DETRIMENTAL RESEARCH PRACTICES (DRPS) and Their Impediments to Research Integrity

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Background to this Plenary Talk

- Why does this matter?
  - There are integrity issues outside the strict definition of RM
  - Do DRPs precede RM? It would make sense.
  - Regardless, DRPs have consequences and victims.

- At Purdue University
  - No definition of detrimental research practices
  - Therefore, no process to directly address
  - Reunification of education and compliance under RIO

- Why this talk?
  - How we are addressing
  - How to integrate DRP into RCR (one approach anyway)
  - Caveat: many here and more knowledge available
Background to Detrimental Research Practices

- 1992 – Responsible Science, NASEM

- 2006 – Fostering Integrity in Science, Steneck
  - Defined as Misrepresentation, Inaccuracy, Bias

- 2013 – RCUK Policy and Guidelines on Governance of Good Research Conduct, Research Council UK
  - At Purdue, draw heavily on this definition

- 2016 – Implementing a Comprehensive Research Compliance Program, Dade, Olafson, & DiBella
  - Defined as Data, Authorship, Working with others, Rules & Whistleblowing

- 2017 – Fostering Integrity in Research, NASEM
  - DRP instead of QRP
  - Did not define explicit list but referenced and gave examples
DRPS as Presented at Purdue

- Presented after RM definition (strict federal alignment)
- What are detrimental research practices (DRPs)?
  - Practices of questionable integrity that do not rise to the level of research misconduct
  - Some universities or institutions include DRPs in their formal RM policy
  - Even so, some DRPs could be considered RM depending on context
- Four categories
  - Misrepresentation
  - Breach of duty care
  - Improper dealing with allegations of misconduct
  - Neglectful or exploitive supervision ("mentoring malpractice")
Misrepresentation/Misleading

- Of data by purposeful suppression or flawed interpretation
- Undisclosed duplication of publication
- Failure to declare material interests (COIs)
- Of qualifications, experience, or positions
- Of involvement in publications
  - Gift, guest, ghost or coercive authorship
  - Denial of authorship (overt or by exclusion)
    - Concept of right of first refusal

(RCUK, 2013)
Breach of Duty Care/Negligence

- Disclosing research participants
- Putting participants in danger
- Not taking reasonable care of participants
  - Including informed consent issues
- Not observing legal and ethical requirements for animal subjects, humans, human organs, or tissues
- Improper conduct in peer review of proposals or results

(RCUK, 2013)
Improper Dealings with Allegations

- Failing to address infringements
  - Covering up misconduct
  - Not protecting complainants (whistleblowers)

- Failing to deal with malicious allegations
  - Non-good-faith claims

(RCUK, 2013)
Neglectful or Exploitive Supervision / Mentoring Malpractice

- Co-opt/Hijack/Misappropriate
  - Ideas, projects, grants, publications, intellectual property, connections, credit
- Overload/Divert/Oppress
  - Busy work, menial tasks, unrelated assignments
- Oversharing/Impropriety/Indiscipline
  - Personal life, controversial opinions/topics, biases, family, flirting/coquetry
- Uncommitted/Unsupportive
  - No time, uncaring, unencouraging, unreliable, avoidant, unhelpful
- Toxicity
  - Berates, curses, belittles, sabotages, cruel, disgruntled, bullying

(Adapted from Chopra, Edelson, & Saint. (2016). Mentorship malpractice. JAMA)
How We Report DRPS

- Allegations reported by any means of communication
  - Directly to Graduate School/Dean
  - Directly to RIO/RIO Office
  - Directly to Provost
  - Purdue Hotline (phone/web form)
THANK YOU

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