

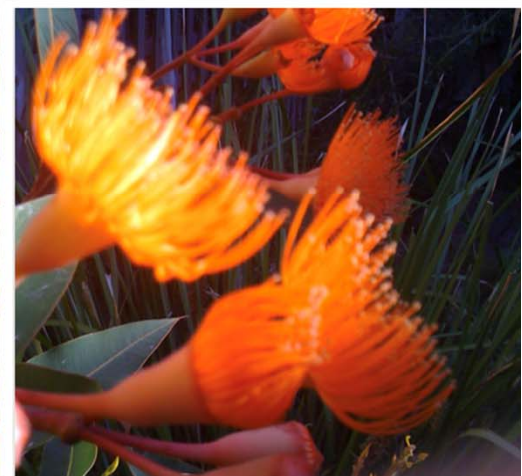
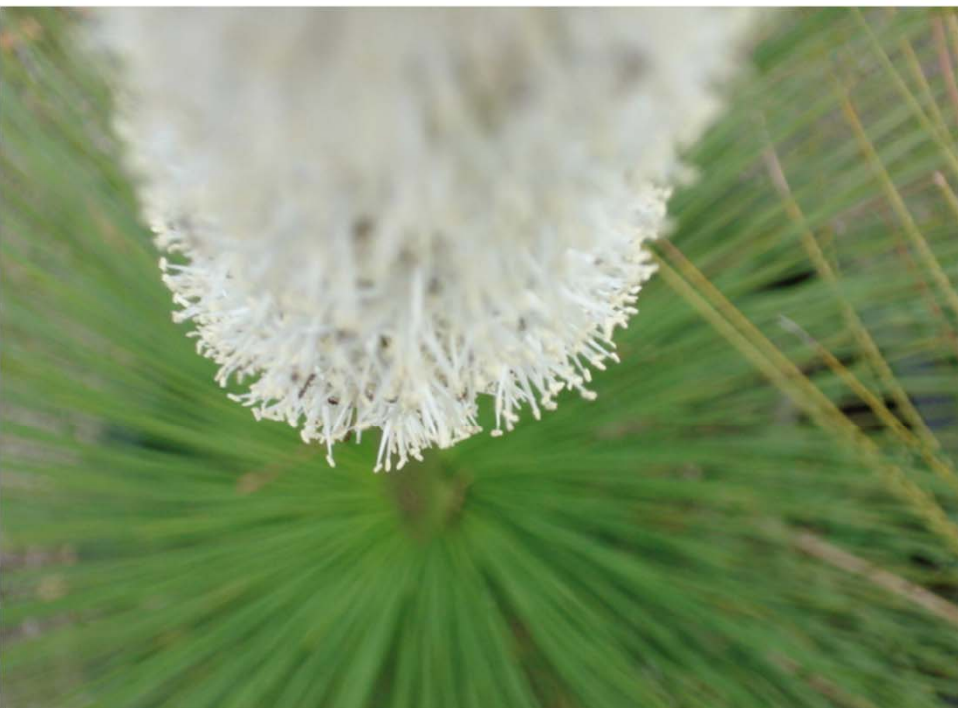


6th WORLD CONFERENCE ON RESEARCH INTEGRITY

HONG KONG
2 - 5 JUNE 2019

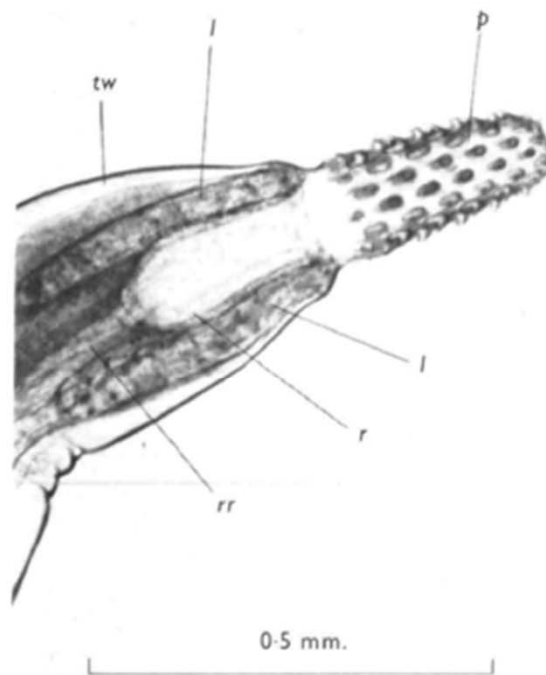
Focus Track (FT1) Ensuring Integrity in Innovation and Impact

Daniel Barr and Maura Hiney
with Zoë Hammatt

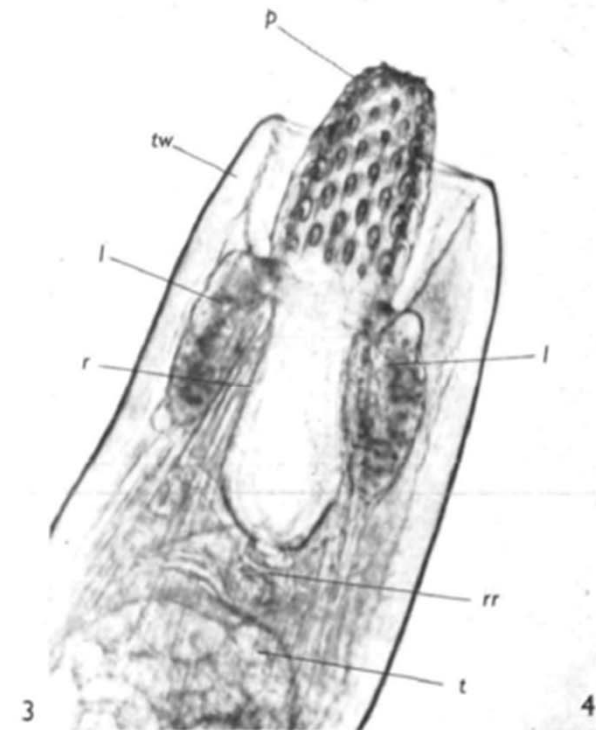


Delayed and unpredictable research impact

- Hammond, R. A. The proboscis mechanism of *Acanthocephalus Ranae*. *J. Exp. Biol.* 45, 203–213 (1966).
- 22 citations...
and then a 23rd.



R. A. HAMMOND



(Facing p. 213)

Delayed and unpredictable research impact

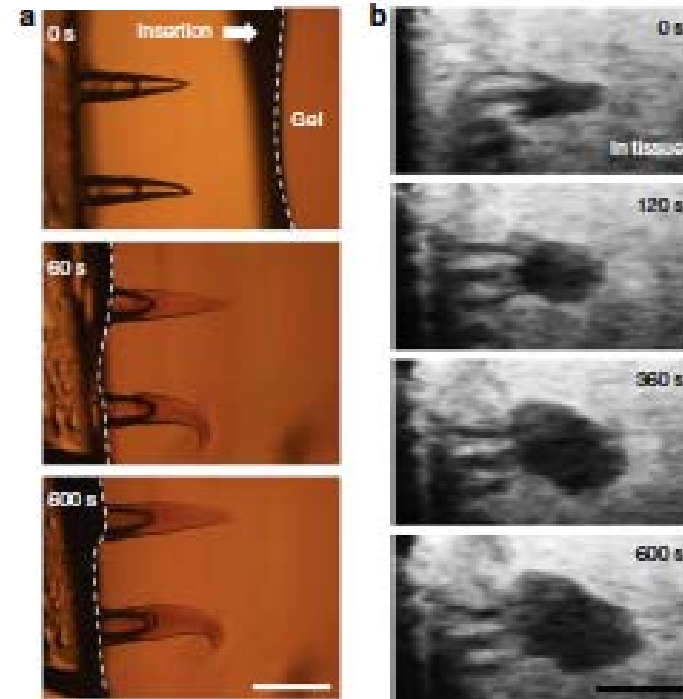
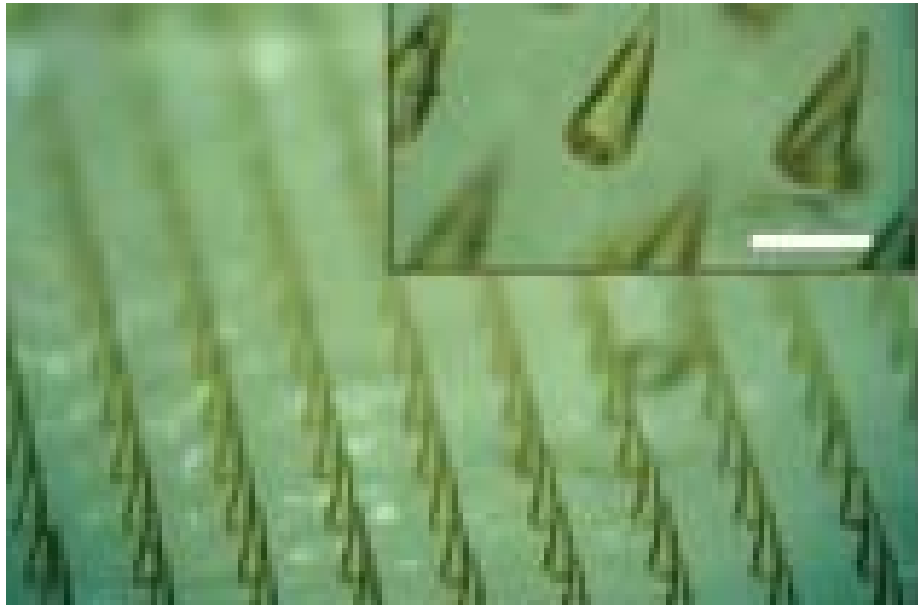
ARTICLE

Received 27 Nov 2012 | Accepted 6 Mar 2013 | Published 16 Apr 2013

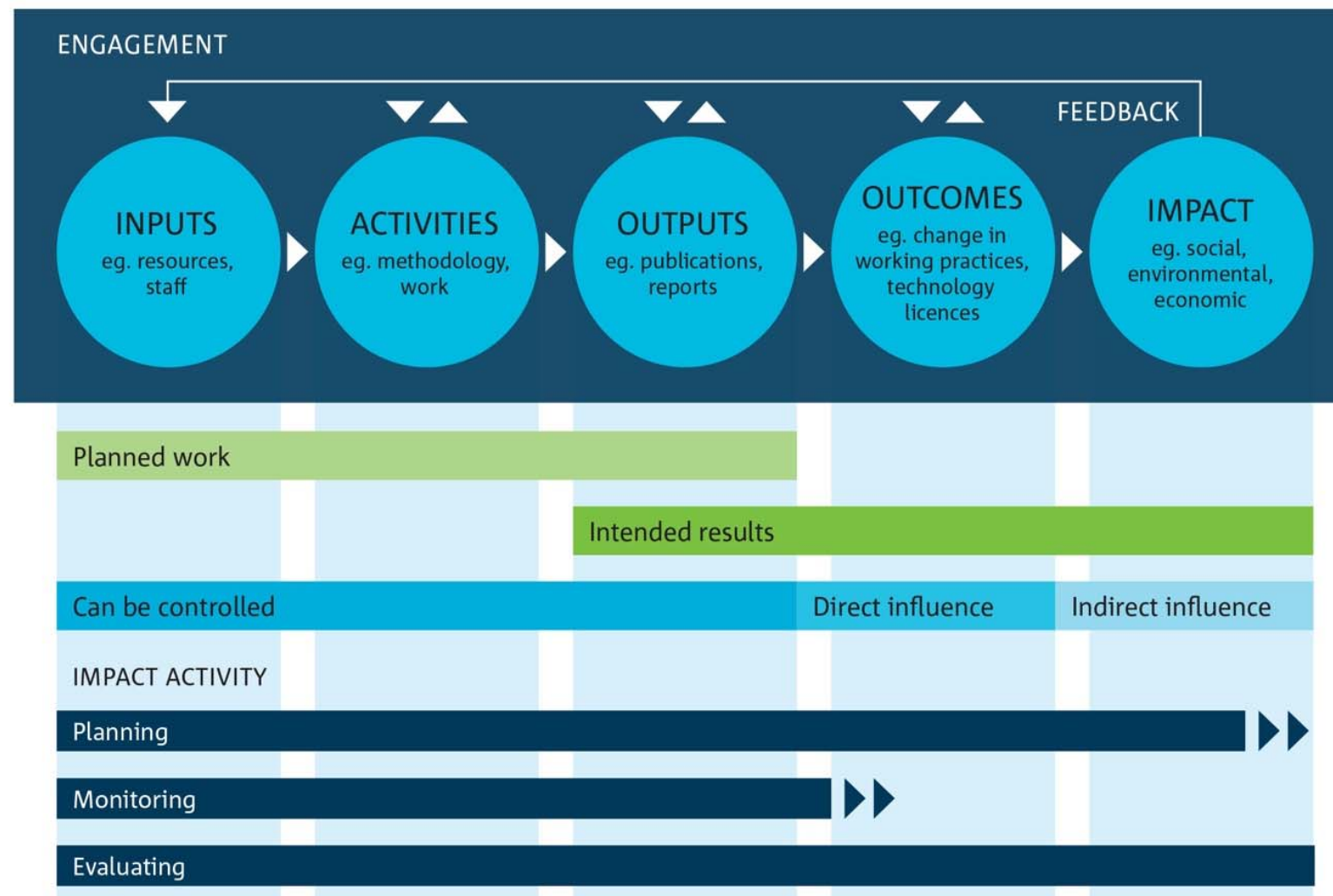
DOI: 10.1038/ncomms2715

A bio-inspired swellable microneedle adhesive for mechanical interlocking with tissue

Seung Yun Yang^{1,2,3}, Eoin D. O'Cearbhaill^{1,2,3}, Geoffroy C. Sisk⁴, Kyeng Min Park⁵, Woo Kyung Cho^{1,3}, Martin Villiger⁶, Brett E. Bouma^{3,6}, Bohdan Pomahac⁴ & Jeffrey M. Karp^{1,2,3}

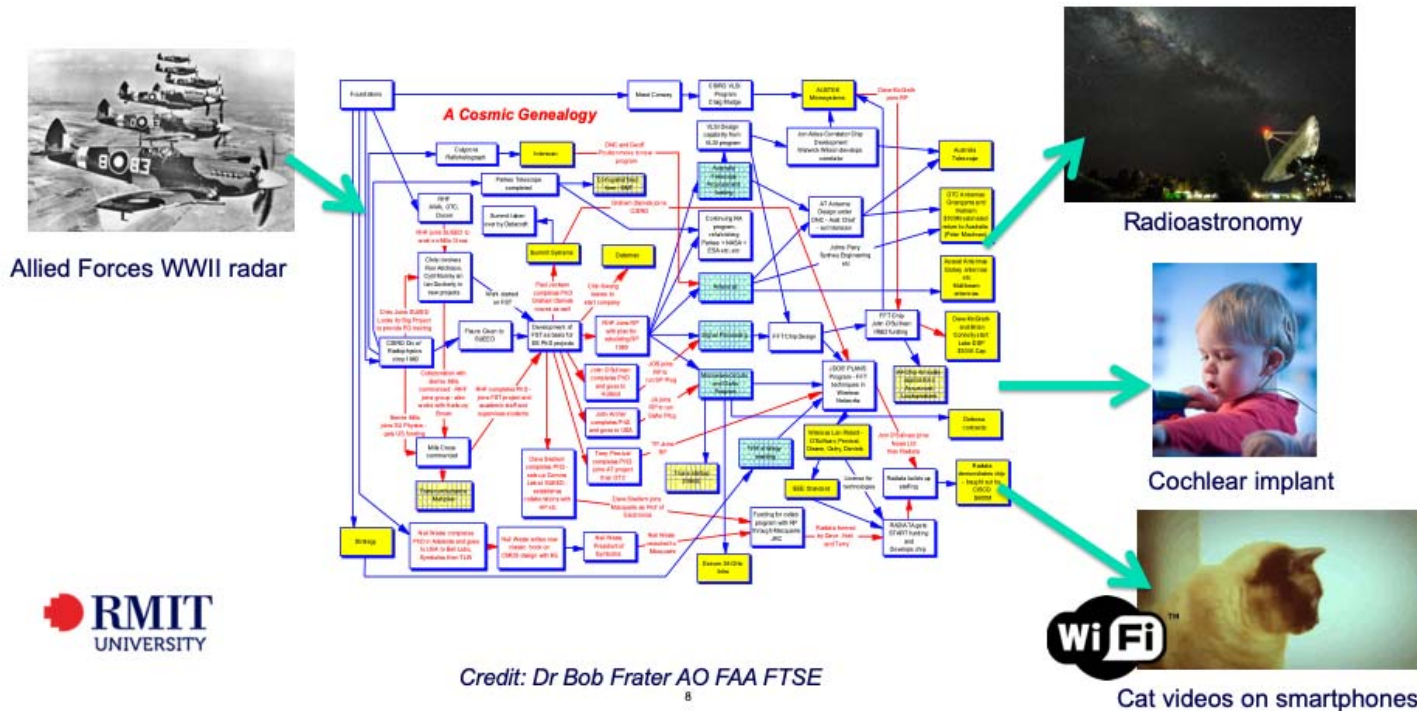


CSIRO's Impact Framework



Research impact and trust

- Research generates knowledge and always has impact
- The impact of research appears broad and unpredictable



Because of this we must be able to trust research

Research integrity is the coherent and consistent adherence to a set of principles that underpin the trustworthiness of research.

Singapore Statement on Research Integrity

Preamble. The value and benefits of research are vitally dependent on the integrity of research. While there can be and are national and disciplinary differences in the way research is organized and conducted, there are also principles and professional responsibilities that are fundamental to the integrity of research wherever it is undertaken.

PRINCIPLES

Honesty in all aspects of research

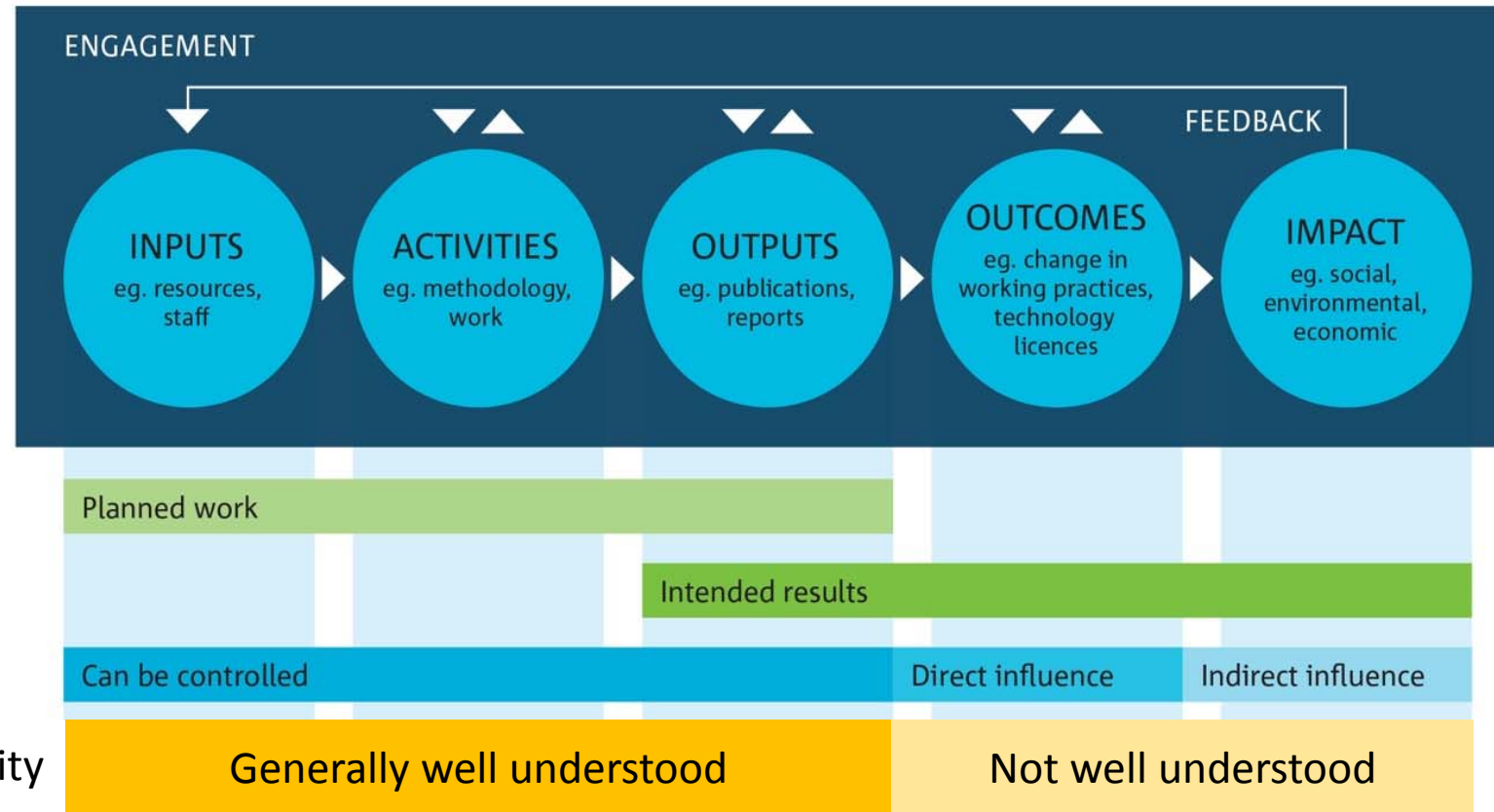
Accountability in the conduct of research

Professional courtesy and fairness in working with others

Good stewardship of research on behalf of others

From the 2nd World Conference on Research Integrity held in Singapore, 2010.

CSIRO's Impact Framework



The principles and responsibilities that guide research integrity, and the application of these principles and responsibilities to these phases is generally well understood

Research Translation
Research Innovation

Principles and responsibilities of research integrity have been captured in many ways, and there is general agreement about them.

How do these apply to the task of research translation?

What additional principles or responsibilities might be required in order to ensure that the translation of research is as honest and trustworthy as the research itself?

Research Integrity Ecosystem



What can we learn from the expectations of end users about research integrity?

Charlie Day told us... research translation is a team sport

Maura Hiney told us...

Maria Leptin told us...

Research end-user

A research end-user is an individual, community or organisation external to academia that will directly use or directly benefit from the output, outcome or result of the research.

Examples of research end-users include governments, businesses, non-governmental organisations, communities and community organisations.

What do end-users of research need?

	End-users	Impacts
Research	Government Businesses Non-governmental organisations Communities Community organisations	Economic Societal Cultural Environmental Health

In small groups discuss from the perspective or persona of an end user

1. What do the end users of research expect or need from research?
2. How do these needs align with the principles of research integrity?
3. What do end users need in order to be able to trust research?

Acting as end users of research, you told us...



What principles apply? Do we need more?

The principles of research integrity are well captured, but what do they mean for innovation and impact?

Are certain principles or responsibilities of research integrity more important than others for research translation?

What additional principles or responsibilities might be required in order to ensure that the translation of research is as honest and trustworthy as the research itself?

PRINCIPLES

Honesty in all aspects of research

Accountability in the conduct of research

Professional courtesy and fairness in working with others

Good stewardship of research on behalf of others

What principles apply? Do we need more?

1. Are certain principles or responsibilities of research integrity more important than others for research translation?
2. What additional principles or responsibilities might be required in order to ensure that the translation of research is as honest and trustworthy as the research itself?

PRINCIPLES

Honesty in all aspects of research

Accountability in the conduct of research

Professional courtesy and fairness in working with others

Good stewardship of research on behalf of others



Honesty

Accountability

**Professional courtesy
and fairness**

Good stewardship

Inclusion

Anticipation

Responsiveness

Reflexivity

“...it can be argued that RRI is essentially an attempt to govern research and innovation in order to include all the stakeholders and the public in the early stages of research and development. The inclusion of different actors and the public is, in turn, meant to increase the possibilities to anticipate and discern how research and innovation can or may benefit society as well as prevent any negative consequences from happening.”

Burget, M. et al., Sci Eng Ethics (2017) 23:1–19

“Responsible Research and Innovation is a transparent, interactive process by which societal actors and innovators become mutually responsive to each other with a view on the (ethical) acceptability, sustainability and societal desirability of the innovation process and its marketable products (in order to allow a proper embedding of scientific and technological advances in our society).”

von Schomberg, R. (Ed.). (2011). Towards Responsible Research and Innovation in the Information and Communication Technologies and Security Technologies Fields. Luxembourg: Publications Office of the European Union. http://ec.europa.eu/research/science-society/document_library/pdf_06/meprapport-2011_en.pdf. Last accessed 2 June 2019.

RRI Dimensions

inclusion, anticipation,
responsiveness and reflexivity
+- sustainability and care



How can we ensure responsible use of the outputs of research in innovation and impact?

As stakeholders, are there principles-based responsibilities for industry or end-users to ensure integrity in innovation and impact?

What are the challenges or opportunities that can arise by such an outward focus that are then placed on researchers and research institutions?

How might the outward focus on innovation and impact, and partnering with industry, positively or negatively affect the responsible conduct of research?

In assessing research impact, how can we ensure that we are measuring the right outputs?

Are there markers or characteristics of trustworthy and honest research that are captured by these assessments of research impact?

What might the coupling of performance in impact assessment to institutional or other funding encourage?

- How much responsibility do researchers have to ensure that their innovations are translated?
- How can we incentivise and alert the research community to the importance and benefits of engaging society in the research process?
- How can we move away from reductionist ways of assessing research, to establish systems that better assess research potential (SE and EUA)?
- Given the resources and expertise required to do meaningful impact assessment, what can we realistically evaluate?
- How can we more closely align the assessment measures used by RFOs and RPOs?
- How can evaluation questions about innovation and future impact more deeply embed markers of trust?

Research impact and trust

- Research generates knowledge and always has impact
- The impact of research appears broad and unpredictable
- *Because of this we must be able to trust research*

2. What principles apply? Do we need more?

The principles of research integrity are well captured, but what do they mean for innovation and impact?