to conclude that including a supervisor as an author if supervisor had not contributed to the publication directly is both common and thought to be an ethical practice. If a supervisor wants to be included, supervisor must have had contributed to the publication more than being a supervisor. In Lithuanian law of Copyright there are strict and clear provisions on what is considered an object of copyright, and ideas or editorial work is not considered as one. In publications where supervisor is legally recognised as a co-author, but the final thesis does not differ from the publication, there are reasonable doubts as to whether the final thesis was prepared by a student independently.

As an implication for further action, workshops and guidelines for supervisors and last-year students, especially in doctoral studies, are crucial not only nationally, but also institutionally.

Greek institutional Research Ethics and Deontology Committees: experiences from the first three years of operation

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Since September 2018 the institutional Research Ethics and Deontology Committees (REDCs) have started operating within all publicly funded Greek Universities and Research Centers. Additionally, these institutes have been obliged to align their Codes of Conduct by integrating the responsibilities of the newly founded REDCs. Since then, the authors have been conducting a mapping exercise regarding the implementation of the new law, and the first results were presented at the 6th World Conference of Research Integrity. The authors have started expanding their survey beyond the EARTHnet members, in order to obtain a more representative picture of the challenges with regard to: (a) selection of the REDC members, (b) interaction with the institutional agencies and academia, (c) implementing ethical assessment in publicly funded research, and (d) repercussions due to the COVID-19 pandemic. This 2nd phase of the research is going to run from February until September 2021, and its aim is to reach out and receive feedback from the REDCs of all major publicly funded Greek Universities and Research Centers. The survey will be conducted through an online survey.

The objective is to report all recent developments and experiences regarding the operation of REDCs, and, additionally, to indicate the handling of interdisciplinary projects by the Committees. Further, this exercise aims at contributing to the on-going dialogue regarding the possibility of the creation of a National Committee of Research Ethics and Research Integrity in Greece and a subsequent National Code of Research Conduct.

Implementation matters! Research administrators in Ethics and Research Integrity

Borana Taraj, EARMA

EARMA is the European Association of Research Managers and Administrators. In 2018, it established the [Ethics and Research Integrity Officer Network²](#) (ERION) thematic group. ERION is an open community to discuss the practical and implementation side of Research Ethics and Integrity. It is a community of practitioners, rules and procedure experts, and its main purpose is to provide a forum for knowledge-sharing and collaboration in order to facilitate implementation of relevant policy and establishment of best practices.

A key component of ERION is the [H2020 Standard Operating Procedures for Research Integrity³ \(SOPs4RI\)](#) project (2019-2022) where EARMA has partnered together with other 12 organisations across Europe. SOPs4RI is working to promote excellent research and a strong research integrity culture that aligns with the European Code of Conduct for Research Integrity. ERION is closely working with the H2020 SOPs4RI partners to promote institutional changes in research integrity for an effective implementation in research administration.

2020 was a challenging year for ERION as for all in times of COVID-19 crisis. While events moved to online, this opened an opportunity to reach out to more colleagues across Europe. The size of the online events increased in number (from 2 to 4) and size (from 30-40 to more than 100 participants). Around 250 are members of the community and also have the opportunity to be part of a web communication platform (SINAPSE) of the European Commission. Topics discussed in past meetings included: GDPR implementation, research data management, training, ethics support in times of COVID-19, research evaluation and many others. In 2021, the focus will be on Horizon Europe, Open Science and the implementation of the ALLEA-code, the European Code of Conduct for Research integrity.

Ethical reasoning and protocols for improving the scientific integrity

Christian Toinard, Full Professor in Computer Sciences, INSA Val de Loire – LIFO, Officer of deontology, scientific ethics and integrity of INSA Val de Loire, France

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This presentation addresses different considerations about a better and may be a stronger science. The purpose is to improve the scientific integrity with ethical objectives. It follows the history of the relationships between ethics and scientific integrity. Indeed, François Rabelais, a French writer and

² <https://www.earma.org/about/governance/thematic-groups/ethics-and-research-integrity-officer-network-erion/>

³ <https://www.sops4ri.eu/>

physician, stated that science without conscience is nothing but the ruin of the soul. Robert Merton demonstrated in 1957 that the culture of science is pathogenic addressing thus the illness of the scientists. Recent advances show why most research results are false or useless. Since, integrity is difficult to reach, ethical choices must be discussed. Thus, a participative reasoning can address the conflicts among a set of ethical and scientific objectives e.g. operational issues versus advanced scientific approaches. That reasoning provides the ethical choices and the corresponding protocols of research e.g. reversibility of the approach with a protocol showing the advantages and the limitations. Since ethics is a matter of choice and scientific integrity is difficult to demonstrate, participative science can help to cope with bad societal orientations, conflicts of interest, pathogenic behaviors and authoritative positions. However, ethics and scientific integrity also can serve political objectives with a poor consideration of social benefits whatever be the approach. Thus, freedom of research and direct democracy remain major protections of true and good science.

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Training for research integrity and research ethics: a scoping review

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Objective: To collect and assess different materials that exist or could be used in research integrity (RI) and research ethics (RE) training of students, researchers and members of RI and RE bodies.

Methods: A systematic search of databases PubMed, Scopus, Web of Science, as well as RRI Tools, Netherlands Research Integrity Network, and grey literature for training opportunities. Publications considered relevant for inclusion were journal articles which describe interventions aimed at improvement of RE and RI attitudes and/or behavior. We considered any kind of course or a methodological approach aimed at identification of best RE, RI or responsible conduct of research (RCR) practices to be an intervention. We extracted data on country, research area, target population, focus and addressed topics, methods, educational approach, delivery mode, duration, outcome assessment, key findings, identified gaps and availability of materials.

Results: Our search retrieved 59,249 results. After removal of duplicates and screening of titles and abstracts by two independent reviewers, 99 articles were selected for analysis. Majority of the trainings were developed in United States (69.7%) and in Europe (10.1%), after 2009 (69.7%). The leading research area of development was biomedicine and health (41.4%), followed by social sciences (15.2%) and engineering and technology (13.1%). Trainings were oriented at students only (54.5%), with only a few developed for a mixed audience (9.1%). Main focus of the interventions was RE (59.6%), followed by RCR (25.3%), and RI (5.1%). Topics included: FFP, authorship, data management, conflict of interest, and peer review, among others. Majority of the interventions were

face to face, and included case studies, role-play and scenarios, in combination with lectures. Interventions measured diverse outcomes, and mostly had positive evaluation results.

Conclusion: Very few trainings consider the concepts of RI, despite the 2014 Singapore Statement. There is a clear lack of comprehensive and measurable outcomes. While it might be difficult to assess how an effective education in RE+RI should look, future research and education should focus on clear outcomes and sustainable ways of measuring them.

An evaluation of scientific virtues for ethics and research integrity training

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Objective: In order to develop the virtue-based ethics and research integrity (ERI) training programme, it is necessary to identify and evaluate which virtues should be stimulated and prioritised in training for good research practice.

Methods: We conducted two focus groups discussions with 21 participants from different stakeholder groups involved in the research and a scoping review study of scientific virtues addressed in ERI training. Based on the results from these studies, we developed a questionnaire for a modified Delphi consensus process in three rounds.

Results: Three main themes were developed from focus group discussions: “relativity of virtue meanings and understandings”, “acquisition of virtues through social interactions”, and “differing importance of particular virtues in research”. The participants had different understanding of the concept of virtue, but they mostly saw them as positive personal characteristics and traits of admirable quality. They emphasised honesty as the most important virtue for good research practice. Our scoping review findings indicate that the majority of included publications were focused on academic integrity and research ethics, and they were most frequently designed as post-test evaluations. Most frequently addressed virtues in these publications were integrity, responsibility and honesty. The Delphi consensus process on scientific virtues was able to reach consensus among a panel of experts on the majority of statements included in this study. We presented 90 different statements grouped under 5 topics to the experts and obtained a consensus among them on 62 statements (68.8%). Experts reached consensus on 35 of 54 presented virtues in research which are important in the ERI training. Honesty and integrity achieved the highest agreement among experts.

Conclusion: The results from focus group discussions, scoping review study and a modified Delphi consensus process should be taken into consideration in the process of developing ERI training programme.

TETRIAS: translating researchers' experiences into training on research integrity at universities of applied sciences – interviews to set the training agenda

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In 2018, the universities of applied sciences (UASs) in the Netherlands signed the Dutch code of conduct on research integrity (RI). By doing so, the UASs have committed themselves to take care of an open and safe research culture, proper management of research data, honest and open agreements on the research data, setting research ethics standards and advice, and to the training of their researchers. However, so far UASs themselves hardly offer any systematic training in the field of RI.

Our goal is to enable the UASs in The Netherlands to meet their obligation to provide their researchers access to a basic training course in the field of RI. To that goal, we will systematically develop a blended training course that provides online information on integrity topics and offers researchers the opportunity to deepen important, and for their specific situation relevant topics through group-discussions and meetings with experts.

The training is to be tailored to the needs of the researchers in UASs. For that purpose, twelve interviews with junior and senior researchers were held before designing the training. Topics to be discussed were: what makes a good UAS researcher; which norms of the Dutch Code of Conduct researchers do and do not recognize, and which needs for RI training do they identify? Preliminary analysis of the interview-data shows that researchers primarily relate integrity issues to 'data management', 'privacy', and 'researcher independence'. In contrast, they relate RI very little to topics such as 'research waste', 'FFP', and 'virtues'. The interviewees do speak clearly about the great need to develop a research culture in the UASs.

The (preliminary) results will be presented at the congress as well as our considerations regarding the design and content of the course.

Best practices for fostering research integrity – results from the INSPIRE project

Dorien van der Schot, the INSPIRE Project and the Netherlands Research Integrity Network, VU University Amsterdam, the Netherlands

A description of the project

In recent years attention for research integrity increased substantially, underlined by revised codes of conduct, research projects and initiatives to foster research integrity. The INSPIRE project (Inventory in the Netherlands of Stakeholders' Practices and Initiatives on Research integrity to set an Example)¹ aims to collect, classify and share best practice initiatives with the purpose of inspire stakeholders to foster research integrity.

Relevance to research integrity practice

A lot of initiatives to foster research integrity have been developed, but these are not easy to find. We conducted a systematic inventory on these initiatives and found a diversity of initiatives, ranging

from research integrity education, changing research culture, raising awareness to codes of conduct, and implementation of procedures and policies.

The expected or achieved outcomes of the project

Our project has led to an inspiring and useful collection that will be made freely available in an online toolbox in The Embassy of Good Science (<https://www.embassy.science/>). A selection of best practice initiatives from the toolbox will be presented in a structured format.

We will also provide an overview of the content of the toolbox in its current form and indicate how many initiatives we found for the major topics research performing organizations need to take action on when wanting to foster research integrity.

¹ Netherlands Research Integrity Network. Inventory in the Netherlands of Stakeholders' Practices and Initiatives on Research integrity to set an Example (INSPIRE project) [Inspire \(nrin.nl\)](https://www.inspire.nl/)

Organizational climate in academic organizations

Marin Viđak (1), Lana Barać (1), Ivan Buljan (1), Ružica Tokalić (1), Darko Hren (2), Ana Marušić (1),
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Introduction. Ethical climate (EC) is a type of organizational work climate reflecting practices, procedures, and policies with moral consequences (1). It is associated with more positive teamwork (2), performance and job satisfaction (3) and employees' response to ethical dilemmas (4). Previous research showed differences in the perception of EC by the employees at medical, technical and humanities faculties (5).

With our research we plan:

1. To collect and synthesize existing interventions for improving EC;
2. To explore whether medical and humanities students have similar perception of the EC compared to staff, and whether moral foundations correlate to EC perception;
3. To gain in-depth understanding of EC through interviews at University of Split School of Medicine (USSM) and Faculty of Humanities and Social Sciences (FHSS).

Methods

1. Scoping review

We searched Medline, Web of Science, Scopus, PsycINFO and ERIC, as well as grey literature databases. We included articles describing interventions for improving EC in organizations.

2. Cross-sectional study

We conducted a survey by using EC (6) and Moral Foundation Questionnaire (7). Participants were full-time staff and senior students from USSM and FHSS.

3. Qualitative study

We performed 11 semi-structured interviews, using purposive sampling to reach participants at different stages of careers. Interviews were conducted in Croatian, voice recorded, transcribed and analysed.

Results

1. Scoping review

We included 34 studies in the final analysis. Interventions had positive impact on workplace environment, performance, and reduced perceptions of an ego-involving climate.

2. Cross-sectional study

The dominant climate at both schools was Organizational Rules and Procedures. The Perception of EC of medical students did not differ from the staff, but humanities students had lower perception of self-interest climate, and higher perception of caring climates than the humanities school employees.

3. Qualitative study

Five themes were identified: climate, relationships, interests, role of institutions, and work organization. Participants view the leadership of the institutions as the main determinant of the climate.

Conclusion

EC perceptions do not differ significantly between students and employees. Leadership, rules and procedures are considered to have the largest impact on EC. Interventions can positively impact workplace environment.

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Who made the biggest cheating? Students' opinions about plagiarism made by different persons

Dijana Vucković* and Sanja Pekovic, University of Montenegro, Montenegro

Plagiarism has become one of the strongest threats to the quality of research across different regions and cultures (Glendinning, 2016; Thomas, 2017). Many individuals, groups, even institutions are breaking academia rules, with modern technology, internet and social media helping them to plagiarise and to create new cheating forms (Lancaster, 2019; Tauginiene et al., 2018). In recent taxonomies of cheating behaviour, 17 forms of plagiarism have been identified up to now (Tauginienė et al., 2019). The number of persons involved in such a behaviour is also growing.

Our aim in this research was to identify students' opinions about plagiarism made by several personas (student, teacher, student + ghost writer) with the purpose to create (a part of) strategy to prevent plagiarism. We opted for a mixed methodology based on three case studies. These case studies were included in the questionnaire with several identical questions for each of them asking for explanations of unethical behaviour, its causes and consequences, and asking for ideas how to deal with a problem. After respondents (N=120, students of bachelor, master, and doctoral studies) filled the questionnaires, we organized three focus-group discussions with 18 participants (students of master's and doctoral studies). Focus-groups discussions were driven around three cases of plagiarism and each time we started with the same question (Who cheated most?) with the aim to provoke our respondents to explain in detail their opinions about plagiarism. The data processing was done according to qualitative and quantitative procedures (Fern, 2001; Fraenkel, & Wallen, 2000; Yin, 1994).

The results show that our respondents are stricter towards plagiarism made by academia members, especially teachers, while ghost writers were evaluated in a more permissive way ("it's not their fault"). Our respondents underlined the opinion – there is no big or small plagiarism, each type should be legally processed, because "small" cheating threatens to become much bigger. In order to prevent plagiarism, our participants think that there is a need to learn more about academic writing and ethical reasoning for students, and to develop better professional competences of teachers – they should be more competent and interested in students' research works. We proposed several recommendations to prevent plagiarism during bachelor studies and beyond.

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Preventing predatory publishing: the CNR's Italian guidelines for researchers

Roberta Martina Zagarella*, Marco Annoni and Cinzia Caporale. CNR Interdepartmental Center for Research Ethics and Integrity (Italy), Italy

Today, it has been widely acknowledged that predatory publishing represents a crucial issue in research integrity, as it introduces significant distortive effects on (a) the fair competition between research projects, researchers, and research institutions; (b) academic and scientific careers; (c) the allocation of research funds; (d) and, more generally, on the progress of scientific knowledge. Moreover, predatory publishing has been linked with an increased likelihood of spreading fabricated, falsified and erroneous data and conclusions, as well as with the dissemination of fake news that may negatively affect the public debate over relevant societal issues.

As a consequence, in recent years, the scientific community has begun to take action with the aim of mitigating and controlling for the effects of predatory publishing. Often, these actions entail two steps: (i) the creation of “black lists” of “predatory” journals and publishing companies; (ii) and a series of measures aimed at both recognizing and discouraging publications in such journals.

However, creating such “black lists” is a challenging endeavor, in part because it is difficult to choose a set of unambiguous criteria to distinguish between predatory and legitimate journals; and, in part, because many leading scientific publishers have in some cases begun to adopt marketing strategies that are similar to those adopted by predatory publishing companies.-

Against this background, in this poster we present a series of practical recommendations aimed at preventing and controlling for the risks that researchers – especially those who are at the early stages of their career – fall prey to predatory publishing. These recommendations are now part of the first Italian guidelines on the issue of predatory publishing, which have been recently published by the Research Ethics and Integrity Committee of the Italian National Research Council (CNR).

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WORKSHOP DESCRIPTION

1. Opening and sharing of personal data: ethical and legal issues and solutions

Monday, 27 September, 10-12 am CEST. No preregistration. Link to the workshop will be posted on the congress platform.

Description

When working with personal data, the General Data Protection Regulation (GDPR) poses an ethical conundrum to European researchers: the protection of the personal data of the study subjects can limit the transparency and sustainability of the scientific process by restricting data sharing and reuse. The aim of this workshop is to identify solutions that are both ethical and GDPR-compliant for the sharing of research personal data with the global scientific community. The workshop will present some existing solutions by actually showing how to adopt them in practice. Participants will learn how to adapt those solutions to their specific research case, while engaging in the discussion of the compromises and risks that each solution might carry.

Organisers

- **Enrico Glerean**, staff scientist, Aalto University, Finland (neuroscience, brain imaging, scientific computing)
- **Cyril Pernet**, Senior Research Software Engineer, Copenhagen University Hospital, Copenhagen, Denmark (neuroscience, brain imaging, open science)
- **Richard Darst**, staff scientist, Aalto University, Finland (scientific computing)
- **Riitta Salmelin**, professor, Department of Neuroscience and Biomedical Engineering, Aalto University; member of TENK, Finland (neuroscience, brain imaging, research ethics)
- **Maria Rehbinder**, senior legal counsel, Aalto University, Finland (GDPR for research, Finnish and European legislation, IP)
- **Päivi Lindström**, legal counsel, Aalto University, Finland (GDPR for research, Finnish and European legislation)
- **Ilari Lähteenmäki**, project manager, Aalto University, Finland (research data management, security)

2. Teaching research ethics to different learners

Monday, 27 September, 12.30-14.30 CEST. No pre-registration. Link to the workshop will be posted on the congress platform.

Description

The motivation behind this workshop lies in experiences of teaching research ethics to doctoral candidates with diverse backgrounds. Among other things, there are differences in students' attitudes regarding research integrity and research ethics. Doctoral candidates differ with respect to their degree of interest, the experienced relevance to their own research, tendency to care about ethics, and how ethics is understood (instrumental or intrinsic; tool for advancing good science or restriction of research). The aim of the workshop is to bring together teachers with wide

experience on research ethics training to discuss the question how to acknowledge the differences between students.

The workshop contributes to developing teaching of research ethics. The learning objective is to find practical solutions as well as to develop new practices for teaching. The workshop will consist of an introduction, four short presentations on particular challenges and solutions related to above topics, questions and a concluding discussion.

Organisers

- **Helena Siipi**, Research integrity adviser, teacher of research ethics courses (University of Turku, Finland)
- **Susanne Uusitalo**, Research integrity adviser, teacher of research ethics courses (University of Turku, Finland)

3. “And suddenly you are an ombudsperson...” – Framework conditions for professional ombudsman work at scientific institutions

Monday, 27 September, 10.30-12.00 CEST. Pre-registration required, max. 25 participants. FULL. Link will be sent to the participants.

Description

The workshop is aimed at ombudspersons and RI advisors who advise scientists in their respective institutions on issues of good scientific practice and work towards compliance with RI standards by means of various measures. Ombudspersons and RI advisors often assume this office, which is associated with complex challenges, without having been specially qualified or trained for it. Ombudspersons may therefore be unprepared for the time and personal burdens associated with dealing with cases of conflict. In addition, there is a lack of clearly defined responsibilities and limits for ombudsperson activities.

In this workshop, we want to reflect on the framework conditions of ombudswork together with the participants and, based on their experiences, identify best practices for a professional exercise of ombudsman work and for dealing with its burdens.

Organisers

- **Dr. Katharina Beier**, Ombuds Office for Good Scientific Practice (University of Göttingen)
- **Helga Nolte**, Ombuds Office (University of Hamburg)

4. Research assessment exercise: How to incentivise RI

Monday, 27 September, 13:30-15:00 CEST. Pre-registration, max. 30 participants. FULL. Link will be sent to the participants.

Description

How researchers are assessed influences how they conduct their work. Current approaches to evaluation, often focusing on quantitative measures such as number of publications, journal impact factor or level of outside funding, have created a system wherein the quality and integrity of

research are jeopardized. By rewarding preferred practices, however, institutes can promote responsible conduct.

In this interactive session, participants will learn about connections between research culture, evaluation and integrity. In small groups, they will have the opportunity to identify and discuss what practices they would like to see encouraged in their own work contexts, and why. Participants will leave with insights into options for fairly assessing and incentivizing these practices.

Organisers

- **Helen Sitar**, Science Policy Programme Officer, EMBO & Community Coordinator, San Francisco Declaration on Research Assessment (DORA)
- **Sandra Bendiscioli**, Senior Science Policy Programme Officer, EMBO

5. Cross-border investigations: The Hawaiian-Austrian case

Monday, 27 September, 9-10.30 am CEST. No pre-registration. Link to the workshop will be posted on the congress platform. The workshop can accommodate 100 participants.

Description

Research is increasingly becoming an international endeavour. Not only do researchers change positions and work abroad, applying their training to different cultural and regulatory contexts, but also cooperative research involving multiple funders and institutions is becoming the norm. Mutual trust as a fundamental requisite to collaboration can be difficult to establish, particularly when researchers hail from different institutions and countries and are unable to communicate frequently other than via email and remote platforms. Many collaborations lead to vibrant new innovations, but sometimes things go wrong. Using a hypothetical Hawaiian-Austrian case of research misconduct, together we will explore the challenges in cross-border investigations. With various scenarios and options for decision-making, attendees will be invited to help resolve the many questions that arise when multiple jurisdictions are involved. The aim of the workshop is to offer insights into how similar scenarios might be addressed when they arise in real life.

Organisers

- **Zoe Hammatt** (University of Hawaii School of Medicine)
- **Nicole Föger** (Austrian Agency for Research Integrity)

The workshop organisers are members of the World Conferences on Research Integrity Governing Board and co-creators of the informal Global Research Integrity Network.

6. Teaching the responsible conduct of research – challenges and lessons learned

Monday, 27 September, 10.30-12:00 CEST. Pre-registration required, max. 40 participants. FULL. Link will be sent to the participants.

Description

Irresponsible research practices and scientific misconduct often occur because knowledge and understanding are lacking. Repeated instructions on good scientific practice (GSP) and research

integrity (RI) can be considered as preventive measures. Nevertheless, there are many questions about what should be taught, when it should be taught, and how instruction is best delivered.

We invite ENRIO Congress participants to discuss with us their questions and concerns about teaching GSP/RI. Those interested can send us their questions and concerns prior to the Congress. Depending on the topics, registered participants will be divided into three groups each led by one of our facilitators. The facilitators are part of Team Scientific Integrity that has directed over 800 educational sessions and train-the-trainers courses on GSP/RI at universities and non-university research institutions in Europe and Asia since 2009.

The workshop organisers will contact the participants in advance to ask for their topics of interest, questions or concerns about teaching GSP/RI.

Organisers

- **Dr. Michael Gommel**, M.A. (corresponding author)
- **Dr. Julia Verse**
- **PD Dr. Dr. Gerlinde Sponholz**
Team Scientific Integrity

7. Responsibility of research funders for safeguarding good research practice

Monday, 27 September, 15.30-17.00 CEST. Pre-registration required, max. 60 participants. FULL. Link will be sent to the participants.

Description

With regard to the important role of funding organizations in establishing and maintaining standards of good research practice, possible areas of action (prevention/repression) concerning the protection of scientific integrity will be identified and discussed in this workshop using a fictitious research funding organisation as an example.

In six themed breakout sessions, the workshop participants can contribute their own experiences, challenges, best practice examples and ideas regarding the potential areas of action and options for research funding organisations, as well as their limits of responsibility and authority.

The outcome of the workshop should be recommendations for the programme, procedure and process design of the fictitious organisation, which will be presented to the whole group for shared reflection. In this way, participants will gain an enhanced awareness of the various scopes for action of funding organisations, acquire suggestions for their national funding systems and thus contribute to the development of standards across Europe.

Organisers

- German Research Foundation
- Deutsche Forschungsgemeinschaft (DFG)

Equal Opportunities, Research Integrity and Cross-Programme Development division:

- **Dr. Sonja Ochsenfeld-Repp** (Head of Division)
- **Martin Steinberger** (Director/Head of Unit Research Integrity)

- **Gabriela Bahadori** (Officer – Unit Research Integrity)
- **Kerstin Gemünd** (Officer – Unit Research Integrity)
- **Dr. Kirsten Hüttemann** (Director – Unit Research Integrity)
- **Dr. Philip Ridder** (Officer – Unit Research Integrity)

Life Sciences 2 division: Microbiology, Immunology, Neurosciences:

- **Dr. Tobias Grimm** (Head of Division)
- **Dr. Andreas Görlich** (Programme Officer)

8. I spy with my little eye: Improving image integrity awareness in scientific publishing

Monday, 27 September, 16.30-18.00 CEST. Pre-registration required. Max. 60 participants. FULL. Link will be sent to the participants.

Description

Image reporting issues present a significant publication ethics concern in scientific publishing. These issues, even when arising due to honest errors, affect the reliability of the public record and are detrimental to public trust in research. This workshop provides practical training that you can apply in your role as author, editor, reviewer, mentor, or reader, with the ultimate aim of improving the integrity of image reporting in scientific publishing. This workshop aims to (1) familiarise you with good practice guidelines and common errors/concerns in image data reporting; (2) equip you with skills that will help you – as author, reader, reviewer, or editor – to critically assess image data and identify common issues; and (3) discuss the roles and responsibilities of publishers, consultants, authors, and readers in addressing and resolving image integrity concerns, and provides guidance on the steps to take when encountering image integrity issues during peer review or after publication.

Notice of recording: The presentation section of the workshop will be recorded. During the recording, the attendees are muted and their cameras are off. The interactive sections will not be recorded. The recording of the presentation will be made available on the online platform, where the registered participants of the congress have access to it.

Technical requirements: Attendees are recommended to use a laptop/desktop. Mobile devices will likely not be sufficient for viewing the details of the images that will be discussed during the workshop.

Organiser: **Maria Zalm**, PhD. Senior Editor, Publication Ethics – PLOS (Public Library of Science)

9. Expanding horizons for Research Integrity practice

Monday, 27 September, 13.30-14.45 CEST. No pre-registration. Link to the workshop will be posted on the congress platform.

The Horizon 2020 framework programme leaves a substantial corpus of knowledge on various aspects of Research Integrity and its practice. The intended outcome is to render research in Europe more reliable, more open, and closer to societal values, needs and concerns. In this workshop a panel of researchers, representing different H2020-funded projects under the Science with and for Society (SwafS) calls, explore new opportunities for enhancing the added value of SwafS projects and their impact to researchers, research performing and funding organizations, and research administrators.

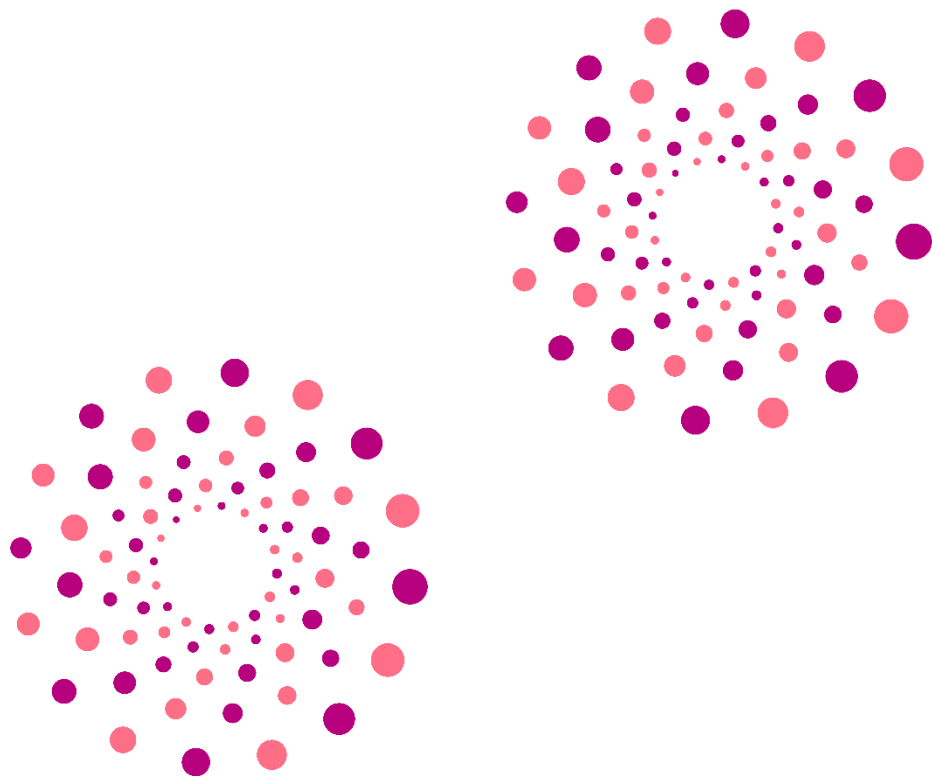
The interaction is structured in the following way:

- Panelists representing new projects introduce their main objectives
- Panelists representing mature projects introduce their main outcomes and what they consider the project's 'legacy'
- Panel discussion on the opportunities of cross-fertilization of knowledge between projects
- Participation of the audience with questions to the panelists.

Panelists

- **Dr. Eva Buchinger**, Austrian Institute of Technology (coordinator of TechEthos)
- **Prof. Søren Holm**, Department of Law, School of Social Sciences, University of Manchester (coordinator of ROSiE)
- **Prof. Niels Mejlgaard**, Department of Political Science, Danish Centre for Studies in Research and Research Policy, Aarhus University (coordinator of SOPs4RI)
- **Dr. Ralf Lindner**, Head of the Competence Center Policy and Society, Fraunhofer Institute for Systems and Innovation Research (coordinator of SUPER MoRRI)
- **Assis. Prof. Natalie Evans**, Ethics, Law and Medical Humanities, Amsterdam University Medical Centers (representing VIRT2UE)

Organiser: **Panagiotis Kavouras**, Physicist, MSc, PhD. Senior researcher at National Technical University of Athens.





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