

Open Science Conference 2020 - Call for Poster Presentations

Driving institutional change for open, responsible research and innovation

Abstract

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

In an extensive literature review, we analyzed what trends drive Open Science and RRI forward and what barriers prevent their wide implementation in the current system. To name a selection of critical trends, hyper-competition, increasing staff mobility and pressure, shrinking research funds etc. influence research practices negatively. These trends oppose the values of democracy, quality, self-protection, sustainability, technological innovation etc. which are driving RRI and Open Science.

In addition, a comparison of different sectors and national contexts showed that indeed the variation across sectors is substantial: The type of research and stakeholder relationships is very important for the performance of RRI and Open Science. In particular, it matters how established or novel these sectors are. Whereas the differences in national settings seem to be less important for RRI and OS implementation.

Building on this analysis, we conducted four case studies to observe how to deal with these findings to allow and support institutional change. Four institutions, including three universities and one company, conducted co-creation experiments: They engaged various internal and external interest groups in the design and implementation of a research project, e.g. by organizing focus groups, conducting interviews etc. This effort led to a RRI-model for the company, a brand new responsible research center at one university and an advanced approach to the implementation of ethics policies at another university.

The findings on how institutions need to change their organizational frameworks to allow better embedment of responsible research and enable enhanced values for the quadruple helix actors (academia, industry, policy makers & society) are currently summarized.

The result of this three-year work is a guiding document with recommendations on how to initiate and foster institutional change. These guidelines are complemented by a set of online courses to support different interest groups from academia and industry in initiating open and responsible practices. These include, but are not limited to, an introduction to RRI, RRI in industry, public engagement and ethics.

The poster will present the main findings of our analysis and highlight the mutual learnings from the co-creation experiments. It will also present and refer to the online courses and guideline document as useful resources for the community to initiate institutional change.