

# Strategies for Increasing the Competitiveness of Team Science and Center Grant Proposals

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**CHRISTINE BLACK**

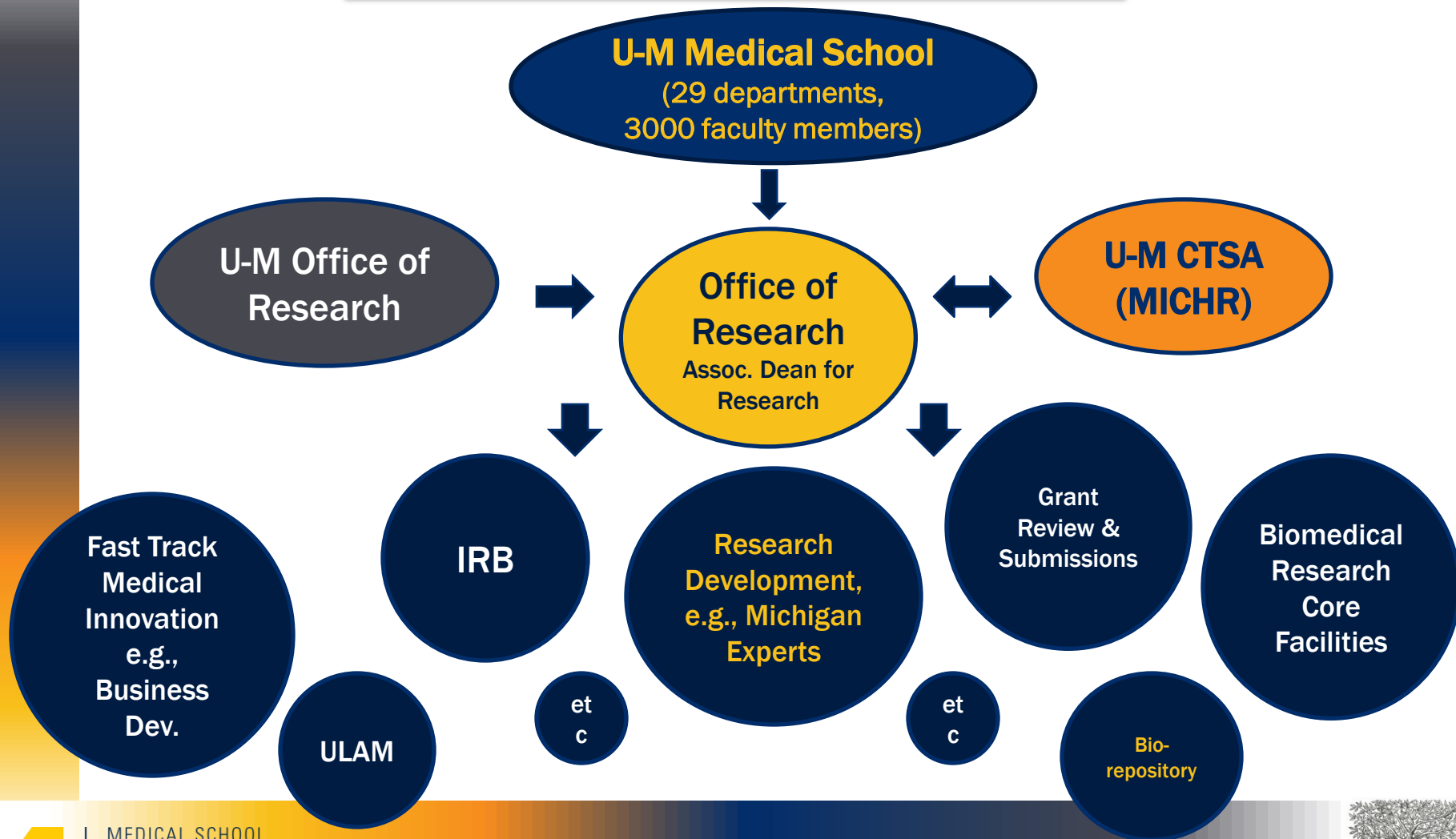
Assistant Director,  
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# University of Michigan Medical School Office of Research



# How to find the right unit in the pre and post award process?



<http://research.med.umich.edu/routema>



# (in)Direct Proposal Assistance

- **Part time direct editing assistance from Med OoR**
- **Proposal Preparation Funding Program**
  - \$10K for large proposals, e.g., program projects, center proposals, U awards
  - Several uses, e.g., hiring expert consultants; assembling and hosting brainstorming sessions; paying reviewers; or hiring temporary incremental secretarial, administrative, and/or expert services required to assemble and submit large proposals
- **Assoc. Dean's Discretionary Bridging**

Primarily used for bridging renewals of center proposals
- **MCubed - encourages interdisciplinary seed work at U-M**
  - Two-year seed-funding program designed to empower interdisciplinary teams (from at least three departments) of University of Michigan faculty to pursue new initiatives with major societal impact
  - <http://mcubed.umich.edu/about>

# Much distributed help in Med Depts.

- U-M Med Grant Proposal Writers and Editors group:
  - 68 in UMMS Grant Editors group
  - 37 in T32 (training grants) group
- 624 post docs

# Direct Proposal Assistance

- **CTSA** (Michigan Institute for Clinical and Health Research) **Research Development Core**
  - In-person one-hour consultation meeting providing investigators with supportive advice about their proposal or research idea
  - Also identifying collaborators, editing, biostats
  - Stats for FY 12-13: 90 Consulting team meetings, 39 grants edited; 78% Medical School; 80% will recommend/use in future.
  - [www.michr.umich.edu/services/researchdevelopment](http://www.michr.umich.edu/services/researchdevelopment)

# Informational Resources

- **U-M Medical School Proposal Sampler**
  - Database of previously funded proposals with reviewers' comments
- **Reference List of Freelance Editors**
  - <http://research.med.umich.edu/editors>
- **CTSA (MICHR) Resources for Team Science**
  - [www.michr.umich.edu/education/teamscience](http://www.michr.umich.edu/education/teamscience)
- **U-M Medical School Resource Profiles**
  - Boilerplate descriptions of units & facilities
  - <https://wiki.umms.med.umich.edu/display/RR/Office+of+Research>

# Providing Research Resources

- **Biomedical Research Core Facilities**
  - Provide talent, technology, and services for research
  - Support for grant development
  - e.g., Bioinformatics, Biosafety Containment facility, DNA Sequencing, Flow Cytometry, Metabolomics, Microscopy & Image Analysis, Proteomics, Sample Preservation Freezer Facility, Transgenic Animal Model, Vector Core
  - <http://research.med.umich.edu/brcf>





# Michigan Experts:

## A Way to Find and Connect to Collaborators

- [experts.umich.edu](http://experts.umich.edu)
  - Started with U-M Med; now Dentistry, Engineering, Kinesiology, Nursing, Pharmacy, Public Health, and some institutes & centers, e.g., Life Sci Inst.
- **Michigan Corporate Relations Network (MCRN)**
  - Expertise and resource portal incl. U-M, Michigan State University, Michigan Tech U, Wayne State University, Western Michigan University, U-M Dearborn experts sites
  - [www.michigancrn.org](http://www.michigancrn.org)

# Data-enabled Support

- Putting the right resources in place:
  - Proposal/award data
    - Basic facts
    - Key terms (or abstracts)
    - Participants
  - Publication data
    - Basic facts
    - Key terms (or abstracts)
    - Coauthors (can be computed)
  - Staff to query and analyze data

# Team Formation

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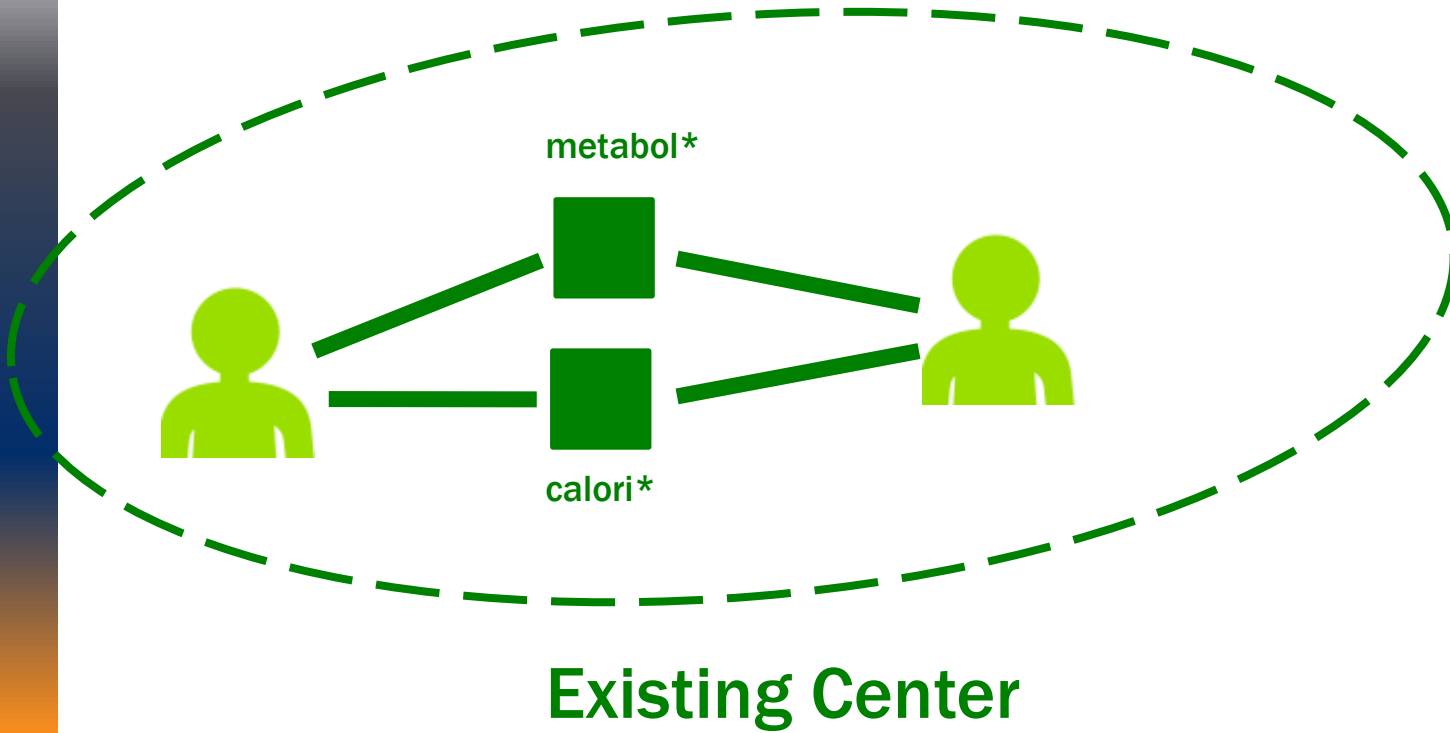
- Searching in subject matter expertise databases (like experts.umich.edu)
- Custom queries

Best practice: Iterate search terms with a subject matter expert to arrive at more inclusive results and fewer false positives

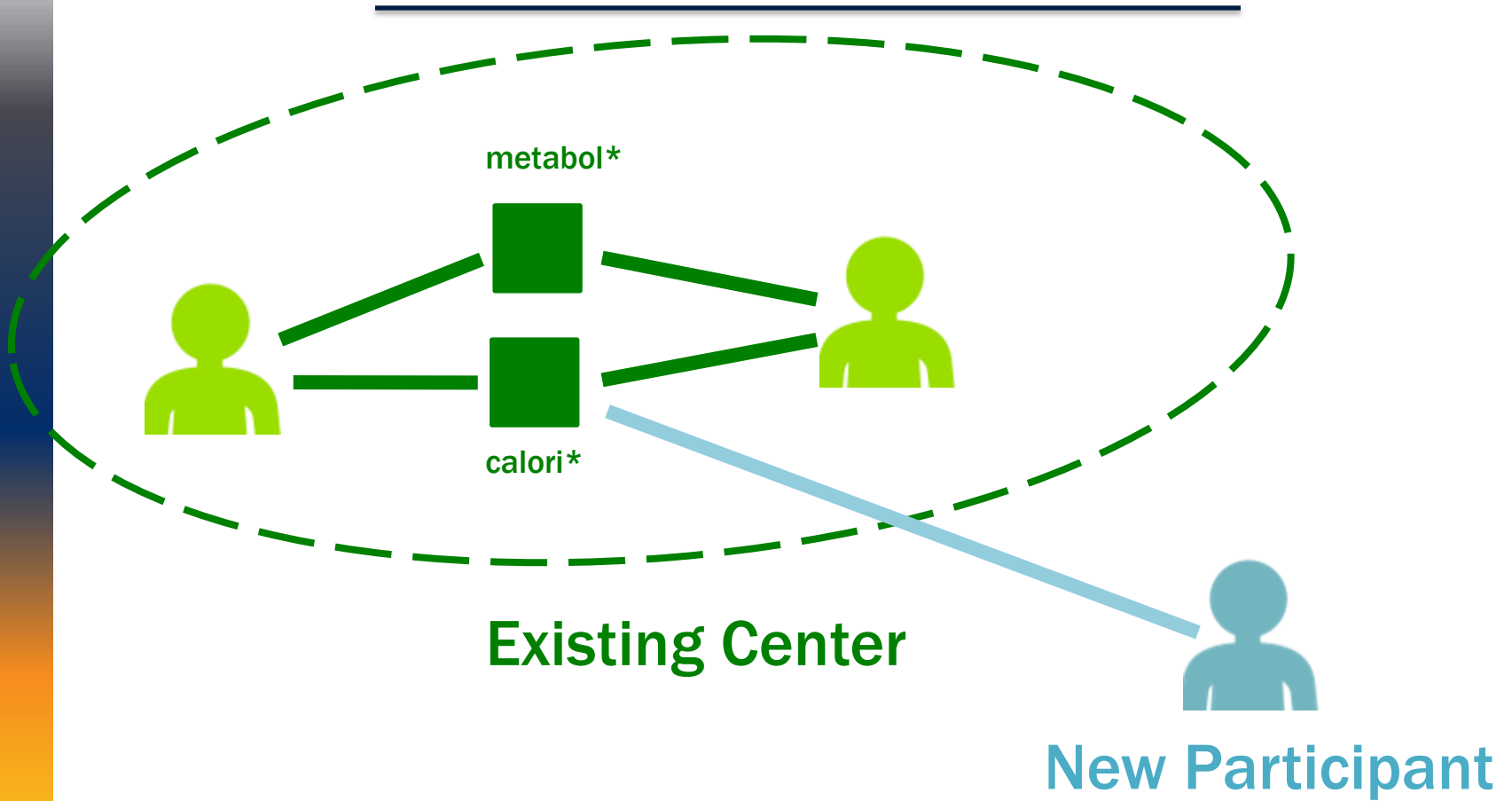
- e.g. for metabolomics/nutrition:
  - metabol\* (metabolic, metabolism, metabolomics)
  - calori\* (calorie, calories, caloric)
  - vitamin\* (vitamin A, vitamin B)

# Team Formation

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# Team Formation



# Proposal Impact

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- NIH P30:

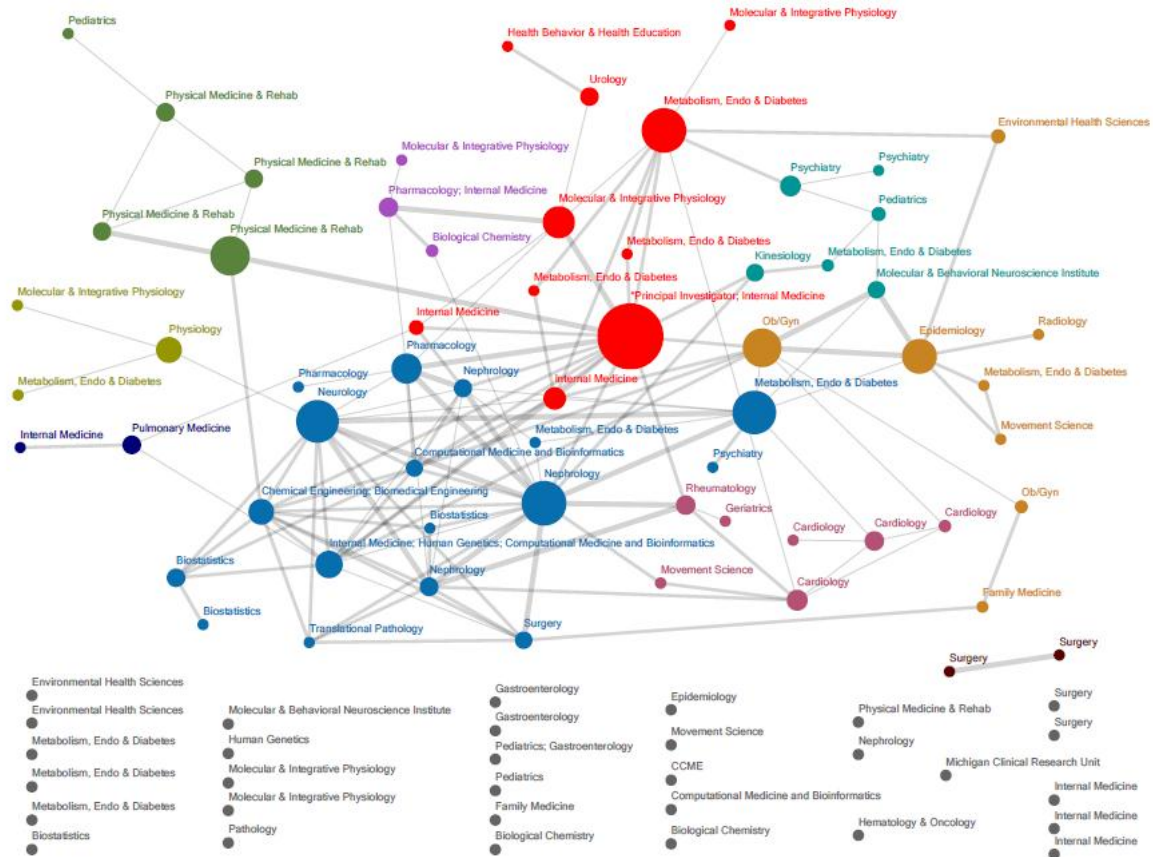
“To **support shared resources** and facilities for categorical research by **a number of investigators** from different disciplines who provide a multidisciplinary approach to a **joint research effort** or from the same discipline who **focus on a common research problem**. The core grant is integrated with the center's component projects or program projects, though funded independently from them. This support, by providing **more accessible resources**, is expected to assure a **greater productivity than from the separate projects** and program projects.”

[http://grants.nih.gov/grants/funding/ac\\_search\\_results.htm?text\\_curr=p30&Search\\_Type=Activity](http://grants.nih.gov/grants/funding/ac_search_results.htm?text_curr=p30&Search_Type=Activity)



# Proposal Impact

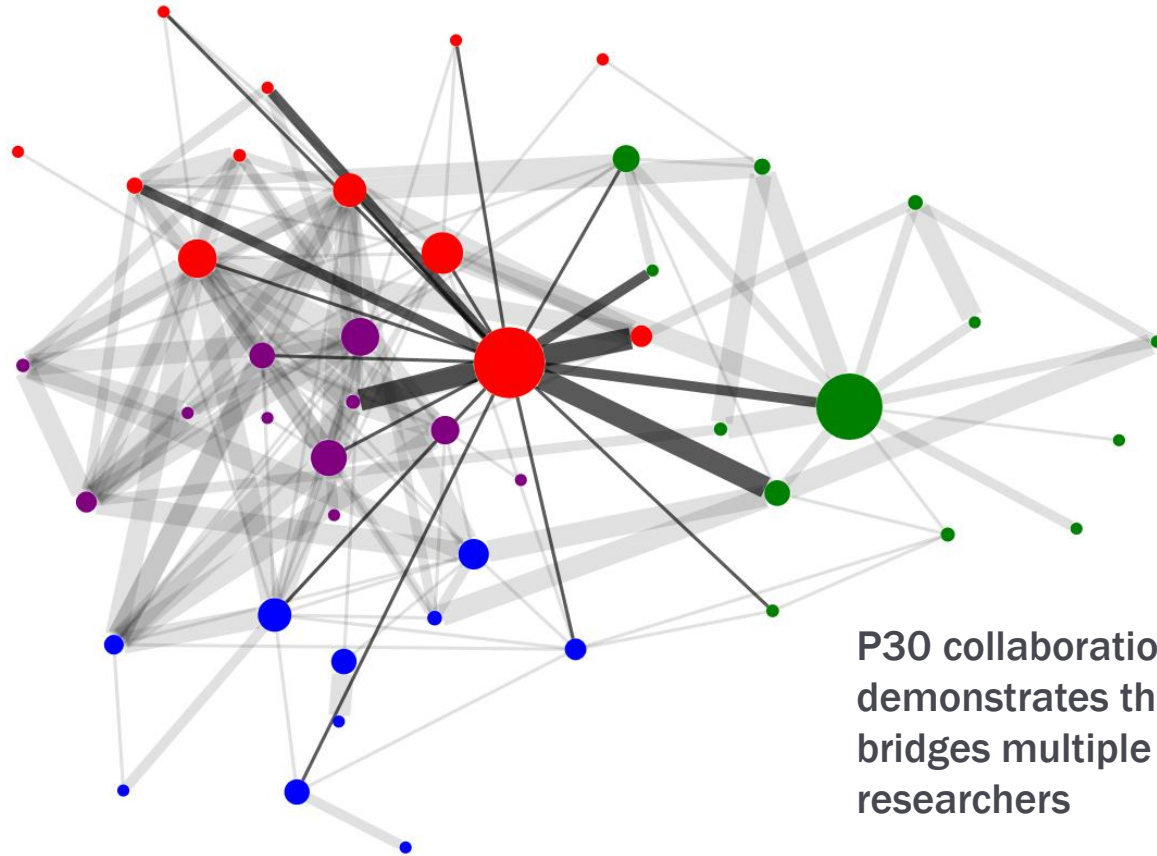
- Demonstrated P30 bridging effects:



# Proposal Impact

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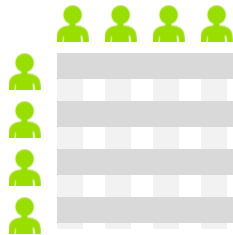
P30 collaboration network demonstrates that PI (center) bridges multiple clusters of researchers



# Direct Proposal Assistance (Data-Enabled)

- Example required exhibit

-Grid of every center member coparticipation, coauthorship relationships

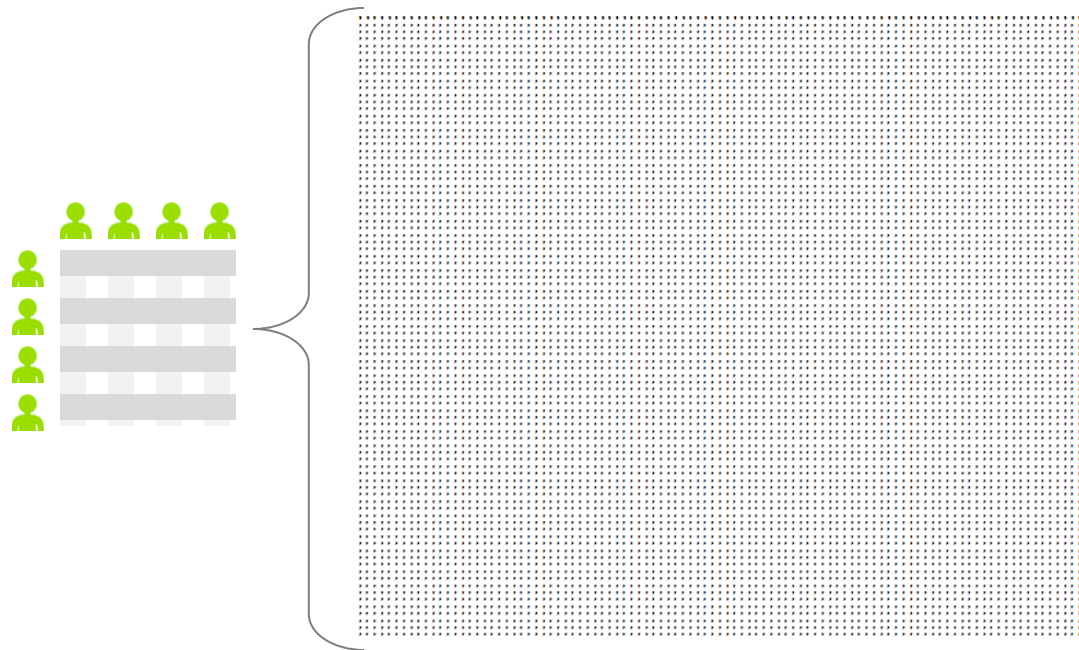


	Researcher1	Researcher2	Researcher3	Researcher4
Researcher1	---			
Researcher2	Co-author: Y Co-grant: N	---		
Researcher3	Co-author: N Co-grant: N	Co-author: Y Co-grant: Y	---	
Researcher4	Co-author: N Co-grant: Y	Co-author: N Co-grant: Y	Co-author: Y Co-grant: Y	---

# Direct Proposal Assistance (Data-Enabled)

- Administrator's task

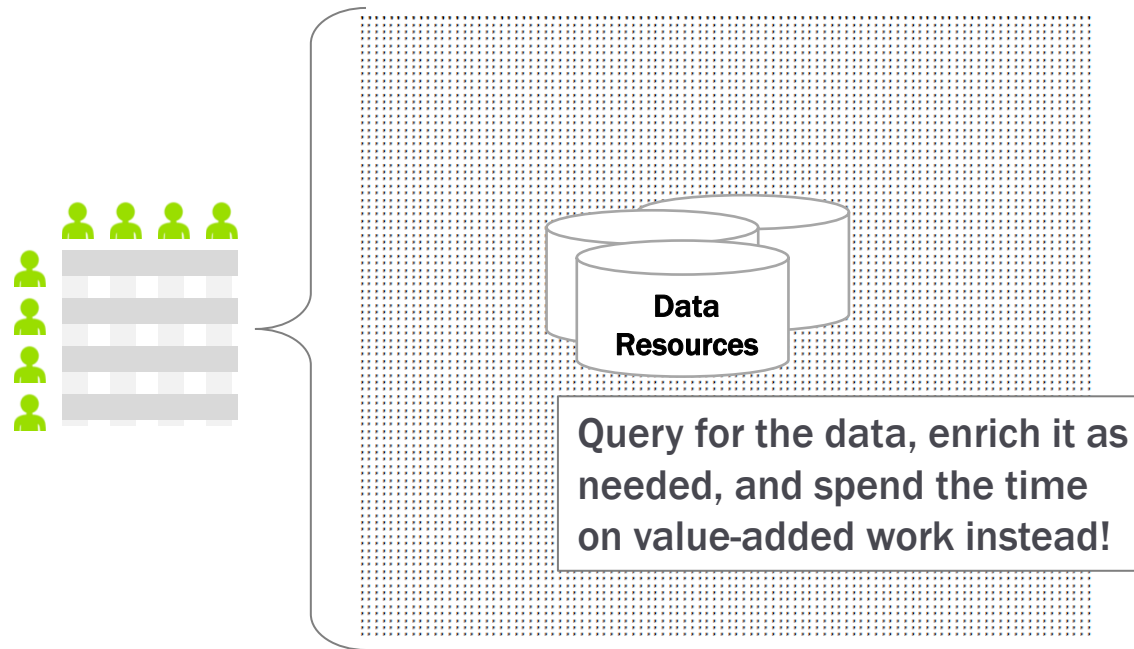
-Email all participants asking if they have worked with all other participants, then chase down and reconcile the answers?



# Direct Proposal Assistance (Data-Enabled)

- **Administrator's task**

-Email all participants asking if they have worked with all other participants, then chase down and reconcile the answers?



# Contact Information

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