RESPONSIBLE SCIENTIFIC RESEARCH: CHALLENGES AND OPPORTUNITIES FOR ETHICS/INTEGRITY OFFICERS

Susana Magalhães[1]

[1]*I3S-Instituto de Investigação e Inovação em Saúde, University of Porto, Portugal*
[2]*University Fernando Pessoa*

Abstract

In this paper, we aim to provide a reflective, argumentative and critical analysis of the role of integrity officers in promoting responsible conduct in research. We also aim to stimulate the debate on the gap that has been steadily growing between ethics and integrity in science and its impact on the threat of researchers' self-regulation.

Research Integrity is an issue of concern by universities and other research institutions due to the growing number of cases of research misconduct every year (Altman, 2006; Deer, 2011; Steneck, 2002, 2006; Baker 2016; Diaba-Nuhoho and Amponsah-Ofeh, 2021). Since the 1980s, research misconduct has led to the institutionalization of bodies specifically focused on dealing with research integrity issues, such as the Office of Research Integrity in the US and the UK Research Integrity Office. However, the annual number of articles on research integrity indexed in the Web of Science™ between 1982 and 2019 has risen from none to over 200 (ISIS 2020 Global Research Report). Science is no longer a one-man business, with isolated researchers working in their own laboratories, and the number of researchers has risen sharply, while the pressure of publishing continues to grow. In an academic world that is now widely open to society, the number of stakeholders is constantly increasing. Guidelines and norms have been issued covering the different dimensions and principles of trustworthy, reliable, honest and accountable research: the Singapore Statement (2010), the Montreal Statement (2013), the Hong Kong Principles (2019) and the revised European Code of Conduct for Research Integrity (2017). Hundreds of articles have been written on the threats to research quality, including competitive environment, pressure to publish, poor mentoring/supervision and a rewarding system based on metrics, being thus likely to promote ethical disengagement strategies. However, making a statement about unethical conduct is not enough to understand how to act to put integrity back at the heart of the system. The meaning of integrity for researchers, research institutions and policymakers is not homogeneous, being influenced by one's own experience, training and work environment. Responsible research needs to be framed within ethical boundaries and not only under the concept of integrity.

Considering that ethics in research refers to the ethical fundaments of the relations among the different stakeholders, while integrity covers the procedural dimension of research, we propose that Integrity Officers should also be Ethics Officers, highlighting their role in researchers' training in responsible research (which covers both relational and procedural issues). Based on the example of the Integrity Officer's work at one of the most important Portuguese research performing organizations in Health Sciences (the Institute of Research and Innovation in Health, i3S, University of Porto), we will discuss the challenges and the opportunities faced by those who play this role in (biomedical) research institutions and in the research ecosystem. Regarding this matter, we will focus on three main challenges/opportunities: the need to build trust from a bottom-up approach to research ethics & integrity, while issuing compliance documents that impose top-down norms; the demand for networking among different stakeholders of the research

ecosystem; and the promotion of good scientific practices with and for society.

References

Altman, L. K. (2006*). For science gatekeepers, a credibility gap*. The New York Times. Retrieved from http://www.nytimes.com/2006/05/02/health/02docs.html?pagewanted=all

Baker, M. (2016). 1,500 scientists lift the lid on reproducibility. *Nature* 533, 452–454. https://doi.org/10.1038/533452

Deer, B. (2011). How the case against the MMR vaccine was fixed. *British Medical Journal*, 342, 77-82.

Diaba-Nuhoho, P. & Amponsah-Ofeh, M. (2021). Reproducibility and research integrity: the role of scientists and institutions. *BMC Research Notes,* 14: 451, BMC Research Notes (2021) 14:451. https://doi.org/10.1186/s13104-021-05875-3

Fanelli, D. (2011). The black, the white and the grey areas: Towards an international and interdisciplinary definition of scientific misconduct. In T. Mayer & N. Steneck (Eds.), *Promoting research integrity in a global environment* (pp. 79–90). Singapore: World Scientific Publishing.

Steneck, N. H. (2002). Assessing the integrity of publicly supported research. In Steneck. N. H. & Scheetz, M. D. (Eds*.). Investigating Research Integrity: Proceedings of the First ORI Research Conference on Research Integrity* (pp. 1-16). Washington, DC: Office of Research Integrity.

Steneck N. H. (2006). Fostering integrity in research: Definitions, current knowledge, and future directions. *Science and Engineering Ethics*, 12, 53-74.

Szomszor, M & Quaderi, N. (2020*). ISI Global Research Report Research Integrity: Understanding our shared responsibility for a sustainable scholarly ecosystem*. Clarivate.