SUCCESS IN INTERDISCIPLINARY GRANTSEEKING AND DEVELOPING TEAMS FOR COLLABORATIVE PROPOSALS

Prepared for the University of Tennessee Institute of Agriculture

June 11, 2021
AGENDA

FUNDERS FOR INTERDISCIPLINARY PROJECTS

HALLMARKS OF STRONG INTERDISCIPLINARY PROJECTS

COLLABORATION BASICS

BUILDING AN EFFECTIVE TEAM

MANAGING TEAM-BASED PROPOSAL DEVELOPMENT

Q&A

SHORT BREAK & Q&A
DEVELOPING SCIENCE TEAMS
## Collaboration vs. Integrated Research Team

<table>
<thead>
<tr>
<th><strong>Collaboration</strong></th>
<th><strong>Integrated Research Team</strong></th>
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<tbody>
<tr>
<td>Each Team member has specific expertise to address research problem.</td>
<td>Meet regularly (outside of grant funding) to discuss team goals, objectives and plan a course.</td>
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<tr>
<td>Typically work on serrate parts of research problem and then integrate.</td>
<td>Leadership responsibilities are shared.</td>
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<td>Data sharing and brain storming varies and can be limited or frequent.</td>
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SCIENCE-OF-TEAM-SCIENCE (SCITS) IDEAL TEAMS

- Encourage **risk taking** and foster unconventional approaches
- **Small teams** > large teams
- Foster **collaboration and networking** with PIs from diverse fields and different career levels to heighten innovation
WHAT DETERMINES TEAM SCIENCE SUCCESS?

- Funding trends
- Common vision and theme
- Institutional infrastructure and resources for communication and data sharing

- Interpersonal dynamics among team members
- Sharing ideas and leadership responsibilities
- Team members’ collaborative skills and experiences
TOOLS FOR FINDING COLLABORATORS

- Research Gate
- NIH Reporter, NSF Award Search
- NIH Matchmaker
- PIVOT
  - (link currently broken, but check with the Office of Sponsored Programs)
# PIVOT: PROFILE DISCOVERY

**Profiles**

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"cardiac arrhythmia" AND "ryanodine receptor"
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**Researcher Profiles for ProQuest**

- Government Information Solutions [view profiles]
- Graduate Education Programme [view profiles]
- Information Solutions [view profiles]
- Shared Services [view profiles]
- Workflow Solutions [view profiles]
Sara E Branch
Assistant Professor, Psychology
Community of Science

CV Page: https://pqrscosprod.s3.amazonaws.com/links/104C011E95704B
Personal Website: https://www.hws.edu/academics/psychology/facultyProfile.aspx?

Expertise: Dr. Branch has expertise in social and personality psychology with a focus on interpersonal relationships, communication studies, and motivation. She is also active in the scholarship of teaching and learning. Her research examines how the relationship context affects support outcomes, particularly in regard to advice as a support function. Her research on motivation examines both person and situational factors that affect student interest and persistence in the STEM fields as well as students' more»

Affiliations: Assistant Professor, Psychology, Community of Science

Funding Matches:
- 217 funding opportunities
- 64 funding opportunities for your department
OUTREACH AND NETWORKING

- Meet with PIs from different fields
- Discuss research/program focus, current projects, publications, and related professional activities with each other
- After the discussion work to form a concept for a collaborative project

- Ask:
  - What sort of topic is compatible with your respective research/project foci?
  - How do your disciplines complement one another?
  - How much funding would you need to make the project work?
FINDING COLLABORATORS

- Your institution
- Professional associations
- Conferences
  - Don’t “herd.”
  - Don’t lead with your elevator pitch.
  - Exchange business cards.
  - Follow up.
LEVERAGING NETWORKS

- Your network
- Colleagues’ networks
- Interdisciplinary team? Seek out colleagues in other departments.
  - Leverage *their* network!
- Multi-institution and industry? WORK THE NETWORKS.
Industry researchers graduated from doctoral programs too!

They belong to the same scientific societies.

They attend the same conferences.

They publish in the same journals.

*Research administrators often monitor opportunities for private sector partnerships and guide faculty toward industry collaborations.*
1. What is your rationale?
2. Are you ready to collaborate?
3. How will your team function?
4. Do you have the technology and resources?
5. How will you communicate and coordinate?
6. How will team leadership, management and administration look?
7. How will you resolve conflict?
8. How will you evaluate your collaboration?
PREPARING A TEAM FOR A COLLABORATIVE PROPOSAL

- Define a **vision and goals**
- Define and refine **partner involvement**
- **Develop a plan** for writing the grant proposal
- Set **expectations** for each team member’s contribution to the proposal
- **Formalize** partner involvement with MOUs
- Solicit and obtain **support letters**
- **Communicate** with collaborators **frequently** throughout the grant proposal writing process
Who Will Do What?

- What are the expected contributions of each participant?
- Who will write any progress reports and final reports?
- How and by whom will personnel decisions be made? How and by whom will personnel be supervised?
- How and by whom will data be managed? How will access to data be managed? How will you handle long-term storage and access to data after the project is complete?

Authorship, Credit

- What will be the criteria and the process for assigning authorship and credit?
- How will credit be attributed to each collaborator’s institution for public presentations, abstracts, and written articles?
- How and by whom will public presentations be made?
- How and by whom will media inquiries be handled?
- When and how will you handle intellectual property and patent applications?

Overall Goals

- What is the overall vision for the collaboration?
- What are the scientific issues, goals, and anticipated outcomes or products of the collaboration?
- When is the collaboration over?
- When is the project over?
Contingencies and Communicating

- What will be your mechanism for routine communications among members of the research team (to ensure that all appropriate members of the team are kept fully informed of relevant issues)?

- How will you decide about redirecting the research agenda as discoveries are made?

- How will you negotiate the development of new collaborations and spin-off projects, if any?

- Should one of the principals of the research team move to another institution or leave the project, how will you handle data, specimens, laboratory books, and authorship and credit?

Conflict of Interest

- How will you identify potential conflicts of interest among collaborators?

- Could a collaborator or any close family members or associates benefit financially from the research?

- Is a collaborator receiving money from someone who could benefit financially from the research?
COMMON CHALLENGES OF COLLABORATIVE PROPOSALS

- Keeping everyone **engaged**
- Keeping all **cores/programs aligned** with the project vision and requirements
- Maintaining **timelines**
- **Obtaining** institution and departmental data
- **Pushback** from other programs (turf battles)
COMMON CHALLENGES OF COLLABORATIVE PROPOSALS

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- Maintaining **timelines**
- **Obtaining** institution and departmental **data**
- **Pushback** from other programs (turf battles)
- **Budget creep**
- **Personality and capabilities** management
- **Filling gaps** when team members fail to deliver
- Management of all **documents** including ancillary materials
- **Version control**
PROPOSAL SUBMISSION TEAM AND RESPONSIBILITIES
3 PHASES OF COLLABORATIVE PROPOSAL DEVELOPMENT

Phase 1: Framing (weeks 1–4)
Phase 2: Collaboration (weeks 5–8)
Phase 3: Refinement (weeks 9–12)

This is for a 12-week development cycle, but complicated proposals will require much longer!
Adapted from Averting the Big Bang.
### PRINCIPAL INVESTIGATOR

<table>
<thead>
<tr>
<th>Player</th>
<th>Phase 1: Framing</th>
<th>Phase 2: Collaboration</th>
<th>Phase 3: Refinement</th>
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</thead>
<tbody>
<tr>
<td>Principle Investigator (PI)</td>
<td>• Finalize key participant &amp; collaborator list; recruit partners</td>
<td>• Refine partner participation; identify external commitment letters</td>
<td>• Track writing assignments &amp; follow up with missing contributions</td>
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<tr>
<td></td>
<td>• Define proposal outline (incl. Vision, Goals, &amp; Themes)</td>
<td>• Finalize writing assignments</td>
<td>• Finalize management structure</td>
</tr>
<tr>
<td></td>
<td>• Start writing assignment outline</td>
<td>• Identify management structure</td>
<td>• Finalize budget, justification, and cost share</td>
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<td>• Identify graphics</td>
<td>• Refine budget and cost share</td>
<td>• Finalize commitment letters (internal/external)</td>
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<tr>
<td></td>
<td>• Draft/estimate budget</td>
<td>• Identify internal commitment letters</td>
<td>• Review technical plan and make final edits based on University review</td>
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<tr>
<td></td>
<td>• Identify necessary university resources (Admin, space, data, cost-share)</td>
<td>• Compile technical plan; draft text and prepare for University review</td>
<td>• Verify that institutional approvals have been obtained to submit proposal</td>
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<tr>
<td></td>
<td>• Interpret solicitation; identify appropriate teaming strategies.</td>
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| *Needs to be supportive of the 12-week plan. Ultimately controls the process but relies on key players to complete tasks and adhere to the timeline.
# INSTITUTIONAL ADVOCATE

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<tr>
<td>Advocate (AV)</td>
<td>• Participate in University limited submission process</td>
<td>• Verify that writing assignments and draft text components are on track.</td>
<td>• Participate in University review of the proposal</td>
</tr>
<tr>
<td></td>
<td>• Contact with PI to verify necessary University resources (space, cost share, admin support)</td>
<td>• Support the PI.</td>
<td>• Support the PI.</td>
</tr>
<tr>
<td></td>
<td>• Verify that PI has completed initial proposal vision/goals outline</td>
<td></td>
<td>• Verify that University approvals have been obtained to submit the proposal</td>
</tr>
<tr>
<td></td>
<td>• Organize limited submission process</td>
<td></td>
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</tr>
<tr>
<td>University</td>
<td></td>
<td>• Select and support PI/Advocate with necessary resources</td>
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*Needs to be identified by University and PI. We recommend an institutional administrator (i.e., Research Dean, Institute Director, Department Head)*
## PROPOSAL DEVELOPMENT SPECIALIST

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<tbody>
<tr>
<td>Development Specialist (DV)</td>
<td>• Serve as a catalyst in University limited submission process</td>
<td>• Refine partner participation</td>
<td>• Assist w/ finalizing commitment letters</td>
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<td></td>
<td>• Assist PI in conceptualizing draft/estimating budget</td>
<td>• Coordinate drafts for nontechnical proposal pieces</td>
<td>• Coordinate and make final edits based on University review</td>
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<td></td>
<td>• Identify necessary University resources (admin support, space, data, cost share, outreach, diversity)</td>
<td>• Assist w/ commitment letters (internal/external)</td>
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</tr>
<tr>
<td></td>
<td>• Interpret solicitation and identify appropriate teaming strategies</td>
<td>• Help compile technical plan draft text and prepare for University review</td>
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<td>• Edit text if necessary</td>
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*Are typically Masters or PhD-level professionals who serve as catalysts in the proposal process and participate in writing/editing.
## OFFICE OF SPONSORED PROGRAMS

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<tr>
<td><strong>Research Administrators (RAs)</strong></td>
<td>• Draft/estimate budget &lt;br&gt; • Identify necessary University resources (admin support, space, data, cost share) &lt;br&gt; • Interpret solicitation, provide feedback; contact sponsor if necessary</td>
<td>• Contact participants for Biosketches, Current/Pending Support, COI tables, Appendix material &lt;br&gt; • Refine budget and cost share &lt;br&gt; • Assist w/ commitment letters (internal/external) &lt;br&gt; • Compile draft text</td>
<td>• Finalize budget, justification, and cost share &lt;br&gt; • Assist with finalizing commitment letters &lt;br&gt; • Review proposal text for compliance issues &lt;br&gt; • Verify that University approvals have been obtained to submit the proposal</td>
</tr>
<tr>
<td>*University authority for proposal submission. Assist w/compliance, budget, and administrative functions.</td>
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**Player**

Research Administrators (RAs)

*University authority for proposal submission. Assist w/compliance, budget, and administrative functions.*

**Phase 1: Framing**

- Draft/estimate budget
- Identify necessary University resources (admin support, space, data, cost share)
- Interpret solicitation, provide feedback; contact sponsor if necessary

**Phase 2: Collaboration**

- Contact participants for Biosketches, Current/Pending Support, COI tables, Appendix material
- Refine budget and cost share
- Assist w/ commitment letters (internal/external)
- Compile draft text

**Phase 3: Refinement**

- Finalize budget, justification, and cost share
- Assist with finalizing commitment letters
- Review proposal text for compliance issues
- Verify that University approvals have been obtained to submit the proposal
Make sure you understand the funder’s solicitation and intentions before you begin proposal development.

Steps:
• Define funder’s goals
• Note restrictions and requirements
  • Timing
  • Funding amounts
  • Project elements
  • Evaluation
Develop your approach.

Steps:
• Define vision and goals
• Develop a proposal outline
• Estimate the budget and obtain institutional approval for cost sharing and other commitments
• Obtain institutional data or review preliminary data to support need statement or rationale
• Refine outline with project team
*Always seek input from the funder before beginning proposal development.*

**Steps:**
- Contact Program Officers for feedback
  - Email or phone
  - Elevator pitch
  - Concept/white paper
  - Pre-proposal if required
- Refine outline with project team
Make key decisions about management and personnel.

Steps:
- Identify the required or preferred management structure
- Clearly define responsibilities
- Collect and edit biosketches – make sure they are tailored to your project
- Write and secure internal commitment letters
Draft and refine your budget.

Steps:
- Draft an internal budget
- Determine external partner
- Determine cost share requirements
- Secure cost share
- Refine overall budget and prepare justification
- Confirm budget is well aligned and sufficient
Draft and refine your proposal.

Steps:
• Assign writing sections and prepare drafts
• Compile first draft and revise
• Circulate for comments and revise again
• Internal and external review and additional revision
• Full revision for unified style, consistency, and final check for alignment with RFP requirements and internal/external requirements
• Compliance checks and internal/external signoff
• Planning retreats
• Style guides
• Shared document storage (Dropbox, Box, Google Docs, institutional resources)
• Multiple review cycles
RESOURCES


• Dressler, K., Mulfinger, L., & Page, N. “Averting the Big Bang.” NCURA Magazine, Vol. 45:2, Mar/Apr 2013, p. 21

• Building Successful Research and Project Collaborations. Interdisciplinary Research Support. UCDavis.

• The Pitch is Dead. Long Live the Conversation.

• UTIA Office of Sponsored Programs

• UTIA and Hanover Research

• PIVOT tutorials
Hanover Research supports UTIA faculty throughout the grant development process.

How Hanover works with the UTIA:

Content Director, Chris Gray is UTIA’s primary point of contact at Hanover and manages support for individual faculty projects.

Hanover is available to provide UTIA faculty with proposal revision support on new proposals and resubmissions.

Please contact Dr. Tim Rials or Jessica McCord to learn more about UTIA’s relationship with Hanover and the process for requesting support.
GRANTSMAINTSHIP TRAINING CENTER

Put your institution’s faculty on the path towards submitting a grant proposal while equipping them with valuable knowledge about the grantseeking process.

GO TO THE TRAINING CENTER
QUESTIONS?
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