Creating a Culture of Collaboration: Operationalizing Interdisciplinary Research

Whitney Lash-Marshall (wglash@esf.edu), Paul Hirsch, Kenneth Shockley, Kathryn Friedman, Carmen Carrion-Flores, Valerie Luzadis, Christopher Nomura, Roberta Johnson, Laura Rickard, & Steve Tulowiecki
Fostering Collaboration in SUNY

• Launched in 2013
• Fund *multi-campus* research projects to:
  • Promote *innovative, collaborative research* among SUNY faculty
  • Provide *experiential learning opportunities* for SUNY students
  • Produce *social benefit* and economic opportunity for New York and beyond
Our Research Team

Understanding and Overcoming Barriers to Communication in Complex Socio-ecological Systems

• 9 Individuals from diverse disciplines at 4 SUNY Institutions
Inter- & Transdisciplinary Research

• Presents new challenges to the research process.
• Many of us have not been trained to participate.
• Requires coordination of multiple individuals around a multi-faceted (complex) research problem.

“Sometimes I think the collaborative process would work better without you.”

License to Laugh
The 4E Team

Collaborative Interdisciplinary Research Community

Institutional Barriers?

Epistemological Barriers?

Barriers to Team Work?

What barriers have you encountered?

How have, or how might they be, overcome?

Authentic Collaborative Research

Research Translation

Education

Policy

Practice (e.g. Industry)
Methods

• **Online survey**
  - SUNY researchers in 4E domains across 8 SUNY Institutions.
  - 651 responses (28% response rate)

• **Semi-structured interviews**
  - 15 interviews across 7 interdisciplinary teams
  - 13 interviews with SUNY administrators

• **Working with ongoing projects** in the Networks
  - Identify and overcome barriers in real time
  - Green Composite Materials and Brain Networks

• **Workshop development**
  - Facilitative Leadership for Collaborative Team Research
  - Navigating complexity in process and problems
Survey Respondents

- “Barriers to Interdisciplinary Research In and Across SUNY”
  - The majority of respondents were tenured research or faculty members (55%)
  - 67% had submitted an Interdisciplinary (INT) proposal.
  - 76% had participated on an INT research team
  - 85% were interested in doing so in the future
  - Why do they participate?
    - The “…problem(s) of interest required subject matter expertise OR methods or techniques from disciplines other than [their] own” (28%)
<table>
<thead>
<tr>
<th>Institutional Barriers</th>
<th>Epistemological Barriers</th>
<th>Barriers to Teamwork</th>
<th>Barriers to Research Translation*</th>
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### Top Three Barriers to Interdisciplinary Research In & Across SUNY:

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<tr>
<td>Time demands</td>
<td>Lack of common language</td>
<td>Geographic differences (Travel Required)</td>
<td>Challenges of communicating with different audiences</td>
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<td>Funding challenges</td>
<td>Different methodologies, assumptions and what constitutes adequate proof</td>
<td>Personal characteristics</td>
<td>Goals of academic research are not compatible with goals of practitioners</td>
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<td>Budget control</td>
<td>Difficulty in clarifying problem definition and integrating objectives</td>
<td>Project organization or management structure</td>
<td>Scholarly research relevant to policy, education or industry is valued less than other research</td>
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*Includes only respondents who answered ‘yes’ to whether they participate in research with translation for policy, education or industry*
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<th>Contribution</th>
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<td><em>Interdisciplinary engagement as a means of co-shaping the problem or research question as part of the collaborative process.</em></td>
<td><em>Interdisciplinary engagement as a means of inserting complementary expertise into a previously established problem or research question.</em></td>
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<td>• Multiple perspectives involved in problem formulation.</td>
<td>• Project is defined by a single or few disciplinary perspectives, but does not include the breadth of disciplines that subsequently will be engaged in the project.</td>
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<td>• The inter- or transdisciplinary research team comes together at the point of problem formulation with the recognition that additional points of view will require problem reformulation.</td>
<td>• Individuals are invited/contracted to fulfill a disciplinary or organizational role on an already defined problem.</td>
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Creating a Culture of Collaboration

Institutional Space & Opportunity

Overcoming Barriers to Authentic Collaboration

Intellectual Openness & Engagement

Facilitative Leadership
1. Empower facilitative leaders
2. Non-Disclosure Agreements
3. Proactive identification of barriers
4. Collaboratively defined operating agreement.

www.rfsuny.org/RF-News/ESF-NoE---Composites/Name-18630-en.html
1. Respect for intellectual property: will not submit an individual proposal based on group ideas.
   • Be willing to share ideas;
   • Be transparent in the communication of plans for publications, proposals, patents, etc. throughout the process.
   • Intellectual property includes networks and contacts.

2. Agree to be an active participant and engage in the process.

3. Collectively determine criteria for impartial selection of projects.
Strategies for Promoting Collaboration

1. Empower facilitative leaders
2. Non-Disclosure Agreement
3. Proactive identification of barriers
4. Collaboratively defined operating agreement.
5. Developing shared visualizations.
6. Critical Reflection
Thank you!

Whitney Lash-Marshall: wglash@esf.edu
Paul Hirsch (PI): pahirsch@esf.edu