

TRACK 4: Next Generation Research Evaluation Governance – Enabling Creative and Responsive Knowledge Production

Session Proposers:

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Description:

Creative research and knowledge production are required to address the so-called Grand Societal Challenges (Kuhlmann & Rip 2014). Research and innovation activities are supposed to become “responsive” to societal needs. This request has been put forward by the European Commission and in several EU Member States (see e.g. the “Rome Declaration on Responsible Research and Innovation in Europe” 2014), yet more recently also in emerging economies and their research and innovation systems, not at least in China. Governance approaches to research and innovation, in particular funding policies and performance incentives as well as related evaluation processes will have to reflect such ambitions – this is the focal concern of the suggested session (track).

Research evaluation and related performance measurement, in advanced and in emerging countries, have become increasingly professionalised in recent years. Yet most of the implemented measures are focussed on simplistic “excellence” criteria (Rip 2012). Where research “impact” criteria are used they are all too often defined in a quite mechanistic way (Spaapen & van Drooge 2011).

The professionalised research performance evaluation can be seen as a form of governance of research. In the last few years it has been provoking increasingly harsh criticisms from researcher communities (e.g. DORA, initiated by the American Society for Cell Biology, Way & Ahmad 2013) and sociologists of science (e.g. the “Leiden Manifesto for Research Metrics”, Hicks et al. 2015). The critics warn against a misfit between increasingly bureaucratised simplistic research performance evaluation governance and the need for incentives stimulating creative, risk taking research.

Meanwhile we have witnessed growing efforts, in advanced and emerging countries, to overcome this misfit. In 2015, UK HEFCE published a report titled “–The Metric Tide Report of the Independent Review of the Role of Metrics in Research Assessment and Management” (Wilsdon et al. 2015), which proposed a framework for responsible metrics, and made a series of targeted recommendations based on fifteen months of evidence-gathering, analysis and consultation. These indicators and underlying data infrastructure developed are designed in the ways that support the diverse qualities and impacts of UK research.

Similarly in China, the blunt uses of metrics such as SCI publications, journal impact factors and grant income targets are worrying. The country’s leading academic institution for the natural sciences and the highest science and technology advisory body, the Chinese

Academy of Sciences (CAS), so far, has experienced four phases of their institute evaluation system, reflecting the history of using metrics within the CAS and China. The latest reform of the system in 2010, also known as the major R&D outcome-oriented evaluation system, was proposed to encourage creative and original research work. Not only research institutes, but also Chinese universities, have already taken action to change the orientation of research evaluation towards creative and original knowledge production or real-problem solving, rather than counting publications.

Given the development of science, and the mission to address societal challenges, research drawing on multiple disciplines is more needed than ever. That is also why “convergence science” is becoming an emerging research paradigm (Bonaccorsi 2008). The eight research fields in CAS’s 13th Five-year plan also indicate the concept of convergence science. There is no doubt that evaluation of convergence science will be a new challenge in near future.

In this context, the proposed session will provide a forum to discuss new approaches on research evaluation, reflecting the required responsiveness of research and innovation and “responsive” governance principles and requirements (e.g. Kuhlmann et al. 2015).

Guiding aspects to be addressed by session papers include:

- Trends of governance of and through research evaluation in an international perspective;
- Modes of responsive evaluation of different research paradigms, e.g. inter-disciplinary research, convergence research;
- New concepts and responsive practices of third-party evaluations, e.g. talents evaluation, programme evaluation, faculty or institute evaluation;
- Responsive assessment of mission-oriented research (Grand Challenges) and of societal impact.

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