### **Report on**

### **Responsible Research and Innovation (RRI) Workshop**

### Thursday, 8th January, 2015, 14.00-16.20 A11 Highfield House, University Park

### Written by Eleanor Hadley Kershaw, Sarah Hartley and Warren Pearce<sup>1</sup>

#### Introduction

The Responsible Research and Innovation (RRI) Workshop was convened and facilitated by <u>Dr Sarah Hartley</u> (School of Biosciences) and <u>Dr Warren Pearce</u> (School of Sociology and Social Policy), with financial support from the Leverhulme Trust '<u>Making Science Public' programme</u> and the <u>Science,</u> <u>Technology and Society Priority Group</u>. The potential for an ongoing interdisciplinary conversation about RRI at the University of Nottingham (UoN) was identified during a <u>research project</u> conducted in summer 2014 to investigate how RRI is being interpreted within UoN (Pearce *et al.*, 2014).

On 8<sup>th</sup> January 2015, following a public lecture by Professor Richard Owen, University of Exeter, on '<u>Responsible Research and Innovation: From nice words</u> to meaningful action', 18 participants<sup>2</sup> from 11 schools and departments across UoN gathered to address the following **workshop aims**:

- 1. Establish an RRI network across UoN;
- 2. Share understandings of RRI from different perspectives and disciplines;
- 3. Explore what the RRI agenda means, how we might want to respond and what support might be needed.

Following a brief round of introductions<sup>3</sup>, participants worked in four groups of 4-5 (selected to ensure a mix of disciplines and interests) to discuss the following key questions.

## 1. What does responsibility mean in your field? Are there differences across disciplines?

All four groups identified similarities in meanings of responsibility across disciplines, particularly at the level of individual researcher responsibility. This might mean a combination of: staying within ethical boundaries and observing ethical principles such as respect for others, informed consent and confidentiality (as moderated by ethics review processes); adhering to norms such as objectivity and integrity; following codes of conduct, complying with health and safety regulations, completing risk assessments/registers and impact statements; balancing the imperative to be open with the detrimental effects of disclosure; and minimising harm/risks and maximising benefits more generally.

Differences between disciplines were identified in relation to the locus of harm or benefit, ranging from research participants or users of technologies to broader social, economic and environmental impact. Group A suggested that in disciplines where research involves human or animal participants there is more emphasis on weighing up harms and benefits in order to justify research, whereas in the

<sup>&</sup>lt;sup>1</sup> Participants had the opportunity to amend this report in advance of publication.

<sup>&</sup>lt;sup>2</sup> Participants were invited based on their expressed interest in a University network on RRI or

perceived interest after being identified as working in the area of RRI.

<sup>&</sup>lt;sup>3</sup> See Appendix 1 for the workshop agenda

physical sciences researchers may not feel it is their job to assess the value of their work. Group B noted that defining benefits (and harms) is not always straightforward.

Groups A and B concluded that the level (individual, institutional or societal) or locus of responsibility, and to whom the relevant parties are responsible, is complex and can change through the course of a project, as well as varying between different fields. For example, individual researcher responsibility might seem quite clear in a laboratory environment, but much less clear in innovation processes when science/innovation meets wider publics (then responsibility might also lie with media, policy makers and other stakeholders). The extent of individual researcher responsibility in the latter context was questioned by some participants, whilst others felt that existing tools such as risk registers could be adapted to include greater consideration of potential social implications of research. Group C noted that in some fields, such as computer science, where non-researchers also have access to data, responsibility needs to be built into technologies of data collection.

Group A concluded that responsibility can change according to the source of funding and governance, and called for greater consideration of the meaning of responsibility in the context of a rapidly changing Higher Education sector. Groups B and C discussed researchers' capacity to consider responsibility, along with potential conflicts between responsibility and impact agendas.

Some participants were keen to further explore responsibility as a broader concept. For example, does it refer to intentions or consequences; can it be considered in a positive light (taking a risk or pushing boundaries) rather than a negative one (putting a stop to certain activities); should it be considered in the context of rights?

## 2. Is RRI asking us to do anything else beyond what we do at the moment?

Groups A, C, and D agreed that although some aspects of RRI are already covered by existing ethics, risk and safety protocols, RRI is asking for something more. Stakeholder engagement/co-creation of research was proposed by Groups A and C as a significant difference between RRI and other frameworks.

These three groups suggested that RRI's requirement to be embedded throughout the entire research process is novel, necessitating a culture shift and ongoing reflective practice that is anticipatory and responsive. Group C noted that thinking about responsibility upstream is a particular challenge for engineering, where researchers are more interested in fixing things downstream.

Groups A and D thought that RRI asks researchers to consider the bigger picture or the wider context of their research, allowing for fundamental questions to be posed about what research and universities are for, and which research is worth doing. They noted that RRI requires researchers to recognise and respond to public and societal need.

Group B concluded that RRI does not ask anything beyond existing ethics/engagement tools and mechanisms. It raised concerns about the dangers of RRI, suggesting it brings perils and promises. It saw RRI more as an exercise in rebranding. It thought that RRI is being used as a marketing tool to leverage funds and mobilise resources to support links between, and better use of, existing tools, rather than re-inventing the wheel. It noted that RRI might enable existing tools to be more embedded in research practice, and that it highlights interesting questions about long-term impacts and how to deal with cost-benefit conflicts.

In the subsequent discussion there was a wide diversity of views expressed. It was noted that although existing tools are sometimes used well to address issues within some disciplines (for example, medicine or bioethics), universities are not equipped to holistically or systematically deal with issues around technologies such as geoengineering or drones. Some participants proposed that RRI could create the space to develop a reflexive, critical university: one that thinks creatively about science and innovation rather than assuming that there is only one mode of research and innovation – to serve economic development.

# 3. RRI asks us to think about a role for stakeholders/users in shaping the research process. What are your thoughts on/experiences of this?

Group D thought that in some fields (such as synthetic biology) it is absolutely essential to involve industry, whereas in others there might be different principal stakeholders at different stages of the project. It noted the significant role of research funders in shaping which research is done.

Group A discussed the importance of involving stakeholders/users at the design stage in order to fully understand the problem, rather than writing funding applications with potentially inappropriate solutions in mind (the latter was considered to be standard practice in engineering). This was contrasted with citizen science projects such as "Galaxy Zoo", which tap into the enthusiasm of publics, but do not allow them to shape the broader project aims and direction. More than one group thought that there is room for improvement in stakeholder engagement in many fields, perhaps learning from fields where co-creation is done well, for example health research involving patients.

Groups A and C identified key questions in relation to stakeholder engagement: Who are the stakeholders (e.g. industry, "the person on the street", etc.)? What if there are multiple users/stakeholders? What if they oppose the start of the project? What if they have opposing views during the process? What if there are opposing views within or between stakeholder groups; who decides which opinions count? Who decides what's relevant, when and for whom (e.g. are researchers delivering results for research funders, the public, etc.?)?

## 4. Developing a distinct vision of RRI at UoN (next steps): how do we want to respond to the RRI agenda and what support do we need?

After feeding back on the discussions above in plenary, participants gave the following input on next steps:

- RRI is gaining momentum in research policy at national and international levels, but will require a whole institutional response. Which university will be the first to do this; which one will lead the way and become "the responsible university"? The UoN has the potential to take this opportunity. It could break ground in developing itself as a reflexive, critical university, experimental in nature and built through processes of mutual learning, providing a space for creativity and invention around what RRI can mean.
- RRI activities (e.g. training, grant applications) are already happening in discrete units across UoN, whether under the RRI label or not. Coordination and communication is needed at the institutional level to learn from one another and avoid duplicating these efforts.

- Create and maintain a virtual space (such as the existing <u>RRI hub</u>) to share RRI role models, best practice, case studies, RRI buddy scheme, tips on Twitter and stakeholder engagement, etc.
- Actively seek out broader participation across UoN for future discussions, including the Medical School.
- Be innovative: draw on UoN's interdisciplinary strength and institutional support to build RRI into the new priority research areas.
- Put together a bid for a discipline bridging award to support the network (call to be launched soon by the UoN Research Board).
- Consider how RRI fits within UoN policy on ethics, research integrity etc. Could it usefully build on the current conceptualisation of ethics?
- Consider the potential perils of institutionalising RRI as well as the opportunities.
- Consider RRI in relation to the impact agenda, particularly during post-REF planning initiatives.

### **Reference:**

Pearce, W., Hartley, S., & Taylor, A. (2014). *Responsible Research and Innovation: responding to the new research agenda*. Nottingham: University of Nottingham. Retrieved from <u>http://eprints.nottingham.ac.uk/3603/</u>

### Appendix 1: Workshop Agenda

- 1. Introduction
- 2. **1-minute introductions**

Please state your interest in RRI and whether you have come across RRI before this workshop.

### 3. Group work

Four groups of 5 participants will consider the following three questions:

- a. What does responsibility mean in your field? Are there differences across disciplines?
- b. Is RRI asking us to do anything else beyond what we do at the moment?
- c. RRI asks us to think about a role for stakeholders/users in shaping the research process. What are your thoughts on/experiences of this?

Please select one member of your group to write your thoughts on the flip chart and another to report back during the plenary session.

### Tea/coffee break

### 4. Plenary

- a. Each group to report back
- b. Richard Owen to provide brief feedback
- c. Developing a distinct vision of RRI at UoN (next steps): How do we want to respond to the RRI agenda and what support do we need?