# How research funding affects data sharing

- Effective interdisciplinary research requires data sharing
- Making data shareable creates extra work for researchers
- Funding source affects incentives to make data shareable
- Entrepreneurship also affects data-sharing attitudes

### Bioinformatics

- Source of funding: NIH
- Standardized data-sharing practices and multiple data repositories
- "In my field, if you want to publish a paper you have to put your data in GEO\*."

## Biomedical Engineering

- Sources of funding: NIH, DoD, entrepreneurship
- No standardized data-sharing practices

#### Materials Science

- Sources of funding: DoE, DoD, NSF, industry
- "We have so much funding that's not NSF. We have DoD; we have DoE; we have companies. ... We have a lot of funding that's not NSF."
- No standardized data-sharing practices
- "The journals seem to be fairly pragmatic about data sharing. It's not been official for them to force data sharing on us, so they don't."

## Funding sources

- National Institute of Health (NIH)
- Enforced data-sharing requirements
- National Science Foundation (NSF)
- Unenforced data-sharing requirements
- Department of Energy (DoE)
  - No specific data-sharing requirements
- Department of Defense (DoD)
  - Explicit data-sharing limitations
- Industry
- Explicit data-sharing limitations

#### Future Work

- Interviewing one researcher in each of three fields is not enough to generalize to a larger population
- Look at many researchers in multiple fields

- Look at researchers in single field with variety of funding sources
- Compare fields with different data sharing norms
- Compare funding sources within single field



