
Reviewing the Responsible Conduct of Research Literature from a Scientific Virtue Perspective

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World Conference on Scientific Integrity

May 29, 2017



Responsible Conduct of Research (RCR)

Working Definitions

- “In general terms, responsible conduct in research is simply good citizenship applied to professional life.” -Office of Research Integrity, 2004
 - “The term “RCR” may also be used in a wider sense, to **include all possible aspects of individual character and behavior that impact research.**” -Council of Graduate Schools, 2006
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RCR Concepts and Curricula

- Humane treatment of research subjects
- Falsification, Fabrication, and Plagiarism
- Conflicts of Interest
- Duty to report misconduct (whistle-blowing)
- Authorship attribution
- Questionable research practices
- Hostile environments
- Data storage and privacy issues



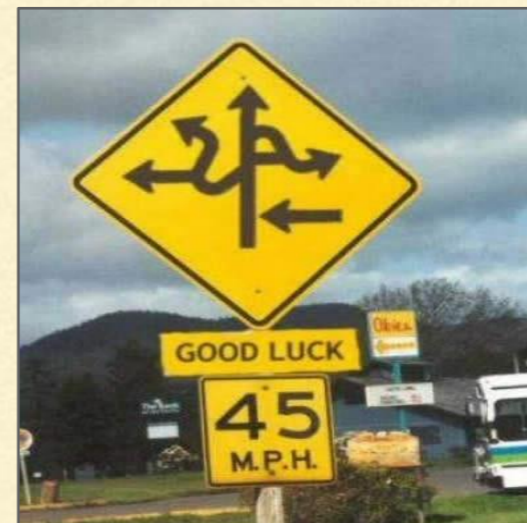
Even more RCR topics...

- Pimple 2002: **6 Domains**
 - (1) Scientific Integrity; (2) Collegiality; (3) Protection of human subjects; (4) Animal welfare; (5) Institutional integrity; (6) Social responsibility
- ORI: **9 Core Areas**
 - (1) data acquisition, management, sharing, and ownership; (2) mentor/trainee responsibilities; (3) publication practices and responsible authorship; (4) peer review; (5) collaborative science; (6) human subjects; (7) research involving animals; (8) research misconduct; and (9) conflict of interest and commitment
- Dubois and Dueker 2009: **250+ topics and subtopics**

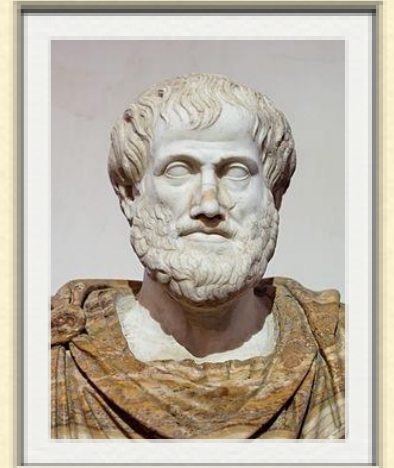


Critiques

- External imposition
 - Paternalism
 - Ethics police
- Onerous
 - Who's responsibility?
 - Tedious and time consuming
- Ineffective
 - Doesn't 'stick'
 - Unhelpful on the ground
 - Too Vague or too specific



Scientific Virtues Approach



- A different kind of ethical theory
 - Character, judgment, and culture, rather than duty, rules, and sanctions for violations
 - Move away from reliance on decision procedures and toward judgment
 - Produce a culture that supports and enables virtuous action
- Scientific Virtue (Pennock)
 - Narrow scope to science...
 - Develop dispositions to do good science
- Use virtue theory to reframe traditional RCR topics, concepts, and methods



Scientific Virtues Prescription

- **Norms** of science come from **within** scientific practice
- Curriculum based on scientific virtues
 - Emphasize **values** inherent in **exemplary science** and **traits** that **support** those values
 - Workshops that encourage **discussion** in virtue terms
- Embrace informal transmission of values
 - Stress importance of **culture in science** and its role in promoting good science (e.g. narratives, stories, anecdotes)
 - Emphasize **role modelling** (e.g. exemplars and mentors)
- Develop normative **sensitivity** and **judgment**



Acknowledgements

BEACON Center

Templeton Foundation

Toolbox Dialogue Initiative

