CONVERGENCE RESEARCH NEEDS SOCIAL SCIENTISTS

social science ☆

See synonyms for *social science* on Thesaurus.com

noun

1 the study of society and social behavior.

2 a science or field of study, as history, economics, etc., dealing with an aspect of society or forms of social activity.
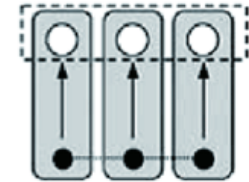
- **Convergence research tenets**
  1. Driven by a deep scientific question or pressing societal need
  2. Deep integration across disciplines, knowledge, methods, data

- **Convergence ~ transdisciplinarity**

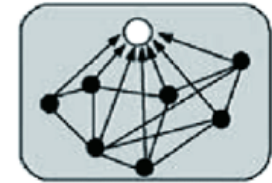- **Requires building community partnerships that respect lay knowledge**

Multidisciplinarity
- Multiple disciplines
- Multiple disciplinary goal setting under one thematic umbrella
- Loose cooperation of disciplines for exchange of knowledge
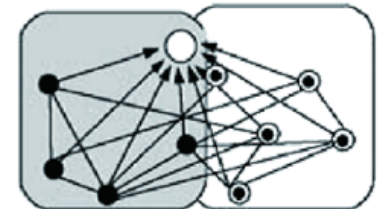- Disciplinary theory development

Interdisciplinartity
- Crosses disciplinary boundaries
- Common goal setting
- Integration of disciplines
- Development of integrated knowledge and theory

Transdisciplinarity
- Crosses disciplinary and scientific/academic boundaries
- Common goal-setting
- Integration of disciplines and non-academic participants
- Development of integrated knowledge and theory among science and society

- discipline ●
- non-academic participants ◉
- goal of a research project ○
- movement towards goal →
- cooperation
- integration

- thematic umbrella
- academic knowledge body
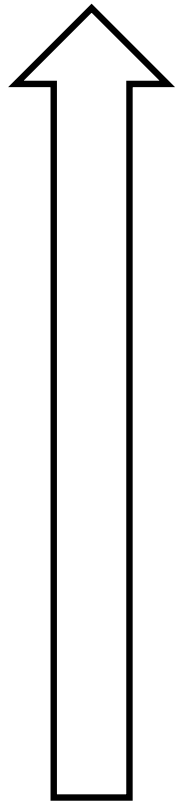- non-academic knowledge body

Hunt, F., & Thornsbury, S. (2014). Facilitating transdisciplinary research in an evolving approach to science. *Open Journal of Social Sciences*, 2014.

INSTITUTIONAL BARRIERS INHIBIT CONVERGENCE

Potential for NSF funding to influence

- Value placed on non-academic dissemination
- Plug & play norms in proposal writing
- Expectations toward publishing in disciplinary journals
- Disciplinary status hierarchies
- Pre-proposal and post-award support
- Teaching loads
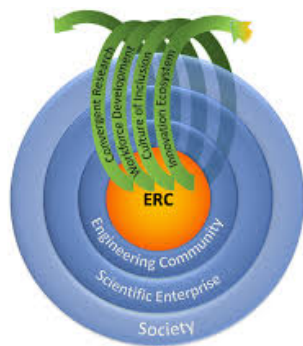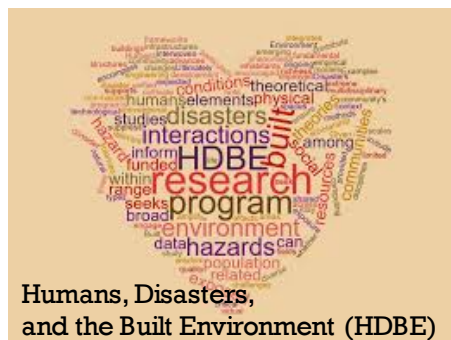- Tenure & promotion (dis)incentives
- Budget models

Impacts highest on junior faculty

CATALYZING SOCIAL SCIENCE IN NSF CONVERGENCE

National Science Foundation
Research Traineeship (NRT) Program
Overview

- Panel review: more emphasis on connections vs. components
- Broader impacts
  - more guidance (investigators & reviewers)
  - social equity as a desired societal outcome
  - evaluate effectiveness of activities
- Small grant opportunities
- Training workshops for junior researchers
- Facilitate funding for non-academic partners

- Incentivize….
  - social scientists as PIs
  - engagement, not just dissemination
  - accessibility via Open Access publishing
  - policy/research briefs
- Project management plans: incorporate more team science principles
- Support for programs like SESYNC
- Allow more course buyouts for researchers with high teaching loads

Humans, Disasters, and the Built Environment (HDBE)

Smart and Connected Communities (S&CC)
PROGRAM SOLICITATION
NSF 18-520
REPLACES DOCUMENT(S):
NSF 16-610

Coastlines & People
CoPe
Coastlines & People

CIVIC INNOVATION CHALLENGE
POWERING SMART & CONNECTED COMMUNITIES

Dynamics of Integrated Socio-Environmental Systems (DISES)