

# CONFLICT OF INTEREST

## KEY CONCEPTS

**Conflict of Interest (COI):** tension between one set of commitments, interests, or obligations and another set.

**External Financial Relationship:** another relationship, other than the one you already have (with your primary research institution), also of an economic nature—such as employment (like paid consulting), holding of equity (like stock, funds, or pension), holding an executive position (like board membership or other management—paid or unpaid), or compensation from licensing and other potential commercialization of Intellectual Property (IP).

**Sponsorship Bias:** the chance that source(s) of study funding may systematically influence the conclusion(s) drawn by researchers conducting studies funded by that source or those sources.

## TEXTBOOKS & REPORTS

- *Conflict of Interest in Medical Research, Education, and Practice* (The National Academies Press 2009; free at [nap.edu](http://nap.edu))
- *Reproducibility and Replicability in Science* (The National Academies Press 2019; free at [nap.edu](http://nap.edu))

## ASSOCIATED ARTICLES

- Bodenheimer's (2000) "Uneasy Alliance" *New Engl J Med* 342(20): 1539–1544.
- Fanelli's (2009) "How Many Scientists Fabricate and Falsify Research?" *PLOS One* 4(5): e5738.

## DATA ON SPONSORSHIP BIAS

- Gaudino et al.'s (2020) "Characteristics..." *JAMA Intern Med* 180(7): 993–1001.
- Jefferson's (2020) "Sponsorship bias in clinical trials" *J Roy Soc Med* 113(4): 148–157.

## DISCUSSION QUESTIONS

1. How does potential COI occur most commonly or significantly for work in your research setting?
2. Does your research institution have a COI office, officer, and / or committee? Should it?
3. Do you think that your interpretation of results might be swayed by financial sponsorship of your research by an entity which you know is hoping for a particular result? What's the "Muhammad Ali Effect"?
4. What do you think academic institutions should do to balance the potential good of fostering healthy relationships with industry beside the possible bad of fostering bias caused by COI in sponsored research?
5. How robust is the body of evidence for the existence of "sponsorship bias"?

## POLICY & REPORTING

The process of handling financial COI at research institutions often begins with disclosure of any external financial relationships a researcher might have with other entities that can reasonably appear to be related to their work for the institution. Your institution should have a **COI Officer** to whom such disclosures can be made.

Disclosure is often sufficient. But some relationships are deemed, upon examination, to create COI—and these are the ones which might require further review and oversight. The aim of such supervision, often by a **COI Committee**, is usually to manage, reduce, or eliminate any bias from the conflict. Note that attempting to eliminate *bias* does not necessarily mean an external financial *relationship* will have to be eliminated. It is the *bias* that must be dealt with.



## FINE PRINT

In 1992–3, the National Academy of Sciences (NAS) published a pair of reports on *Responsible Science* (Vol. 1–2), and those reports ushered in an era of ethical oversight centered around the concept of the Responsible Conduct of Research (RCR) at federally-funded American research institutions across the nation. By 2009, the National Institutes of Health (NIH) had mandated that "all trainees, fellows, participants, and scholars receiving support through any NIH training, career development award (individual or institutional), research education grant, and dissertation research grant must receive instruction in responsible conduct of research" (NOT-OD-10-019). The National Science Foundation (NSF) recommends—though does not require—something similar. Both agencies suggest that satisfactory RCR instruction tends to cover: research misconduct; conflict of interest; human subjects research; animal subjects research; collaboration and interdisciplinarity; data acquisition and management; authorship, peer review, and publication; mentoring and being mentored; and the relationship between science and society.

This handout introduces the topic of **conflict of interest**.