NetEthics Bibliography on Ethics and Responsible Conduct of Research (RCR) in Engineering Research Networks (2000-2023)
Last revised: May 17, 2023


Introduction: This bibliography contains resources on conducting ethical and responsible research within complex engineering networks. Literature on research ethics tends to focus on the “micro” level of the individual investigator or the “macro” level of societal impacts of research. There is a dearth of ethics literature at the “meso” level to guide complex multi-disciplinary teams working together to achieve a common scientific goal. This bibliography draws from the literature in domains including ethics and responsible conduct of research (RCR), law, organizational psychology, engineering, management, and team science. This document includes sources relevant to responsibly and ethically conducting research at the network level and does not aim to replicate the full literature in each subject area. This bibliography is limited to sources published in or after the year 2000, and sources published in English.

This bibliography was prepared as work for the NSF-funded project on “NetEthics: Building Tools & Training to Advance Responsible Conduct in Complex Research Networks Pioneering Novel Technologies” (Award No. 2220611. The NetEthics project involves collaboration with national experts, interviews with participants in an Engineering Research Center (ERC), and an extensive literature review. NetEthics is co-led by principal investigators at the University of Minnesota and Massachusetts General Hospital. More information about NetEthics can be found here.

This bibliography is organized into eight sections, by topical area. These topic areas reflect categories of issues identified through literature review and consultation with experts. There is overlap between categories, and many resources address more than one category of issues. Each resource is listed only once and in the most relevant category. Within each subsection, entries are listed in alphabetical order by first author or editor.

To suggest additional resources for this bibliography, please email the Consortium on Law and Values Senior Administrative Director Dori Henderson at hend0054@umn.edu.
Table of Contents

I. **Ethically Allocating Credit** ................................................................. 3
   A. Articles ........................................................................................................... 3
   B. Online Resources .......................................................................................... 4

II. **Collaborating Across Differences in Discipline, Training, and Geography** .... 4
   A. Articles ........................................................................................................... 4
   B. Presentations .................................................................................................. 4
   C. Books and Reports .......................................................................................... 5
   D. Online Resources .......................................................................................... 5

III. **Ensuring Ethical Research** ................................................................. 5
    A. Articles ........................................................................................................... 5
    B. Presentations .................................................................................................. 6
    C. Books and Reports .......................................................................................... 6
    D. Codes of Conduct .......................................................................................... 6
    E. Online Resources .......................................................................................... 6

IV. **Fostering Positive Team Dynamics** .................................................... 6
    A. Articles ........................................................................................................... 6
    B. Books and Reports .......................................................................................... 7
    C. Online Resources .......................................................................................... 7

V. **Managing and Leading the Network** .................................................... 7
    A. Articles ........................................................................................................... 7
    B. Books and Reports .......................................................................................... 9
    C. Online Resources .......................................................................................... 9

VI. **Advancing Diversity, Equity, and Inclusion** ........................................ 9
    A. Articles ........................................................................................................... 9
    B. Presentations .................................................................................................. 12
    C. Books and Reports .......................................................................................... 12
    D. Online Resources .......................................................................................... 12

VII. **Building a Sustainable Network** ....................................................... 12
    A. Articles ......................................................................................................... 12
    B. Presentations .................................................................................................. 13
    C. Books and Reports .......................................................................................... 14

VIII. **Promoting Socially Responsible Research Outcomes** ....................... 14
I. Ethically Allocating Credit
   A. Articles


B. **Online Resources**


Pimple KD. Collaborative Research: Avoiding Pitfalls and Sharing Credit. *Online Ethics Center* (last accessed May 16, 2023). [Link](#).

II. **Collaborating Across Differences in Discipline, Training, and Geography**

A. **Articles**


Tobi H, Kampen JK. Research Design: The Methodology for Interdisciplinary Research Framework. *Quality & Quantity* 2018;52:1209-1225. [Link](#).


B. **Presentations**

Beever J, Kuebler S, Pinkert LA, Taylor LE. Faculty Perspectives on Frameworks of Responsibility in their Disciplines. 2021 IEE International Symposium on Ethics in Engineering, Science and Technology (ETHICS), Waterloo, ON, Canada, 2021. [Link](#).


C. Books and Reports
Feister MK. EXPLORING THE CONSTITUTIVE AND SOCIAL PROCESSES OF ETHICS IN MULTIDISCIPLINARY ENGINEERING DESIGN TEAMS (Purdue University, PhD dissertation, 2015). Link.

D. Online Resources
Coalesce. CTSA Online Assistance for Leveraging the Science of Collaborative Effort (last accessed May 16, 2023). Link.

III. Ensuring Ethical Research
A. Articles


**B. Presentations**

Petersen AM. Being Ethical in Large-Team Science: A Quantitative Historical Perspective (History of Science Society 2013 Annual Meeting, Boston, MA.) Link.

**C. Books and Reports**


**D. Codes of Conduct**

American Institute of Chemical Engineers (AIChE). Code of Ethics (last accessed May 16, 2023). Link.

American Society of Civil Engineers (ASCE). Code of Ethics (last accessed May 16, 2023). Link.


Institute of Electrical and Electronics Engineers (IEEE). Code of Ethics (last accessed May 16, 2023). Link.


**E. Online Resources**


**IV. Fostering Positive Team Dynamics**

**A. Articles**


Lee SS-J, Jabloner A. Institutional Culture is the Key to Team Science. *Nature Biotechnology* 2017;35:1212-1214. Link.

Marks MA, DeChurch LA, Mathieu JE, Panzer FJ, Alonso A. Teamwork in Multiteam Systems 2005;90:964-971. [Link](#).


**B. Books and Reports**

Davison RB Hollenbeck JR. *Boundary Spanning in the Domain of Multiteam Systems, in MULTITEAM SYSTEMS* (Zaccaro SJ, Marks MA, DeChurch L, eds. 2011). [Link](#).


**C. Online Resources**


Gunsalus CK. Incivility and Bullying -- Quick Tips. *National Center for Professional & Research Ethics* (last accessed May 16, 2023). [Link](#).


Stanford Center for Biomedical Ethics. The Center for Biomedical Ethics Offers a Team Science Consultation Service through Spectrum. *Stanford Medicine Research Office* (last accessed May 16, 2023). [Link](#).


**V. Managing and Leading the Network**

**A. Articles**


**B. Books and Reports**


**C. Online Resources**


Divergent Science LLC (last visited May 16, 2023). Link.


**VI. Advancing Diversity, Equity, and Inclusion**

**A. Articles**


Love HB, Fosdick BK, Cross JE, Suter M, Egan D, Tofany E, Fisher ER. Towards Understanding the Characteristics of Successful and Unsuccessful Collaborations: A
Case-Based Team Science Study. *Humanities and Social Sciences Communications* 2022;9:371. doi: 10.1057/s41599-022-01388-x. Link.


B. Presentations
Parker JN. Tips on Team Science and Equity from NSF Program Officer John Parker. (UMass ADVANCE Research Collaboration Workshop, Amherst, MA, Feb. 8, 2019). Link.

C. Books and Reports

D. Online Resources
Gilliand G. Embracing Diversity in a Team-Science World. LinkedIn (last accessed May 17, 2023). Link.

VII. Building a Sustainable Network
A. Articles


DuBois JM, Schilling DA, Heitman E, Steneck NH, Kon AA. Instruction in the Responsible Conduct of Research: An Inventory of Programs and Materials within CTSAs. *Clinical and Translational Science* 2010;3(3);109-111. Link.


**B. Presentations**


C. Books and Reports

VIII. Promoting Socially Responsible Research Outcomes
A. Articles

B. Online Resources
Bielefeldt AR. Efficacy of Macroethics Education in Engineering. Online Ethics Center (last accessed May 17, 2023). Link.