POSTER ABSTRACTS

These virtual posters consist of a poster pdf and a short presentation video. They can be viewed in the poster rooms of the congress platform.

***

Ethics evaluation of Horizon 2020 grant proposals

Ivan Buljan*, Department of Research in Biomedicine and Health, University of Split School of Medicine, Split, Croatia
David Pina, European Research Executive Agency, Brussels, Belgium
Ana Marušić, Department of Research in Biomedicine and Health, University of Split School of Medicine, Split, Croatia

POSTER

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.

References

Buljan I, Pina DG, Marušić A. Ethics issues identified by applicants and ethics experts in Horizon 2020 grant proposals [version 1; peer review: 2 approved]. F1000Research. 2021, 10:471. (https://doi.org/10.12688/f1000research.52965.1)

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

Ivan Buljan*, Department of Research in Biomedicine and Health, University of Split School of Medicine, Split, Croatia
David Pina, European Research Executive Agency, Brussels, Belgium
Ana Marušić, Department of Research in Biomedicine and Health, University of Split School of Medicine, Split, Croatia

POSTER

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 form 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.

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

Dr. Gabriela Bahadori and Dr. Philip Ridder, the Equal Opportunities, Research Integrity and Cross- Programme Development division, German Research Foundation (DFG), Germany

POSTER

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.

Creating a conscientious environment of research integrity

Anna Carla Goldberg*, Anna Davison and Luiz Vicente Rizzo, Albert Einstein Research and Education Institute, Hospital Israelita Albert Einstein, São Paulo, Brazil

POSTER

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.

References

Rodríguez E, Lolas F. The topic of research integrity in Latin America. *Bioethikos*. 2011;5(4):362-368.

Rigor e Integridade na Condução da Pesquisa Científica - Guia de Recomendações de Práticas Responsáveis. Academia Brasileira de Ciências, Brasilia, 2013: 13 pgs.

The European Code of Conduct for Research Integrity. Revised Edition, Allea, Berlin, 2017, 11 pgs.

Gift or guest authorship among supervisors and students

Kamilė Kapočiūtė-Sabaitienė, Senior Specialist of the Office of Ombudsperson for Academic Ethics and Procedures, Lithuania

POSTER

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.

Renewing ethical boards of the University of Helsinki

Aura Kivilaakso and Seija Oikarinen, Research Services, Support for Research Management, University of Helsinki, Finland

POSTER

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.

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

Krishma Labib and Joeri Tijdink on behalf of the SOPs4RI consortium. Amsterdam UMC, Vrije Universiteit, Department of Ethics, Law and Humanities, Amsterdam Public Health Institute, Amsterdam, the Netherlands

POSTER

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.

References

ALLEA (2017). The European code of conduct for research integrity. Retrieved from: http://www.allea.org/wp-content/uploads/2017/04/ALLEA-European-Code-of-Conduct-for-Research-Integrity-2017.pdf
Kalichman, M. (2013). A brief history of RCR education. *Accountability in research*, 20(5-6), 380-394.

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

POSTER

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.

The adaptation of institutional regulations of ethics committees to national recommendations

Dr. Eglė Ozolinčiūtė, Office of the Ombudsperson for Academic Ethics and Procedures, Lithuania

POSTER

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.

References

Ozolinčiūtė, E. 2020. *Lietuvos mokslo ir studijų institucijų akademinės etikos komitetų veiklų reglamentavimo pokyčiai*. Vilnius: Akademinės etikos ir procedūrų kontrolieriaus tarnyba.

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

Ilja Richard Pavone, National Research Council of Italy (CNR), Italy

POSTER

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 updated 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

Sanja Pekovic*, Rajka Djokovic and Dijana Vuckovic, University of Montenegro, Montenegro

POSTER

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, Gambil (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.

References

Boehm, P.J. (2008). Promoting academic integrity in institutions of higher education. PhD Dissertation, Faculty of the Graduate School Texas A&M University.

Bush, D.K. (2000). An examination how selected colleges and universities promote student academic integrity. PhD Dissertation, The Faculty of the Curry School of Education University of Virginia.

Clifford, K.O. (1998). Academic Integrity and Campus Climate at Small Colleges. In D.D. Burnett, L. Rudolph and K.O. Clifford (Eds.), Academic Integrity Matters (pp.109-123).

Washington, DC: National Association of Student Personnel Administrators. Inc. Hall, T.L. (1996). Honor among students: Academic integrity and student cultures. PhD Dissertation, Indiana University.

Kibler, W.L. (1993). A Framework for Addressing Academic Dishonesty from a Student Development Perspective. NASPA Journal, 30(4), 252-267.

Kibler, W.L. (1998). The Academic Dishonesty of College Students: The Prevalence of the Problem and Effective Educational Prevention Programs. In D.D. Burnett, L. Rudolph and K.O. Clifford (Eds.), Academic Integrity Matters (pp. 23-37). Washington, DC: National Association of Student Personnel Administrators. Inc.

Gambill, T. (2003). Discouraging academic dishonesty: Perceived best practices for one liberal arts college. PhD dissertation, The Faculty of the Curry School of Education University of Virginia.

McCabe, D.L., Trevino, L.K. (1997). Individual and Contextual Influences on Academic Influences on Academic Dishonesty: A Multicampus Investigation. Research in Higher Education, 38(3), 379-397.

Roth, N.L., McCabe, D.L. (1995). Communication Strategies for Addressing Academic Dishonesty. Journal of College Student Development, 36(6), 531-541.

Tom, G., Borin, N. (1988). Cheating in Academe. Journal of Education for Business, 63(4), 153-157.

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

Daniel Pizzolato* and Kris Dierickx. KU Leuven, Department of Public Health and Primary Care, Centre for Biomedical Ethics and Law, Leuven, Belgium

POSTER

Besides the development of guidelines and codes of conduct, formal and informal trainings are other possible ways to promote research integrity (RI) (Resnik 2012) 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 keywords (Heitman and Bulger 2005). 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.

References

David B. Resnik, "Ethical Virtues in Scientific Research," *Accountability in Research* 19, no. 6 (2012): 329–43.
E. Heitman and R. E. Bulger, "Assessing the Educational Literature in the Responsible Conduct of Research for Core Content," *Accountability in Research* 12, no. 3 (2005): 207–24.

Activating institutional change towards Responsible Research & Innovation and Open Science

Helene Brinken, TIB Leibniz Information Centre for Science and Technology, University Library, former: Goettingen State and University Library, Germany helene.brinken@tib.eu

Maxie Gottschling, Goettingen State and University Library, Germany gottschling@sub.uni-goettingen.de

Rafael Maria Raschkowski, Goettingen State and University Library, Germany rafael-maria.raschkowski@sub.uni-goettingen.de

Dr. Birgit Schmidt*, Goettingen State and University Library, Germany bschmidt@sub.uni-goettingen.de

POSTER

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.

References:

FIT4RRI consortium, D'Andrea, Luciano, & Brinken, Helene. (2018). Critical trends shaping science. Zenodo. https://doi.org/10.5281/zenodo.2268891

Gottschling, Maxie. (2020). Starting the Process: Summary of Recommendations from Guidelines on Governance Settings for Responsible and Open Science. Zenodo. https://doi.org/10.5281/zenodo.3768457

D'Andrea Luciano, & Marta Federico. (2020). Starting the process Guidelines on governance settings for responsible and open science. Zenodo. https://doi.org/10.5281/zenodo.3760665

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

Eleni Spyrakou*, Panagiotis Kavouras, Vana Stavridi, Costas A. Charitidis, RNanolab, National Technical University of Athens, School of Chemical Engineering, Athens, Greece

POSTER

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 srecent 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 and Nik Claesen, EARMA

POSTER

EARMA is the European Association of Research Managers and Administrators. In 2018, it established the Ethics and Research Integrity Officer Network[1] (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

---

[1] https://www.earma.org/about/governance/thematic-groups/ethics-and-research-integrity-officer-network-erion/

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 Integrity[2] (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 they 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

POSTER

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 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.

References

Merton, R. K. "Priorities in Scientific Discovery: A Chapter in the Sociology of Science". American Sociological Review, Vol. 22, No. 6, pp. 635-659. 1957.

Steinkamp N., Gordijn B. "Ethical case deliberation on the ward. A comparison of four methods". Medicine, Health Care and Philosophy, 6: 235-246, Kluwer Academic Publishers. 2003.

Ioannidis, J. P. A. "Why Most Published Research Findings Are False". Plos Medicine. August 30. 2005.

Training for research integrity and research ethics: a scoping review

Ružica Tokalić*, Ivan Buljan and Ana Marušić / the EnTIRE Consortium, Department of Research in Biomedicine and Health, University of Split School of Medicine, Split, Croatia

POSTER

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

Vicko Tomić[1, 2]*, Ružica Tokalić[2], Ivan Buljan[2], Marin Viđak[2], Rea Roje[2], Ana Marušić[2]

[1] ST-OPEN, University of Split, Split, Croatia, [2] Department of Research in Biomedicine and Health, University of Split School of Medicine, Split, Croatia

POSTER

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

Rob van der Sande*, Nijmegen, The Netherlands and Fenneke Blom, Amsterdam UMC and Vrije Universiteit Amsterdam, The Netherlands

POSTER

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

POSTER

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) https://www.nrin.nl/about/inspire-project/

Ethical climate in universities

Marin Viđak (1), Lana Barać (1), Ivan Buljan (1), Ružica Tokalić (1), Darko Hren (2), Ana Marušić (1)

1. Department of Research in Biomedicine and Health, University of Split School of Medicine, Split, Croatia, 2. Faculty of Humanities and Social Sciences, University of Split, Split, Croatia

POSTER

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.

References

Cullen JB, Victor B, Bronson JW. The Ethical Climate Questionnaire: An Assessment of its Development and Validity. Psychological Reports. 1993;73(2):667-74.

Bartholdson C, Sandeberg MA, Lützén K, Blomgren K, Pergert P. Healthcare professionals' perceptions of the ethical climate in paediatric cancer care. Nurs Ethics. 2016 Dec;23(8):877-888.

Lilly J, Duffy JA, Wipawayangkool, K. The Impact of Ethical Climate on Organizational Trust and the Role of Business Performance: If Business Performance Increases, Does Ethical Climate Still Matter? JBAM. 2016. Vol. 17, Issue 1.

Martin K, Cullen J. Continuities and Extensions of Ethical Climate Theory: A Meta-Analytic Review. 2006. 175-94 p.

Malicki M, Katavic V, Markovic D, Marusic M, Marusic A. Perceptions of ethical climate and research pressures in different faculties of a university: cross-sectional study at the University of Split, Croatia. Sci Eng Ethics. 2019;25(1):231-245.

Cullen JB, Victor B, Bronson JW. The Ethical Climate Questionnaire: An Assessment of its Development and Validity. Psychological Reports. 1993;73(2):667-74.

Graham. J, Haidt. J, Nosek. B. Moral Foundations Questionnaire. 2013 [cited 2018 Sep 20]; Available from: https://www.moralfoundations.org/questionnaires.

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

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

POSTER

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 became 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.

References

Fern, E. F., 2001. *Advanced Focus Group Research*. Sage, Thousand Oaks, Calif.

Fraenkel, J. R., & Wallen, N., 2000. *How to Design and Evaluate Research in Education.* McGraw Hill, Boston.

Glendinning, I., 2016. European Perspectives of Academic Integrity. In: T. Bretag (Ed.). *Handbook of Academic Integrity* (pp. 55–74), Science+Business Media, Singapore, Springer.

Lancaster, T., 2019. Social media enabled contract cheating. *Canadian Perspectives on Academic Integrity*, 2(2), 7–24.

Tauginienė, L., Gaižauskaitė, I., Glendinning, I., Kravjar, J., Ojsteršek, M., Ribeiro, L., Odiņeca, T., Marino, F., Cosentino, M., Sivasubramaniam, S., 2018. *Glossary for academic integrity. ENAI Report 3G.* http://www.academicintegrity.eu/wp/wp-content/uploads/2018/02/GLOSSARY_final.pdf. Accessed 10 February 2020.

Tauginiene, L., Gaižauskaitė, I., Razi, S., Glendinning, I., Sivasubramaniam, S., Marino, F., Cosentino, M., Anohina-Naumeca, A., & Kravjar, J., 2019. Enhancing the Taxonomies Relating to Academic Integrity and Misconduct. *Journal of Academic Ethics*, 17, 345–361.

Thomas, D., 2017. Factors that explain academic dishonesty among university students in Thailand. *Ethics & Behavior*, 27(2), 140–154.

Yin, R., 1994. *Case study research: Design and methods*. Sage, Beverly Hills, CA.

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

POSTER

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).

References

CNR Research Ethics and Integrity Committee (2015). Guidelines for Research Integrity, updated 2019; https://www.cnr.it/en/doc-ethics
CNR Research Ethics and Integrity Committee (2019). "Increasing Risks of Predatory Publishing: Recommendations for Researchers"; https://www.cnr.it/en/doc-ethics
COPE (2019). Predatory Publishing. https://publicationethics.org/files/cope_dd_a4_pred_publishing_nov19_screenaw.pdf