Challenges and Best Practices in Stimulating Multidisciplinary Research

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This presentation focuses on the challenges in developing multidisciplinary research teams and collaborations comparing both centralized and decentralized institutional structures.

**Challenges** and **Best Practices** in four categories:

- Technology
- Networking & Communication
- Faculty Incentives
- Institutional Structure & Policy
To be or not to be

Centralized versus Decentralized

• Not enough staff
• Local pockets of knowledge
• Redundancies and cross-purposes

What about hybrid models?
• Takes time to build bridges
Technology – Challenges

- Gaps in information; effective dissemination
- Lack of software to help faculty find collaborators on campus; CV’s and Bio’s not updated or available
- Working across institutions:
  - Multiple IRB’s
  - Different timeline for approvals
  - Sharing proposal information and data
• Let’s hear from the panel
  • How does your institution address these challenges?
  • What worked and didn’t work?

• Let’s hear from the audience
  • What are your challenges?
  • How do you address them?
Networking & Communication – Challenges

- Difficulty getting information out in timely manner
- Different definitions of multi/inter/trans-disciplinary
- Need more awareness of Science of Team Science issues related to large group, new & multidisciplinary projects
- Lack of project management skills and abilities to plan and organize large, complex multidisciplinary proposals at department/college level
- Limited time & staff for centralized office to train department/college administrators
- Working across institutions:
  - Timely communication, completing work on time, knowing who to contact
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Faculty Incentives – Challenges

- No clear incentive to conduct interdisciplinary research unless lead PI who receives public credit and F&A

- No structure or incentive to keep groups of faculty working together (no admin support, incentive to organize/attend meetings)

- Disincentive to participate in interdisciplinary research if faculty’s college/department places less weight on these projects compared to individual efforts by faculty

- Although seed funding available for multi-college, multidisciplinary projects, no incentive to keep these faculty working together once the project period ends and they submit required proposal to external funder
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Institutional Structure & Policy – Challenges

- Decentralized campus structure for research admin; no RD resources in central sponsored programs office so RD left to individual colleges

- College with RD unit seen as not research intensive by other centers/groups; difficult time forming partnerships with other researchers on campus

- No structure or incentives for individual faculty members to participate in interdisciplinary research or groups to continue to work together

- RD offices vary in organization and management depending on academic unit; difficult to provide consistent level of assistance

- Hard to maintain equity as different policies by college/school on F&A distribution and percent course buyout
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