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

TEAM SCIENCE VS. COLLABORATION

Collaboration	Integrated Research Team
Each Team member has specific expertise to address research problem.	
Typically work on serrate parts of research problem and then integrate.	Meet regularly (outside of grant funding) to discuss team goals, objectives and plan a course.
Data sharing and brain storming varies and can be limited or frequent.	Leadership responsibilities are shared.

Collaboration and Team Science Field Guide. National Cancer Institute. Bennett LM, Gadlin H, Marchand C.
NIH Publication No. 18-7660

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

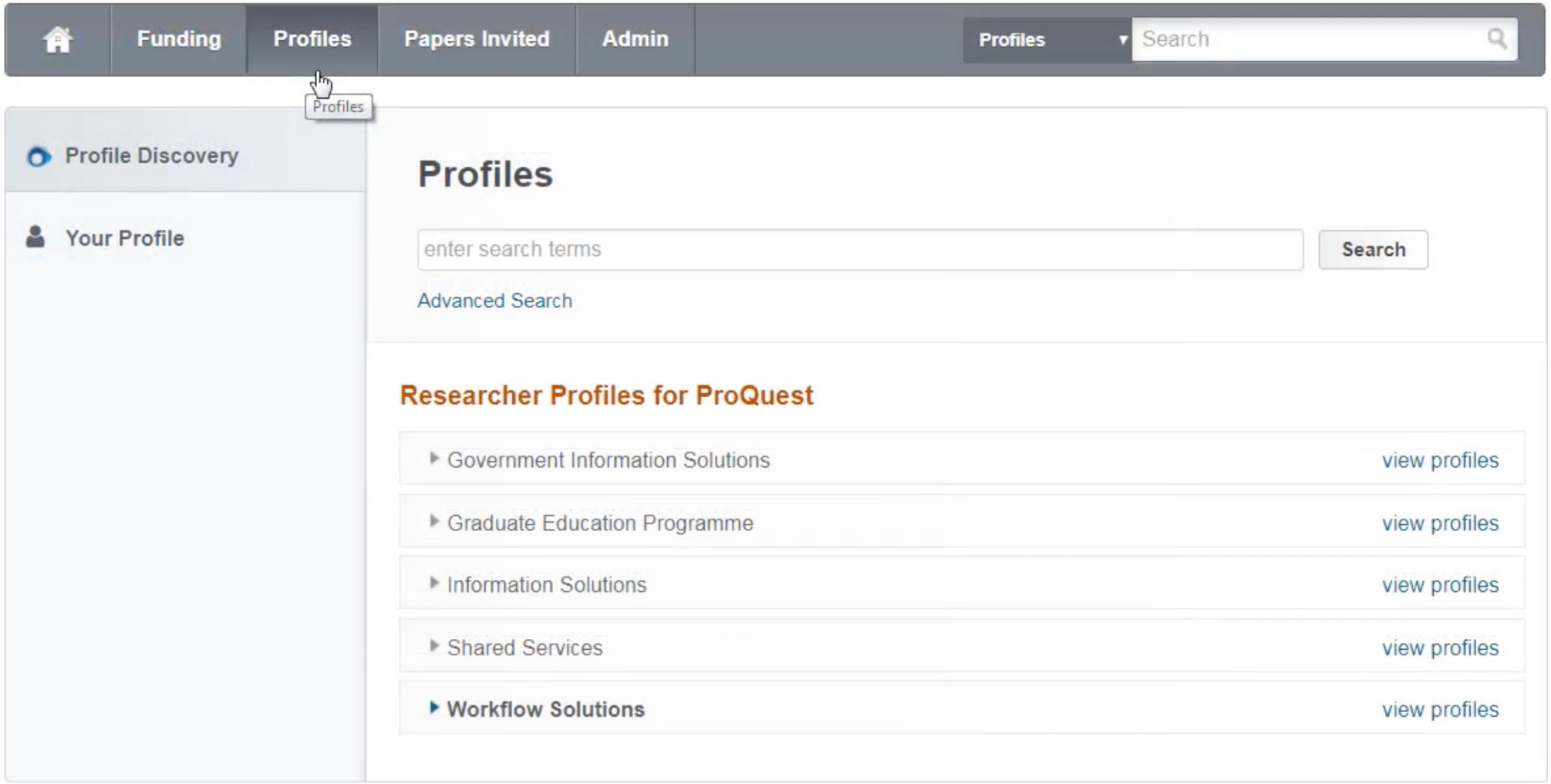
WHAT DETERMINES TEAM SCIENCE SUCCESS?

- 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



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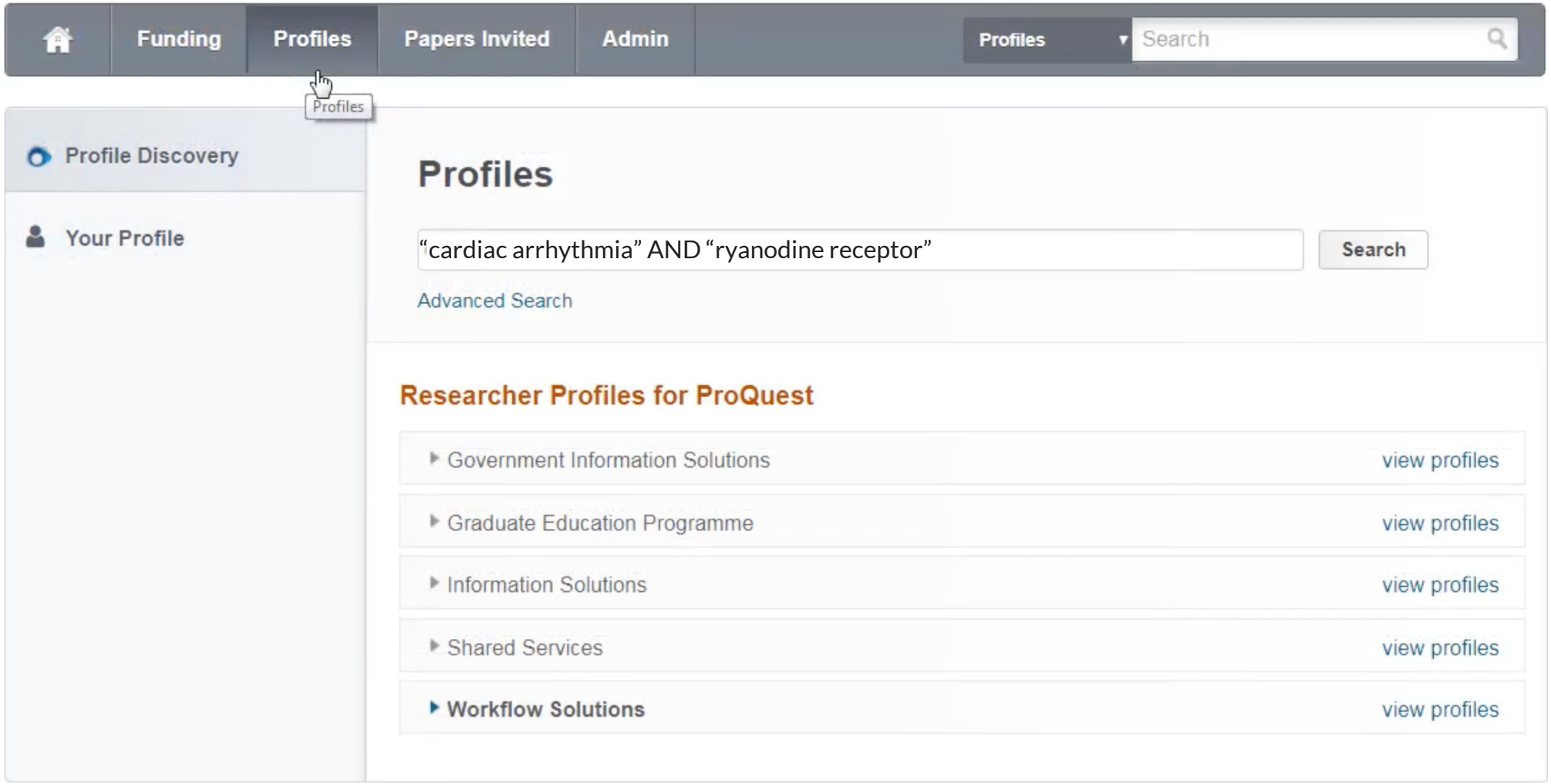

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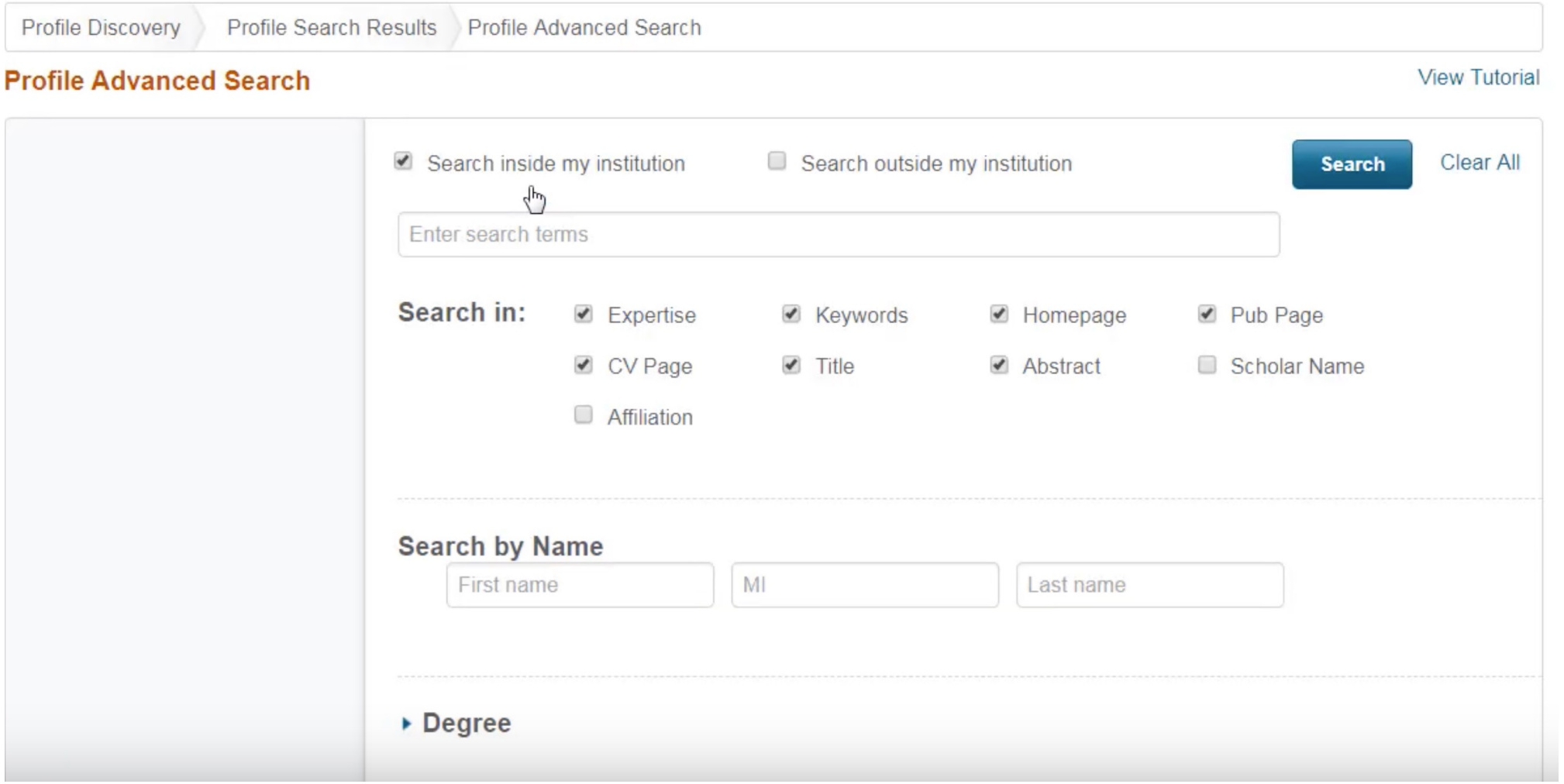
PIVOT: PROFILE DISCOVERY



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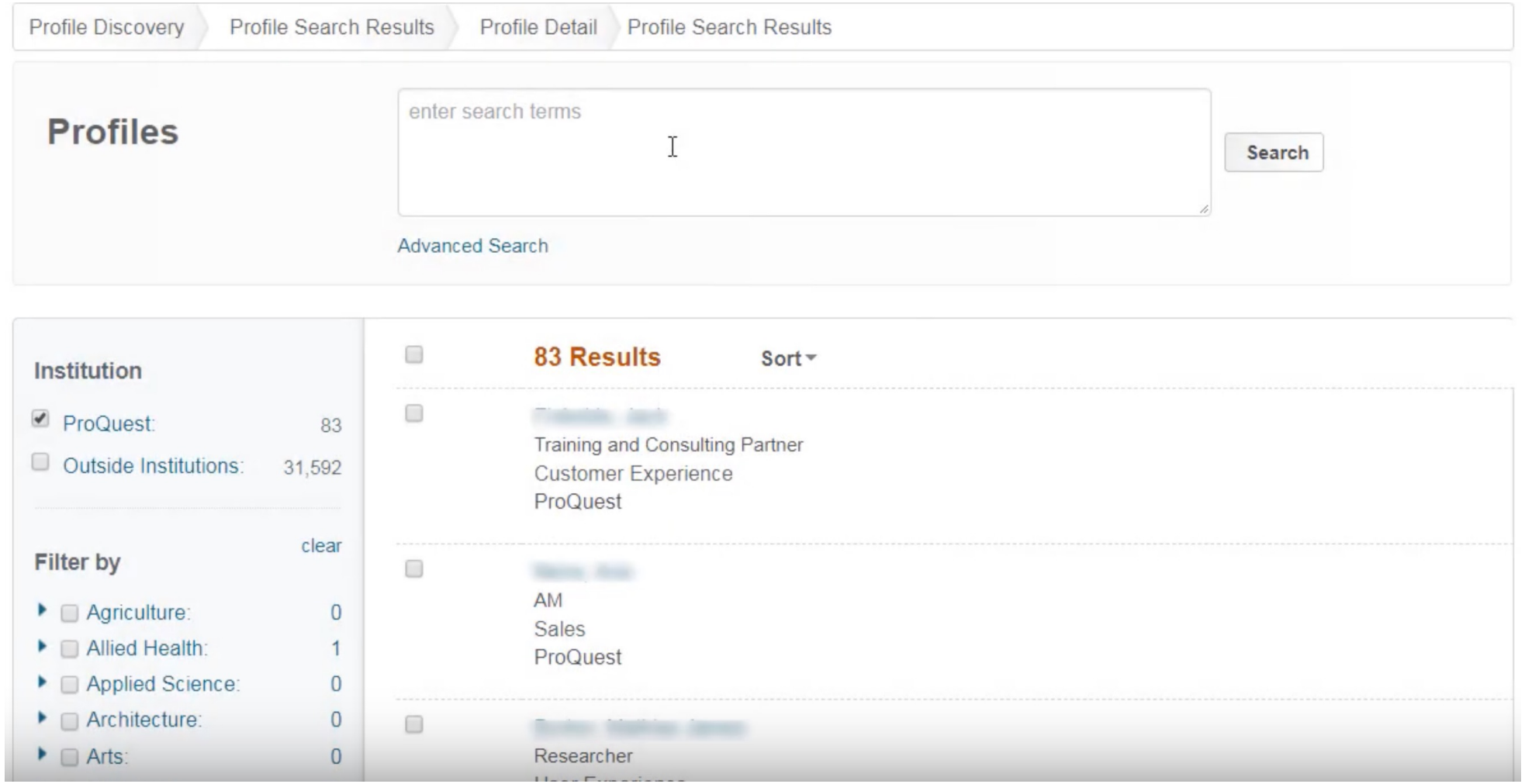

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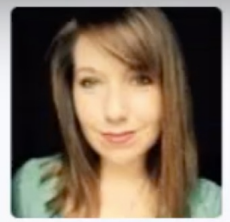

Sara E Branch

Assistant Professor, Psychology
Community of Science

Overview | Publications (16) | Grants (4)

CV Page **https://pqrs-cos-prod.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

Contact Details

Sara [redacted]

Funding Matches:

217 funding opportunities

64 funding opportunities for your department

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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.

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LEVERAGING NETWORKS

- Your network
- Colleagues' networks
- Interdisciplinary team? Seek out colleagues in other departments.
  - Leverage *their* network!
- Multi-institution and industry? WORK THE NETWORKS.

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WHAT ABOUT INDUSTRY?

- 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.

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TEAM SCIENCE GUIDING QUESTIONS

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**?

Hall KL, Vogel AL, Crowston K. Collaboration Plans: Planning for Success in Team Science.

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

COLLABORATIVE AGREEMENT TEMPLATE (NIH)

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?

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?

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NIH National Cancer Institute. Collaboration Team Science Field Guide. NIH Publication No. 18-7660

COLLABORATIVE AGREEMENT TEMPLATE (NIH) CONT'D

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?

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NIH National Cancer Institute. Collaboration Team Science Field Guide. NIH Publication No. 18-7660

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)

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- **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

Player	Phase 1: Framing	Phase 2: Collaboration	Phase 3: Refinement
Principle Investigator (PI) *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.	• Finalize key participant & collaborator list; recruit partners • Define proposal outline (incl. Vision, Goals, & Themes) • Start writing assignment outline • Identify graphics • Draft/estimate budget • Identify necessary university resources (Admin, space, data, cost-share) • Interpret solicitation; identify appropriate teaming strategies.	• Refine partner participation; identify external commitment letters • Finalize writing assignments • Identify management structure • Refine budget and cost share • Identify internal commitment letters • Compile technical plan; draft text and prepare for University review	• Track writing assignments & follow up with missing contributions • Finalize management structure • Finalize budget, justification, and cost share • Finalize commitment letters (internal/external) • Review technical plan and make final edits based on University review • Verify that institutional approvals have been obtained to submit proposal

INSTITUTIONAL ADVOCATE

Player	Phase 1: Framing	Phase 2: Collaboration	Phase 3: Refinement
Advocate (AV) *Needs to be identified by University and PI. We recommend an institutional administrator (i.e., Research Dean, Institute Director, Department Head) **University**	• Participate in University limited submission process • Contact with PI to verify necessary University resources (space, cost share, admin support) • Verify that PI has completed initial proposal vision/goals outline • Organize limited submission process • Select and support PI/Advocate with necessary resources	• Verify that writing assignments and draft text components are on track. • Support the PI.	• Participate in University review of the proposal • Support the PI • Verify that University approvals have been obtained to submit the proposal

PROPOSAL DEVELOPMENT SPECIALIST

Player	Phase 1: Framing	Phase 2: Collaboration	Phase 3: Refinement
Development Specialist (DV) *Are typically Masters or PhD-level professionals who serve as catalysts in the proposal process and participate in writing/editing	• Serve as a catalyst in University limited submission process • Assist PI in conceptualizing draft/estimating budget • Identify necessary University resources (admin support, space, data, cost share, outreach, diversity • Interpret solicitation and identify appropriate teaming strategies	• Refine partner participation • Coordinate drafts for nontechnical proposal pieces • Assist w/ commitment letters (internal/external) • Help compile technical plan draft text and prepare for University review • Edit text if necessary	• Assist w/ finalizing commitment letters • Coordinate and make final edits based on University review

OFFICE OF SPONSORED PROGRAMS

Player	Phase 1: Framing	Phase 2: Collaboration	Phase 3: Refinement
Research Administrators (RAs) *University authority for proposal submission. Assist w/compliance, budget, and administrative functions.	• Draft/estimate budget • Identify necessary University resources (admin support, space, data, cost share) • Interpret solicitation, provide feedback; contact sponsor if necessary	• 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	• 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

RFP ANALYSIS AND PLANNING

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

APPROACH DEVELOPMENT

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

FUNDER INPUT

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

MANAGEMENT AND PERSONNEL

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

BUDGETING

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

WRITING THE PROPOSAL

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

TOOLS AND TECHNIQUES

- Planning retreats
- Style guides
- Shared document storage (Dropbox, Box, Google Docs, institutional resources)
- Multiple review cycles

RESOURCES

- Hall KL, Vogel AL, Crowston K. Collaboration Plans: Planning for Success in Team Science.
- National Cancer Institute. Team Science Toolkit. https://www.teamsciencetoolkit.cancer.gov/Public/GetStarted.aspx
- Dopke L, Crawley W. Strategies for Increasing the Efficacy of Collaborative Grant Writing Groups in Preparing Federal Proposals. Journal of Research Administration. 2013;44(1):36-61.
- 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

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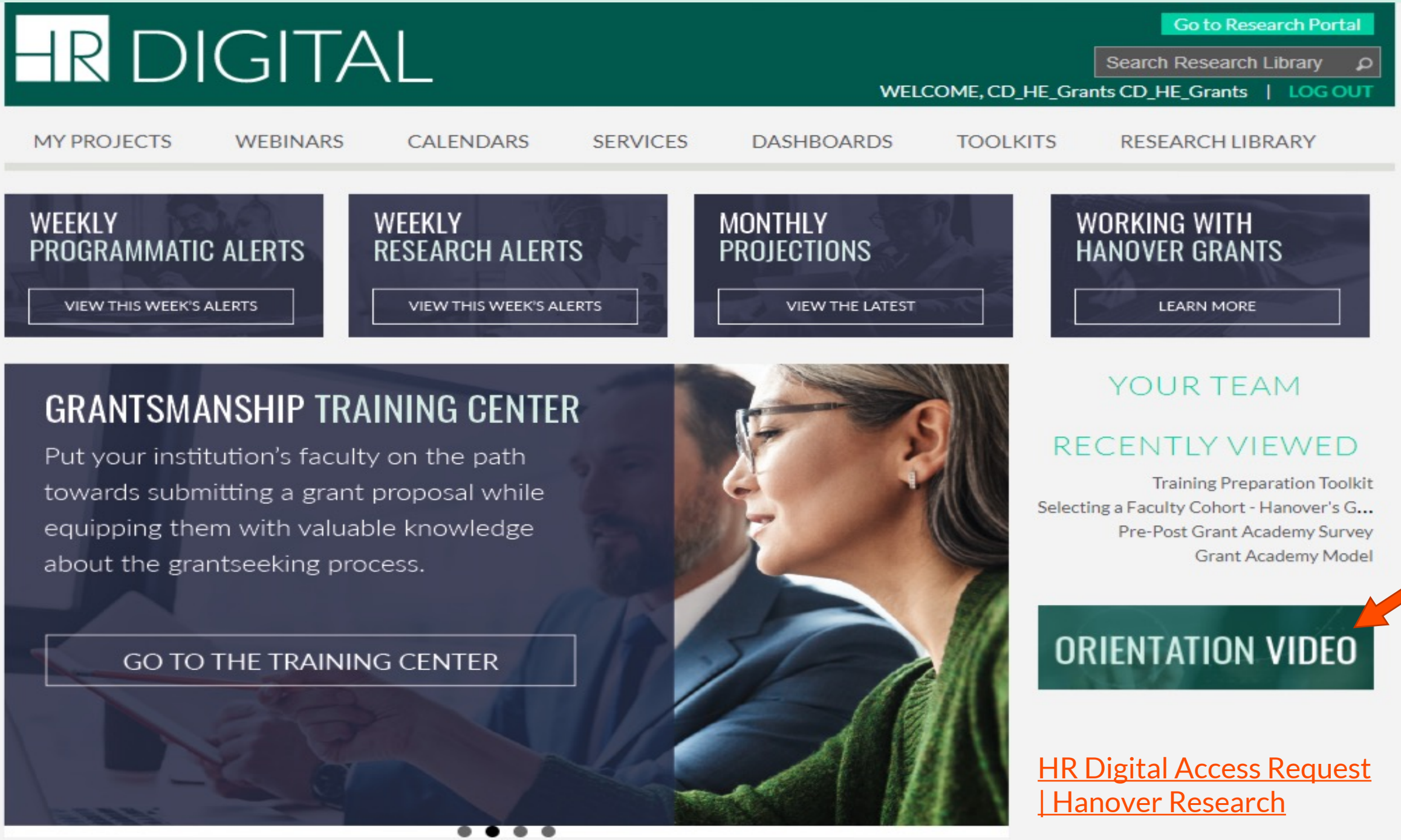
Hanover Research supports UTIA faculty throughout the grant development process.

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.

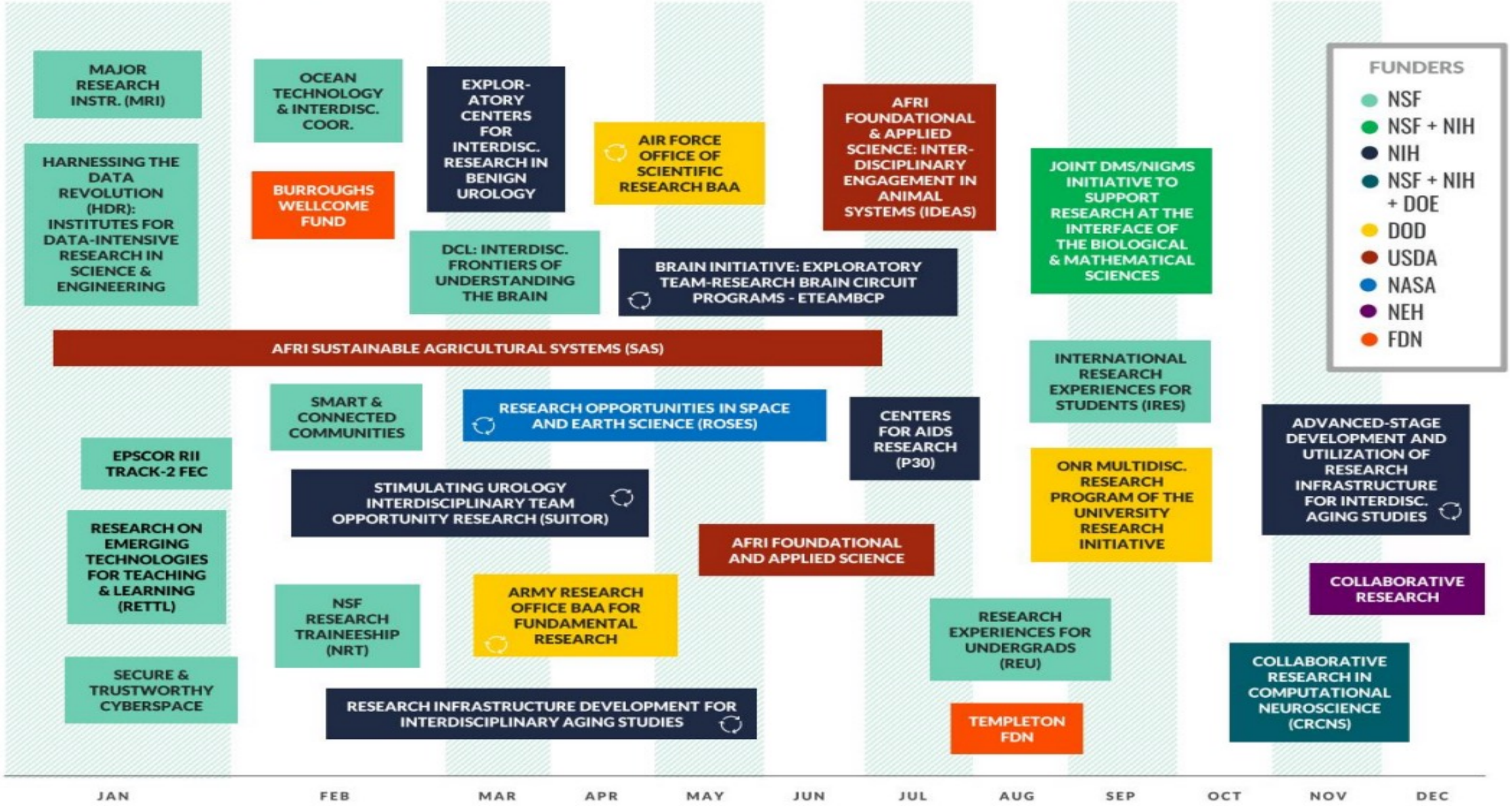
Please contact Dr. Tim Rials or Jessica McCord to learn more about UTIA's relationship with Hanover and the process for requesting support.



[HR Digital Access Request | Hanover Research]

GRANTS CALENDAR

INTERDISCIPLINARY RESEARCH




QUESTIONS?

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