

**Topic-Setting Program to Advance Cutting-Edge
Humanities and Social Sciences Research**
(Area Cultivation)

Progress Report
(Summary of Final Report)

Organizations and Society for Responsible Research and Innovation (OSRRIs)

Core-Researcher: Go Yoshizawa

Institution: Osaka University

Academic Unit: Graduate School of Medicine

Position: Associate Professor

Research Period: FY2014 – FY2017

1. Basic information of research project

Research Area	Humanities and social science research on relationship between academic research changes and misconduct
Project Title	Organizations and Society for Responsible Research and Innovation (OSSRIs)
Institution	Osaka University
Core-Researcher (Name, Academic Unit & Position)	Go Yoshizawa, Associate Professor, Graduate School of Medicine
Project Period	FY2014 - FY2017
Appropriations Plan (¥)	FY2014 2,500,000 JPY
	FY2015 3,450,000 JPY
	FY2016 3,200,000 JPY
	FY2017 2,250,000 JPY

2. Purpose of research

The project aims (1) to articulate responsible conduct of research (RCR) by analysing research misconduct cases and exploring credibility of academic research in the transformation; and, (2) to design and innovate research organisations (i.e. universities, national research institutes, academic societies and research funding agencies) creating responsible innovation through interaction with key stakeholders.

3. Outline of research (Including study member)

The project analysed codes of ethics, codes of conduct and submission guidelines for Japanese academic societies/journals. It also reviewed the current activities on research and education of research ethics. The web survey on 52 academic societies (>1,000 members) revealed that notes on falsification, fabrication and plagiarism (FFP) are stated in nearly 30% of their academic guidelines but those on dual use, care for the handicapped/minority and anti-discrimination are very scarce. In collaboration with practitioners, we also conducted action research on funding agencies, highlighting how they facilitate responsible research in a more inclusive, participatory, deliberative and anticipatory manner. The discussion on responsible research and innovation (RRI) was far ahead in Japanese academic communities, which lead to our further collaboration with National Graduate Institute for Policy Studies (GRIPS) and European research projects like RRI-Practice and HEIRRI. In the research process, the project efficiently deployed arguments and activities within Japan to redefine the role of academic institutions such as universities and academic societies, followed by pilot studies on local-based and grass-roots RCR as complementary to the existing academic institutions. Reframing the concept and practice of RRI in the Japanese context yielded sustainable engagement with natural sciences as well as social sciences and humanities, and had a significantly positive effect on further discussions of local problem-solving transdisciplinary research, citizen science and bottom-up innovation.

Innovation WG

- Go Yoshizawa (Osaka University) - PI/group leader
- Hideyuki Hirakawa (Osaka University)
- Yasunori Yamanouchi (Osaka University)
- Keiichiro Tahara (Institute for Future Engineering)
- Ryuma Shineha (Seijo University)
- Hisashi Nakao (Yamaguchi University)
- Shishin Kawamoto (Hokkaido University)

Research activity WG

- Masaki Nakamura (Osaka University) - group leader
- Jin Higashijima (Yamaguchi University)
- Naonori Akiya (Yamaguchi University)
- Jusaku Minari (Osaka University)
- Minoru Kokado (Osaka University)

4. Research results and outcomes produced

This project performed collaboration with practitioners in funding agencies including JST/RISTEX, NEDO and AMED for launching a new research programme on RCR in the form of action research. It also nudged university research administrators and university education research units to embed RCR and RRI into their activities, being backed up with research presentations and knowledge exchange in a wide variety of academic societies. In particular, the survey results on different activities on RCR at academic societies in life sciences reflexively made them rethink about their societal communications. It should be noted that this project outcome gave scientific communities some opportunities to reorganise their research governance by their own.

In parallel with this project, a project on metrics and indicators of STI (science, technology and innovation) and society links was launched at GRIPS in 2016, in which some of us have participated. This metrics project has developed a new measurement of RCR/RRI, through a number of events such as OECD Blue Sky III and SCWS2017. It fully utilised our project outcomes and expanded its research networks.

Throughout this project, some of us also developed academic review and empirical analysis on dual use in the context of research evaluation and biosecurity. The research activities were conducted in advance of Science Council of Japan and several universities, largely contributing to the development of social sciences and humanities on science, technology and security.

Although this project has comprehensively discussed issues around RCR/RRI, there remain some limitations for further studies. First is on (political) directionality. Integrity in research

and innovation is representation of researchers or innovators for incumbent authorities but academic discussions often downplay, if not ignore, their political connotations in the discourse of ‘responsibility’ or ‘future’ . Responsibility can be reshaped by different actors who keenly anticipate what they want to be. Second is embedding morality to individuals. The aforementioned identity work opens up more critical questions on how researchers should be, and how the research community culture can be changed by education and other means. A future study may focus on a new form of education to appeal researcher’ s individual morality as institutionally reflexive. Third is evaluation of creativity and elegance. One of the major triggers to change individual morality is when researchers positively and actively come to think about ethics or responsibility. This kind of positive environment is often created by full of non-verbal expressions. Forth is bottom-up engagement. A serious lack of discussions on RCR/RRI is the locus of responsibility of those who do not in expert communities. Now that hackers and citizen scientists are far beyond dilettantes and become influencers on the mainstream research and innovation, how can we position them as agent for bottom-up research and innovation?