An introduction to research integrity

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A clear message: 
Good practice = research quality

“If we are to maintain our position at the very forefront of research and scholarship, then we must be sure that the work of our research community is underpinned by common values of rigour, respect, and responsibility.

Excellence and integrity are inextricably linked.”

*The Concordat to Support Research Integrity (2012)*
Good practice = trustworthy & open

Trust in scientists grows as fake coronavirus news rises, UK poll finds

Poll finds 64% of voters more likely to listen to expert advice as 51% say they have seen fake news about virus

- Coronavirus - latest updates
- See all our coronavirus coverage

It is important that COVID-19 data is openly available for people to check 97%

All Covid-19 related research and data should be made open for anyone to use freely 67%

Now more likely to listen expert advice from qualified scientists and researchers 64%

A government data strategy would have helped in the fight against COVID-19 63%

Restricting the public’s right to information is a necessary emergency measure 29%

Source: The Guardian, 05/05/20
But what has this go to do with me?
‘Good research practice’ by another name

Key elements of research integrity are:

- Honesty, Rigour, Transparency and Open Communication, Care and Respect, Accountability

_The Concordat to Support Research Integrity (2019)_

Key themes:

- All disciplines
- All career stages
- All elements of your research: from beginning to end
- **Enabling research, not restricting it**
- **Safeguarding trust in research**
Isn’t this stuff obvious?
‘Rules’ exist but much is unwritten…


Problems are rare?

  - On average, 1.97% of respondents admitted to have fabricated, falsified or modified data or results at least once.
  - Up to 33.7% admitted to questionable research practices.
- What about mistakes?
  - Studies looking at the causes of retractions suggest that c.12% - c.19% are caused by honest errors (e.g. Moylan, E.C., and Kowalczuk, M.K., 2016 and Fanelli, D., 2016.)
Can problems be prevented?

- A recurring theme from UKRIO: problems occurring because of **overconfidence, bad habits or a failure to get help**.
- Awareness and training: researchers need to be encouraged to **be self-critical** and there should be **no stigma attached to asking for assistance**.
- Organisations need to **support their researchers** in this.
- A key lesson from UKRIO’s unique experience: **serious problems could have easily been avoided with a bit of foresight**.
What is ‘good’ research?

- Rigorous
- Accurate
- Original
- Honest
- Transparent
- Collaborative
- Multidisciplinary
- Open
- Creative
- To the benefit of society


- Also: ‘No such thing as failures, only setbacks’
- What do all of the above traits look like in different types/disciplines of research?
Research culture:
‘Publish or perish’ vs. ethics & reflection

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Source: Research Integrity: a landscape study, June 2020
Vitae, UKRIO and UKRN, on behalf of UKRI
Research during a pandemic

• Considerable effects on how research is designed, funded, conducted, managed, monitored and disseminated.

• Huge impact on health, wellbeing and working practices of researchers and of society as a whole.

• How to best support researchers during these times?

• Are there any new working practices which we should try to retain long term?
Questions and discussion

• **What challenges do you face** when trying to do high quality, ethical research?

• **What do you need to help you** overcome these challenges?

• **What can you do** yourselves? **What role should others play** – e.g. universities, funders, publishers, etc?

• **How do we want to improve research culture:** what changes, and how? What shouldn’t be changed?