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# Cultivating Team Science in Clinical & Translational Research

George A. Mashour, MICHR
Elizabeth LaPensee, MICHR
Felix Kabo, ISR
Susan Murphy, MICHR

educate fund connect support


The Michigan Institute for Clinical & Health Research
is here to enable & enhance
clinical & translational research
We do this by being a catalytic partner that
educates, funds, connects & supports
research teams everywhere
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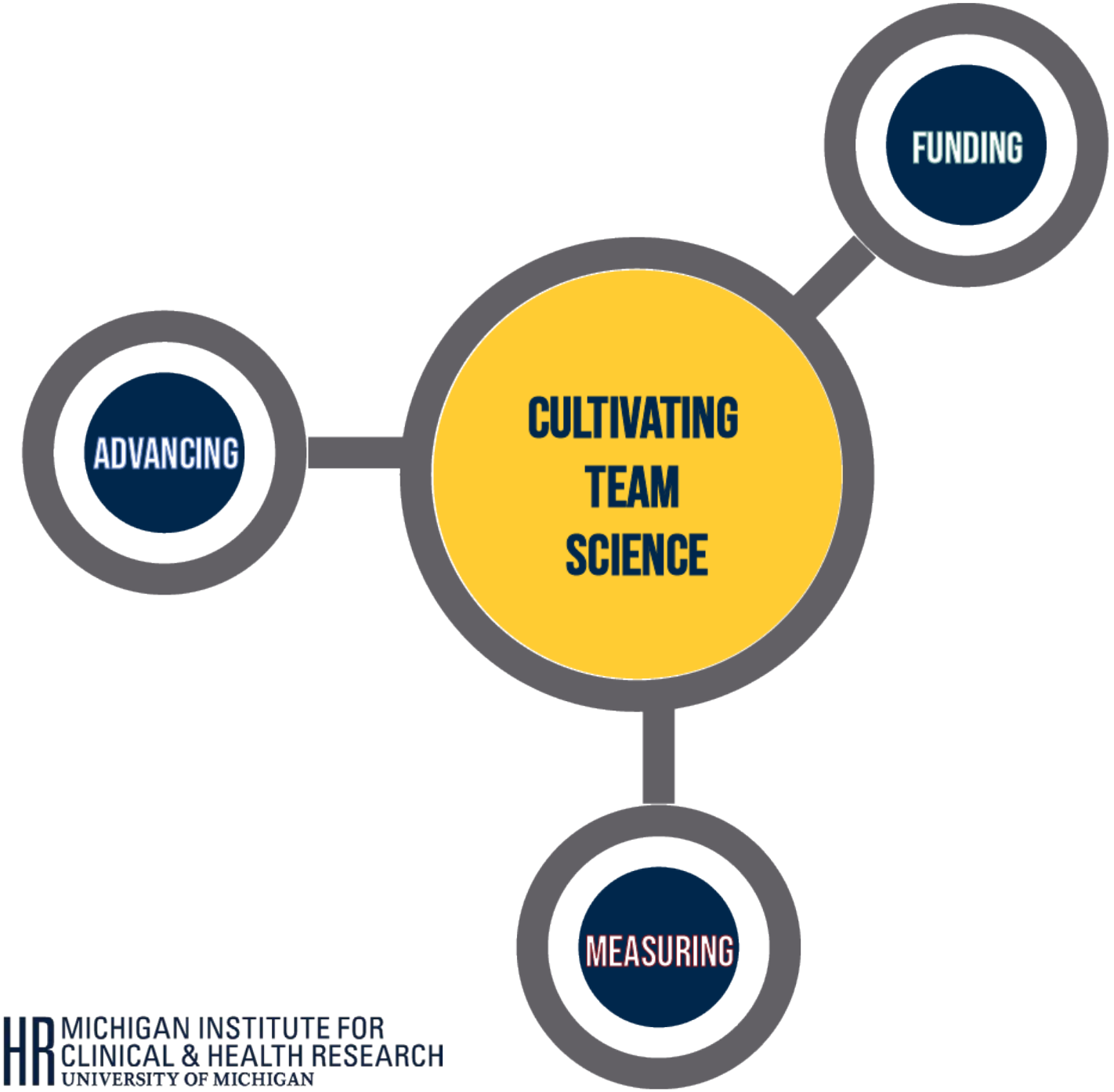


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# Funding Team Science

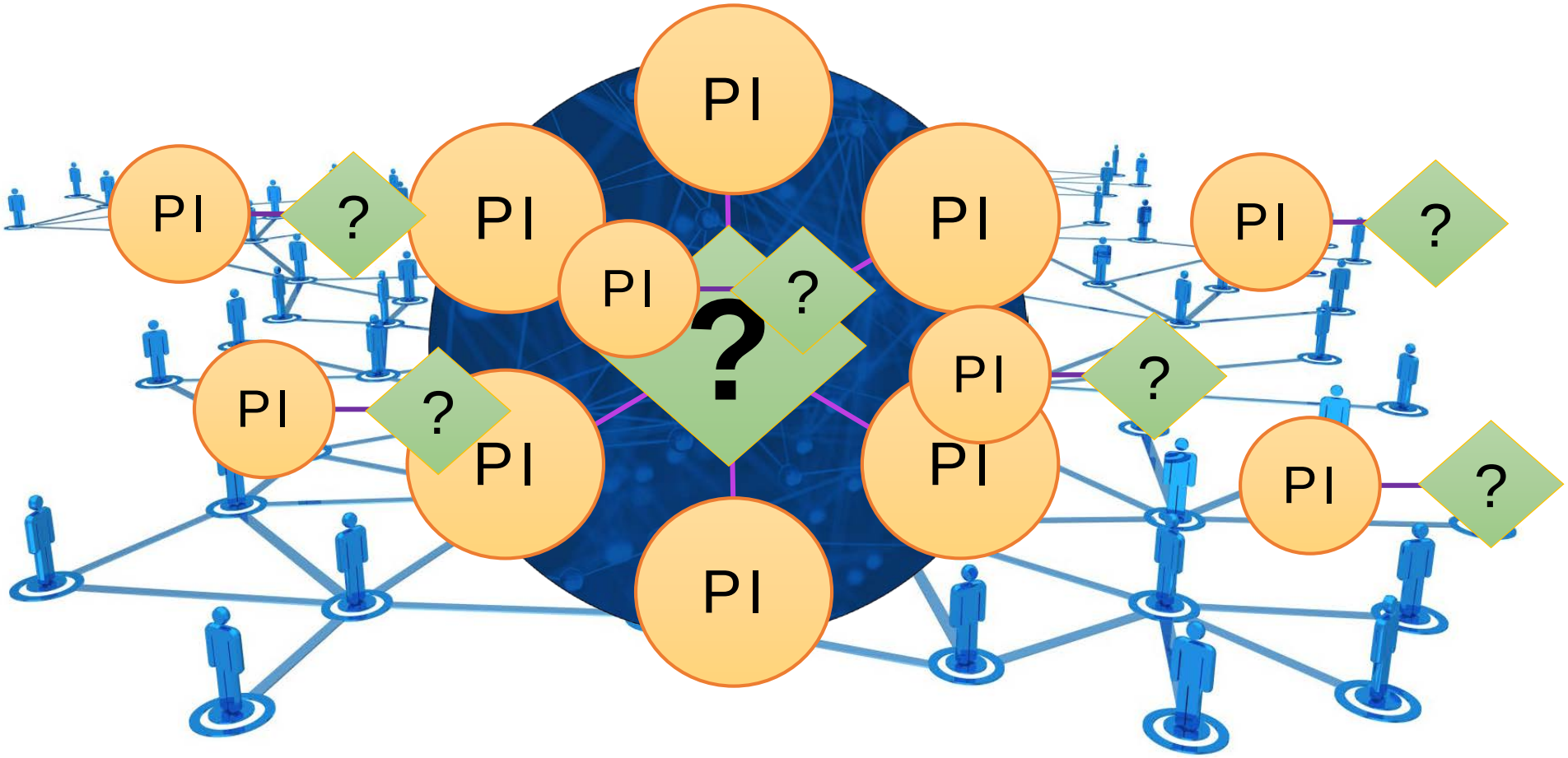

Beth LaPensee, PhD

Administrative Program Director, Research Initiatives

Michigan Institute for Clinical & Health Research

University of Michigan

# Silos to Synergy

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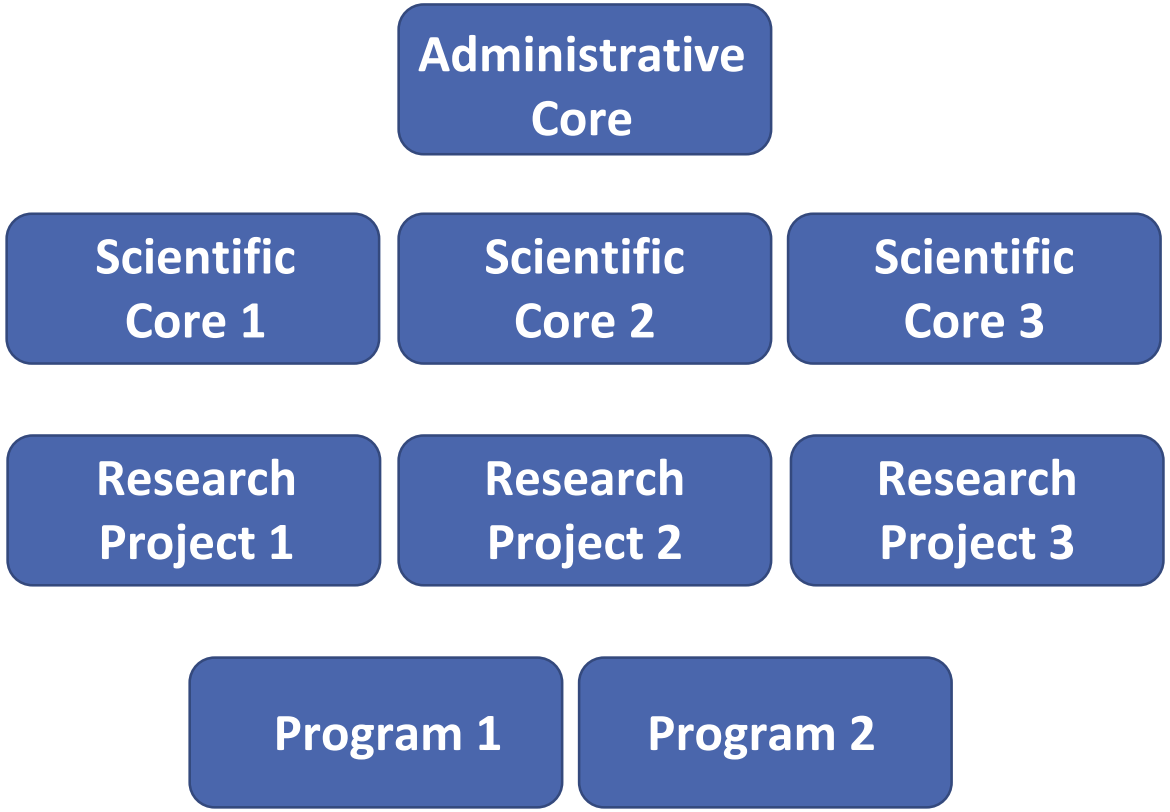
# Large-Scale Grant Example Structure



# Large-Scale Grants

| Research Program<br>Project & Research Centers | Cooperative Agreements: Research<br>Projects & Research Centers |
|---|---|
| **P01**: Research Program Project | **U19**: Research Program |
| **P20**: Exploratory Grants | **U24**: Resource Related Research Project |
| **P30**: Center Core Grants | **U54**: Specialized Center |
| **P50**: Specialized Center | **UM1**: Resource Projects – Complex Structure |
| **P60**: Comprehensive Center | **UM2**: Research Project/Center – Complex Structure |

NATIONAL ENDOWMENT FOR THE HUMANITIES

Administration for Community Living

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# Barriers to Developing Large-Scale Grants

- Grant strategy
- Administrative burden
- Identifying collaborators
- Establishing history of partnerships
- Organizing writing sessions
- Managing team dynamics

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# Portfolio of Support

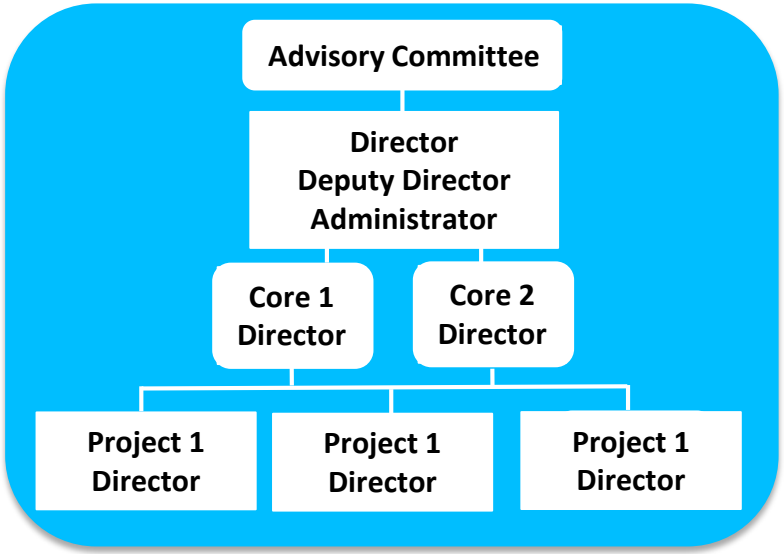
| | |
|---|---|
| **Education** | ➢ **Roundtables** |
| **Strategic Input** | ➢ **Tailored Consultations** |
| **Proposal Management** | ➢ **Planning & Resources** |
| **Grant Editing** | ➢ **One Voice, Compelling** |
| **Financial** | ➢ **Pilot Grants** |

# Education Roundtable Conversations

## ✓ Foundations

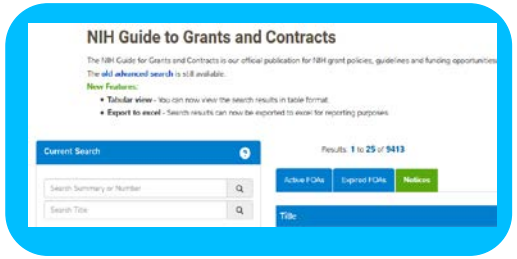
- ❑ Principal Investigator
- ❑ Infrastructure
- ❑ Research Themes


## ✓ Structures




## ✓ Collaborative Proposal Development


## ✓ Identifying FOAs

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Strategic Input | Tailored Consultations

## Research Development Core

*We help faculty turn good ideas into funded science*

### We can help with:

- Crafting an overall vision
- Identifying projects/cores
- Connecting with collaborators
- Study design and biostatistics
- Addressing reviewer comments

Sul

A. SIGNIFICANCE

**Background**

< Describe experience, expert
community-based organizatio

<Does the application demons
research and is there informat
community partners?>

**Community Partners and In**

<Do the communities named i
prevention and treatment inte

B. INNOVATION

<an evidence-based approach
that Care Model)>

<a plan to actively engage co

<application of principles from

<Is there innovation in the app
the community and approache

C. APPROACH

**Community Advisory Board**

**Structure**

<structure of the Community A

See following pages for table

**Partnering with the Commu**

<Establishment and regular meetings of a Community Advisory Board that includes customers and family members will be required>

## Multiple PD/PI Leadership Plan

The <insert project title> will be co-directed by Drs. <insert name 1> and <insert name 2>, who will both serve as PI/PDs for this application. We believe that the diverse training, clinical specialties and research backgrounds of our research team are some of the greatest assets of this grant application. While many are intimately involved in the work, Drs. <insert name 1> and <insert name 2> will be directing the project. Drs. <insert name 1> (<insert department 1>) and <insert name 2> (<insert department 2>) come from very different training and clinical practice backgrounds. Dr. <insert name 1> <insert info about training background 1> Dr. <insert name 2 > <insert info about training background 2>. Dr. <insert name 1> is an <insert title 1> at the University of Michigan Department of <insert department 1>. As an <insert type of researcher 1 >, <his/her> focus has been on <insert research focus 1>. Dr. <insert name 2> is an <insert title 2>. <His/Her> expertise is in <insert research focus 2 >.

While each Program Director will have specific leadership roles within the project, they will share responsibilities for the project as a whole. Such shared responsibilities include overall project administration, regulatory responsibilities and study conduct/management, AE reporting, data integrity as well as analysis, and dissemination. If either Program Director becomes unable to continue to serve this role, the other will take over sole responsibility for the study.

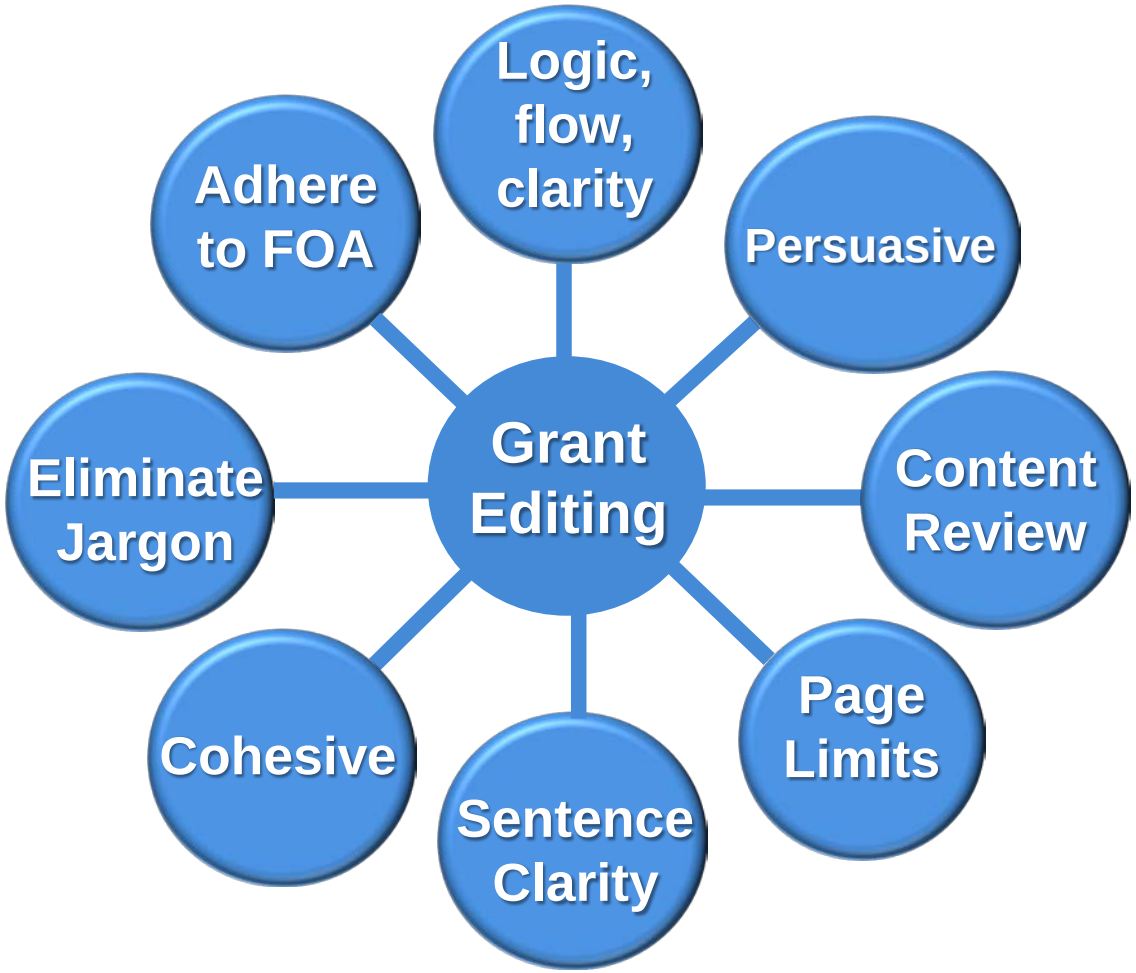
Dr. <insert name 1> will be primarily responsible for the overall organization and management of the project. <He/She> will <insert info on specific roles/responsibilities on project 1>.

Dr. <insert name 2>, in addition to shared responsibilities of the overall project, will <insert info on specific roles/responsibilities on project 1>.

| | | |
|---|---|---|
| Systems Science, Implementation and Sustainability | • <Insert><br>• <Insert> | accomplishments, activities via website, social media, etc. |
| Health Economics | • <Insert><br>• <Insert> | |

# Grant Editing

**One Voice, Compelling**



Financial | Pilot Grants

# Accelerating Synergy

- Supports teams in addressing significant, multifaceted research problems using a cross-disciplinary approach
- Requires collaboration across schools/colleges
- ***Expectation***: Results will be used to develop a competitive external large-scale grant

Financial | Pilot Grants

# Accelerating Synergy

## Positioning

- $100K for one year
- Obtain/finalize preliminary data
- Publish with collaborators to solidify history of partnership

## Grant Development

- $100K for one year
- Analyze/publish final preliminary data
- Prepare grant for submission

*Supports basic, translational and health services research*

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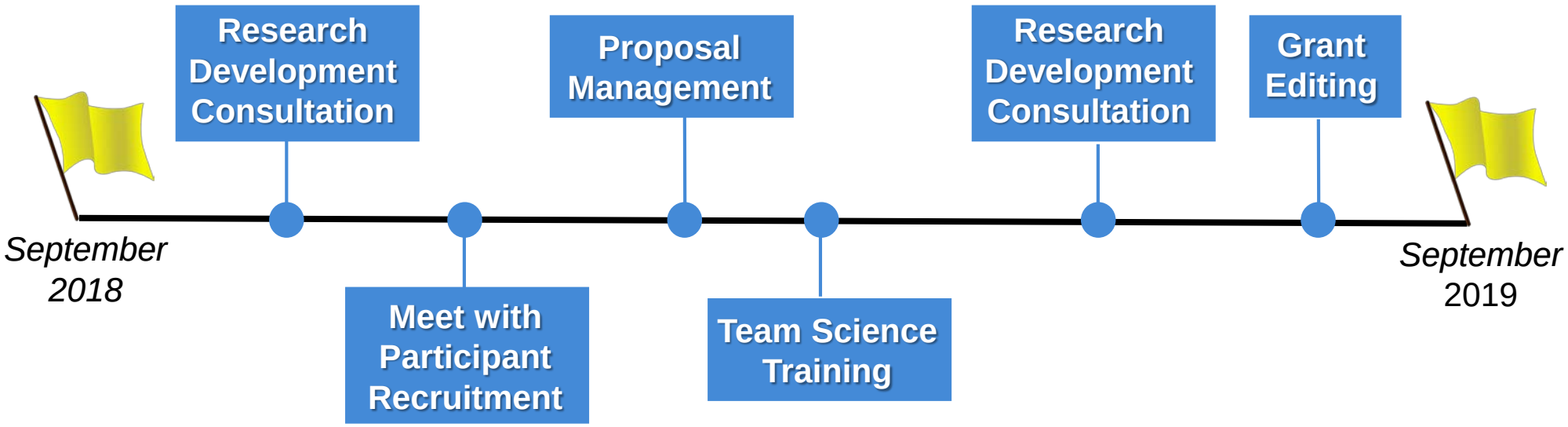
MEDICAL SCHOOL OFFICE OF RESEARCH UNIVERSITY OF MICHIGAN

INSTITUTE FOR HEALTHCARE POLICY & INNOVATION UNIVERSITY OF MICHIGAN

Financial | Pilot Grants

# Awardee Example Tailored Plan of Support

## *Grant Development*

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# Preliminary Outcomes


Teams received large-scale grant support services in the last 1.5 years


Fold increase in the number of large-scale grants supported by MICHR

# In the Works

- Tracking large-scale grant submissions at U-M
- Determining outcomes of grants supported by MICHR

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# Preliminary Outcomes

8

Teams awarded Accelerating Synergy funding


## In the Works

- Sociometric surveys – team relationships, dynamics, networks

# In the Works: Catalyzing Team Formation and Sustainability

## Bringing Teams Together

## Keeping Teams Together



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# Thank You.

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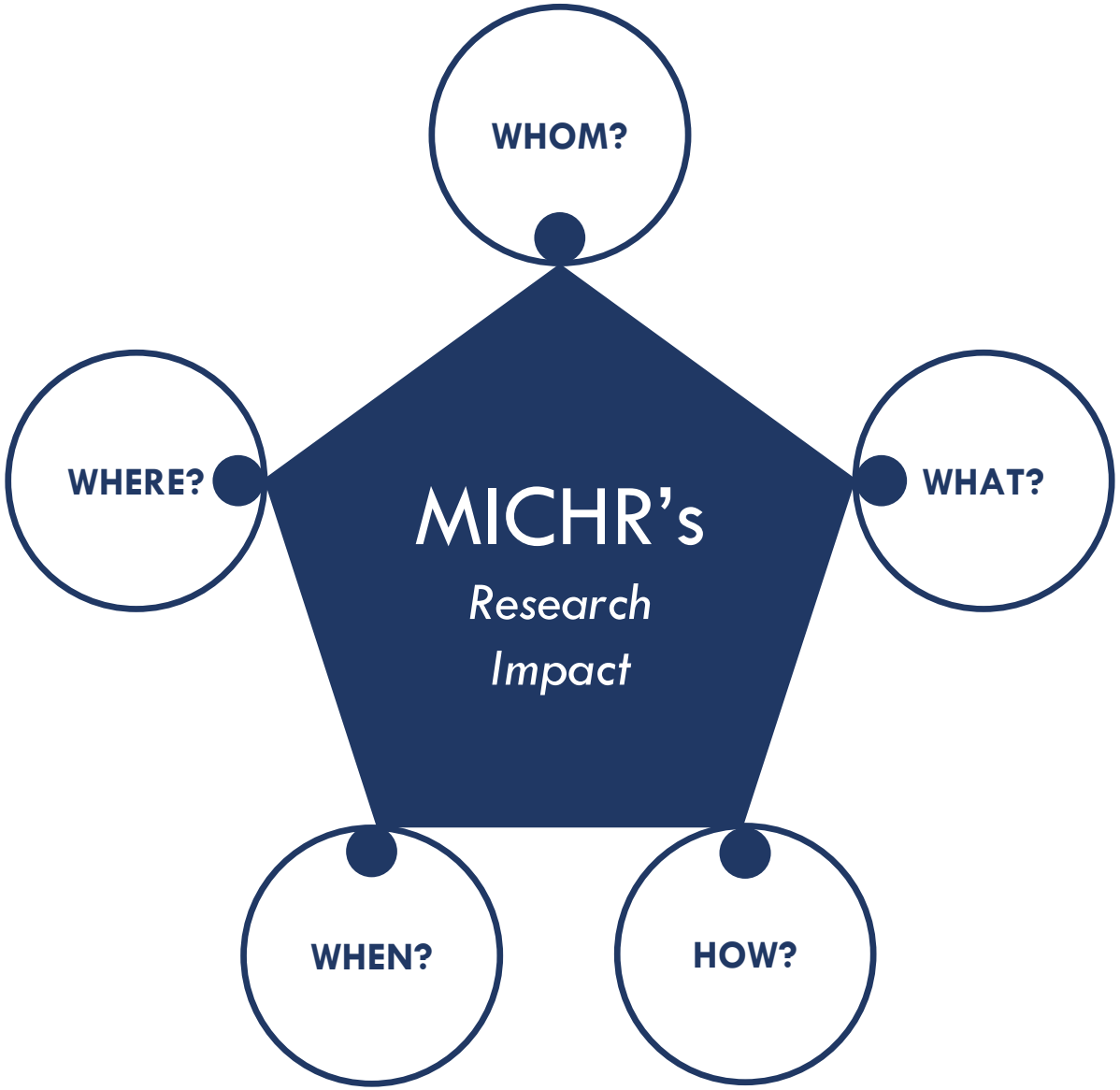
# Measuring Team Science


Felichism Kabo, M. Arch; PhD

Survey Research Center, Institute for Social Research

University of Michigan

# Fundamentals



# Approach

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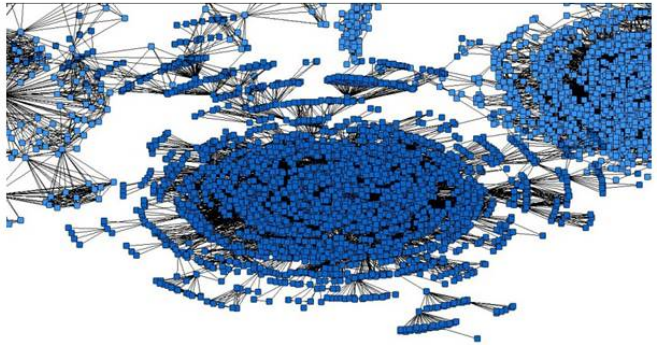

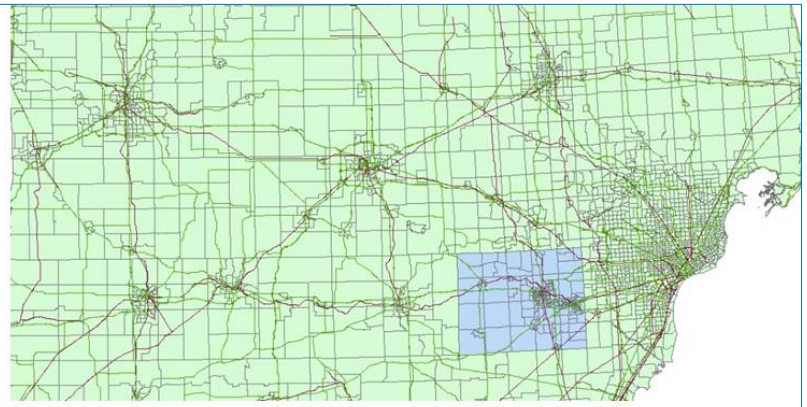

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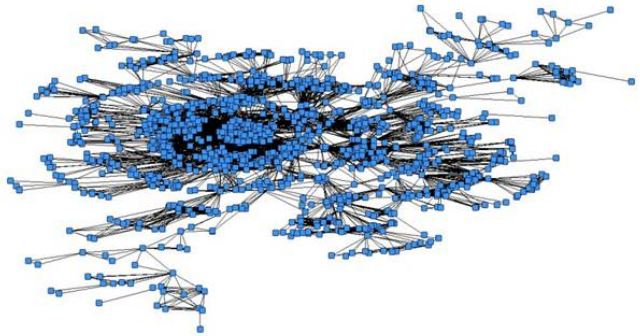
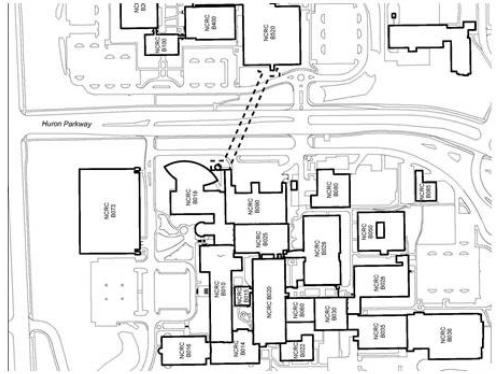
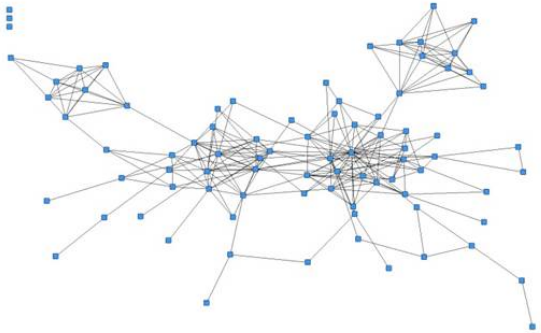
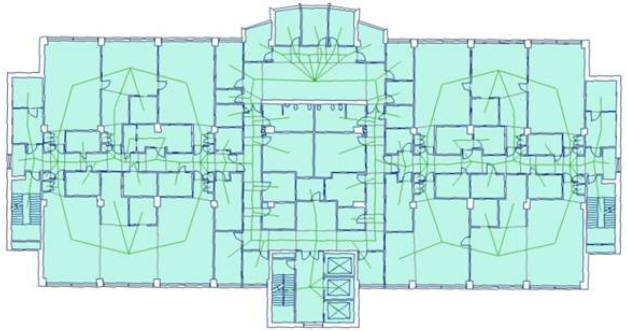





$10^1$





# Grants

Journal of Clinical and Translational Science

ACTS
ASSOCIATION FOR CLINICAL AND TRANSLATIONAL SCIENCE

TRANSLATIONAL RESEARCH, DESIGN AND ANALYSIS
SPECIAL COMMUNICATION

## Effect of a Clinical and Translational Science Award institute on grant funding in a major research university

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Journal of Clinical and Translational Science (2017), page 1 of 6 doi:10.1017/cts.2016.32

Introduction. Previous studies have examined the impact of Clinical and Translational Science Awards programs on other outcomes, but not on grant seeking. The authors examined the effects on grant seeking of the Michigan Institute for Clinical & Health Research (MICHR), a Clinical and Translational Science Awards institute at the University of Michigan.

Methods. We assessed over 63,000 grant proposals submitted at the University of Michigan in the years 2002–2012 using data from the university and MICHR's Tracking Metrics and Reporting System. We used a retrospective, observational study of the dynamics of grant-seeking success and award funding. Heckman selection models were run to assess MICHR's relationship with a proposal's success (selection), and subsequently the award's size (outcome). Models were run for all proposals and for clinical and translational research (CTR) proposals alone. Other covariates included proposal classification, type of grant award, academic unit, and year.

Results. MICHR had a positive and statistically significant relationship with success for both proposal types. For all grants, MICHR was associated with a 29.6% increase in award size. For CTR grants, MICHR had a statistically nonsignificant relationship with award size.

Conclusions. MICHR's infrastructure, created to enable and enhance CTR, has also created positive spillovers for a broader spectrum of research and grant seeking.

Received 25 August 2016; Accepted 7 November 2016

Key words: Clinical and Translational Science Award (CTSA), grant seeking, research proposal success, grant award size.

### Introduction

Recognizing the need for national accelerators and catalysts of clinical and translational research (CTR), the National Institutes of Health (NIH) established the Clinical and Translational Science Awards (CTSA) program in 2006 [1]. There are currently more than 60 CTSA institutes located at top academic health and related institutions. The CTSA program has made an appreciable impact on clinical and translational science in these core institutions and in the nation. For example, studies have examined how CTSAs have transformed the dimensions of collaboration and team science with respect to CTR in their parent institutions [2–5]. However, the CTSA program also has significant and understudied impacts related to research activities such as grant seeking. Given the significant investment in this program for the NIH and the US taxpayers, establishing metrics to quantify its many impacts is of paramount importance.

Previous studies have examined the impact of CTSA programs on other metrics, but none of them has systematically analyzed how a CTSA program has shaped grant seeking over time. For example, the NIH encourages CTSA institutions to develop Ph.D. programs in clinical and translational science (CTS) so as to fulfill the education and training mandates of the CTSA mission. Related to this, a study focused on education and training found that, although only 22 (36.7%) of the 60 CTSA institutions in 2012 had CTS Ph.D. programs, another 13 (21.7%) institutions were in the planning process for doctoral programs [6]. Mentoring is also a key component of the CTSA mission. A study of CTSA-sponsored research (the KL2 program) found a preference for specific mentor qualifications—namely, independent research funding, previous mentoring experience, and seniority or advanced rank [7]. To our knowledge, this is the first study that empirically examined grant seeking as a metric for the impact of a CTSA institution.

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(Email: fkabo@umich.edu)

# Grants

MICHR significantly associated with award receipt & size for all grants

MICHR significantly associated with award receipt & size for clinical & translational grants



**Table 1.** *Heckman regression models of the impact of Michigan Institute for Clinical & Health Research (MICHR) on whether proposals are awarded and on the size of the grant award for the years 2002–2012. Models are shown for all grants*

| | Model 1 | | Model 2 | | Model 3 | |
|---|---|---|---|---|---|---|
| Variables | Funding | Award | Funding | Award | Funding | Award |
| *MICHR* | 0.329 (0.0376)*** | 0.771 (0.0545)*** | 0.353 (0.0379)*** | 0.780 (0.0537)*** | 0.296 (0.0375)*** | 0.772 (0.0546)*** |
| *GRANT TYPE* | | | | | | |
| *Grant (reference category)* | | | | | | |
| Contract | 1.058 (0.137)*** | | 0.766 (0.143)*** | | 0.991 (0.138)*** | |
| Cooperative Agreement | 3.426 (0.102)*** | | 3.505 (0.108)*** | | 3.381 (0.103)*** | |
| Subcontract | 2.602 (0.936)** | | 2.801 (0.976)** | | 2.359 (0.934)* | |
| *PROPOSAL CLASS* | | | | | | |
| *Clinical Trial (reference category)* | | | | | | |
| Instructional | 2.806 (0.936)** | | 2.871 (0.957)** | | 2.836 (0.938)** | |
| Off-Campus Research | 2.528 (0.731)*** | | 2.573 (0.738)*** | | 2.515 (0.723)*** | |
| On-Campus Research | 2.451 (0.725)*** | | 2.735 (0.733)*** | | 2.515 (0.718)*** | |
| Other Sponsored Activity | −0.597 (0.730) | | −0.426 (0.738) | | −0.586 (0.723) | |
| Research Training Grant | 1.380 (0.726) | | 1.787 (0.733)* | | 1.505 (0.719)* | |
| *MEDICAL SCHOOL* | | 0.0174 (0.0308) | | −0.00296 (0.0302) | | −0.00611 (0.0306) |
| *CLINICAL/TRANSLATIONAL* | | 1.503 (0.0465)*** | | 1.550 (0.0457)*** | | 1.497 (0.0466)*** |
| *AWARD TYPE* | | 4.763 (0.0387)*** | | 4.709 (0.0370)*** | | 4.765 (0.0387)*** |
| Constant | 11.04 (0.727)*** | −2.666 (0.0664)*** | 11.03 (0.733)*** | −2.307 (0.0264)*** | 11.07 (0.719)*** | −2.649 (0.0662)*** |
| Observations | 66,402 | 66,402 | 66,402 | 66,402 | 66,402 | 66,402 |

Standard errors in parentheses.
***p < 0.001, **p < 0.01, *p < 0.05.

*Size of Grant Award: All Proposals.* For all grants, being processed by MICHR was associated with a 29.6% increase in award funding in dollars, even when controlling for all other variables—the academic unit of the scientist, the grant award type, the class of the proposal, and the year that the award was made. Most academic units are associated with significantly lower amounts of funding per grant award compared with *Medical School*. However, *Graduate Studies* and *Public Health* are associated with significantly higher funding per grant award compared with *Medical School*. For the grant award type, all other types are associated with higher funding per grant award compared with *Grant*. With the exception of *Clinical Trial Site Activity*, all other proposal classes are associated with higher funding per award compared with *Clinical Trial*.

### *CTR Proposals*

For CTR proposals, Table 2 shows 3 models as follows: Model 4 has all variables except for the academic unit associated with the proposal; Model 5 omits the time variables; and Model 6 is the fully fitted Heckman equation.

**Table 2.** *Heckman regression models of the impact of Michigan Institute for Clinical & Health Research (MICHR) on whether proposals are awarded and on the size of the grant award for the years 2002–2012. Models are shown for clinical and translational research grants*

| | Model 4 | | Model 5 | | Model 6 | |
|---|---|---|---|---|---|---|
| Variables | Funding | Award | Funding | Award | Funding | Award |
| *MICHR* | −0.992 (0.271)*** | 2.186 (0.283)*** | −0.990 (0.273)*** | 1.569 (0.217)*** | −0.329 (0.255) | 2.408 (0.230)*** |
| *GRANT TYPE* | | | | | | |
| *Grant (reference category)* | | | | | | |
| Contract | 0.667 (0.596) | | −0.0659 (0.629) | | 1.038 (0.628) | |
| Cooperative Agreement | 2.699 (0.248)*** | | 3.605 (0.185)*** | | 3.102 (0.237)*** | |
| *PROPOSAL CLASS* | | | | | | |
| *Clinical Trial (reference category)* | | | | | | |
| Instructional | 1.097 (0.775) | | | | | |
| Off-Campus Research | 0.928 (0.750) | | −1.166 (0.716) | | 0.426 (0.696) | |
| On-Campus Research | 2.862 (0.460)*** | | 3.158 (0.594)*** | | 2.395 (0.468)*** | |
| Other Sponsored Activity | −1.496 (0.711)* | | −1.408 (0.841) | | −1.679 (0.749)* | |
| Research Training Grant | 2.369 (0.474)*** | | 2.615 (0.595)*** | | 2.313 (0.486)*** | |
| *MEDICAL SCHOOL* | | 0.165 (0.0818)* | | 0.437 (0.0914)*** | | 0.472 (0.107)*** |
| Constant | 12.48 (0.530)*** | −0.0649 (0.135) | 12.71 (0.593)*** | −0.725 (0.0839)*** | 12.59 (0.543)*** | −0.407 (0.130)** |
| Observations | 1509 | 1509 | 1509 | 1509 | 1509 | 1509 |

Standard errors in parentheses.
***p < 0.001, **p < 0.01, *p < 0.05.

# Egonets

*Journal of Clinical and Translational Science*

**www.cambridge.org/cts**

**Implementation, Policy and Community Engagement Research Article**

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**Key words:**
Ego networks; CTSA; network dynamics; collaboration; team science

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# Measuring team science: Associations between a clinical-translational science institute and investigator ego networks

Felichism W. Kabo[1,2,*] and George A. Mashour[2,3]

[1]Institute for Social Research, University of Michigan, Ann Arbor, MI, USA; [2]Michigan Institute for Clinical and Health Research, University of Michigan, Ann Arbor, MI, USA and [3]Office of Research, University of Michigan, Ann Arbor, MI, USA

**Abstract**

The National Institutes of Health's Clinical and Translational Science Awards (CTSA) institutes have been created, in part, to have a positive impact on collaboration and team science. This study is the first to examine the associations between a CTSA hub, the Michigan Institute for Clinical and Health Research (MICHR), and investigators' ego networks. We ran cross-sectional and panel models of the associations between consulting with MICHR and the ego network measure of two-step reach (TSR) – that is, colleagues of colleagues reachable in two steps – from a network of 2161 investigators who had co-submitted a grant proposal to an external sponsor in 2006. Our analyses covered the period 2004–2012, although some model specifications covered the shorter time period 2006–2010. Consulting with MICHR had positive associations with the size of and changes in an investigator's TSR across and over time, even controlling for research productivity and organizational affiliation. For example, over the period 2006–2010 an investigator who consulted with MICHR reached 44 more individuals than a non-consulting investigator. This study expands our understanding of the indirect impacts that clinical and translational science institutes have on investigators' scientific networks. This network-based approach might be useful in quantifying the impact of team science initiatives at the university level.

## Introduction

The NIH Roadmap was developed to address the complexities of biomedical science and to accelerate scientific progress by tackling challenges that cut across NIH's institutes and centers [1, 2]. The roadmap identified three major themes: (1) New Pathways to Discovery, (2) Research Teams of the Future, and (3) Re-engineering the Clinical Research Enterprise [1, 2]. The Clinical and Translational Science Awards (CTSA) program was launched in 2006, primarily to address the second and third of these themes [3]. However, the methods by which to assess the impact of a CTSA program hub on the development of research teams in clinical and translational science are still unclear.

CTSA program hubs were expected to catalyze clinical and translational research across the nation through activities such as training and cultivation of a translational science workforce, and the fostering of collaborative, interdisciplinary team science [4–6]. There is burgeoning evidence for the positive impact of CTSAs on a range of outcomes such as grant collaboration, publications, and citations [7–9]. The current study takes a novel approach in which, rather than focus on outcomes, we examine the antecedent issue of the potential means by which CTSAs are influencing the processes associated with the positive outcomes. We do this by identifying an individual-level mechanism through which a CTSA is transforming clinical and translational science. In particular, social network analysis is applied to advance understanding of how interactions with a CTSA program hub can influence the individual or ego networks of an investigator.

Social networks contribute to knowledge creation, which is a collective and social activity [10]. In this study we analyzed the impact of a CTSA program hub, the Michigan Institute for Clinical and Health Research (MICHR), on investigator ego networks at the University of Michigan (U-M) to assess the influence the institute has on the conditions that favor team science. MICHR is one of over 50 hubs of the CTSA program supported by the National Center for Advancing Translational Sciences (NCATS) of the National Institutes of Health (NIH). One of MICHR's stated goals is to help enrich investigators' research programs by connecting them to other units and individuals on campus. However, the most appropriate method by which to quantify enhanced scientific connectivity is unclear, both for MICHR and other CTSA hubs.

Previous network studies of CTSA program hubs have focused on changes of entire networks or communities of investigators. This type of approach is also referred to as *socio-centric* analysis. For example, network analysis was employed to assess collaboration, team science

# Egonets

MICHR significantly associated with cross-sectional changes in ego network

MICHR significantly associated with longitudinal changes in ego network



**Table 2.** *Cross-sectional models for the association with consulting MICHR in the years 2006–2010*

| | (1) | (2) | (3) | (4) | (5) |
|---|---|---|---|---|---|
| Year consulted MICHR | 2006 | 2007 | 2008 | 2009 | 2010 |
| **Variables** | | | | | |
| Consulted MICHR | 160.9*** (30.52) | 176.8*** (28.48) | 92.15*** (27.12) | 70.64** (25.51) | 175.6*** (22.40) |
| **Affiliation** | | | | | |
| Medical school (reference category) | | | | | |
| College of engineering | −167.3*** (21.32) | −162.3*** (21.25) | −169.5*** (21.74) | −173.0*** (21.74) | −142.0*** (21.40) |
| Literature, science, arts | −156.4*** (21.35) | −151.5*** (31.20) | −159.6*** (31.80) | −162.8*** (31.86) | −140.0*** (30.92) |
| Life sciences institute | 198.1+ (110.9) | 208.1+ (110.3) | 199.4+ (112.0) | 196.6+ (112.2) | 218.4* (109.0) |
| Constant | 222.4*** (18.97) | 226.2*** (18.60) | 229.1*** (19.28) | 233.7*** (19.19) | 201.4*** (18.99) |
| Observations | 936 | 936 | 936 | 936 | 936 |

MICHR, Michigan Institute for Clinical and Health Research.
Standard errors in parentheses. Dependent variable is Δ in *Two-step Reach* between 2004 and 2012 (all U-M investigators; no new investigators added after 2006).
***$p < 0.001$; **$p < 0.01$; *$p < 0.05$, +$p < 0.1$.

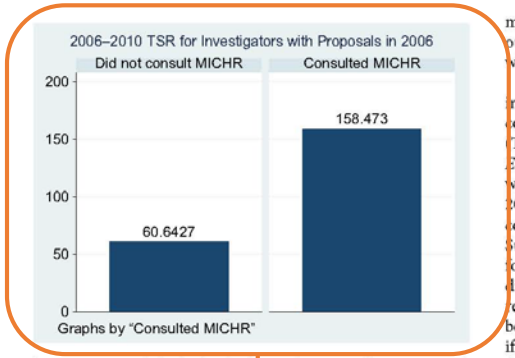



**Fig. 5.** Two-step reach (TSR) values for the period 2006–2010 for investigators who submitted grant proposals to external sponsors in 2006. Scores are broken down by whether investigators consulted Michigan Institute for Clinical and Health Research (MICHR) or not.

2003, 2004, or 2005, and ending in 2008, 2009, 2010, 2011, and 2012. For example, with 2002 as the baseline, the five windows were 2002–2008, 2002–2009, 2002–2010, 2002–2011, and 2002–2012. The evidence was mixed with respect to the association with baseline TSR. For most models with windows ending in 2008 and 2009, the baseline TSR was a suppressor (Supplementary Table S4). Conversely, for most models ending in 2011 and 2012, the baseline TSR was a mediator. For most models baselined in 2004, the baseline TSR was a mediator. Finally, for all models baselined in 2005, the baseline TSR was a suppressor. The analysis showed that the association with the baseline ego network was primarily a function of the study window selected for the 2006 cohort. Given the variation in the direction of the associations with baseline TSR values, we found an exhaustive discussion of the reasons behind this phenomenon to be beyond the scope of this paper. Further, consulting with MICHR was significant regardless of whether the baseline TSR mediated, suppressed, or did nothing. Therefore, we limited our analyses and subsequent discussion to the regression models without baseline TSR.

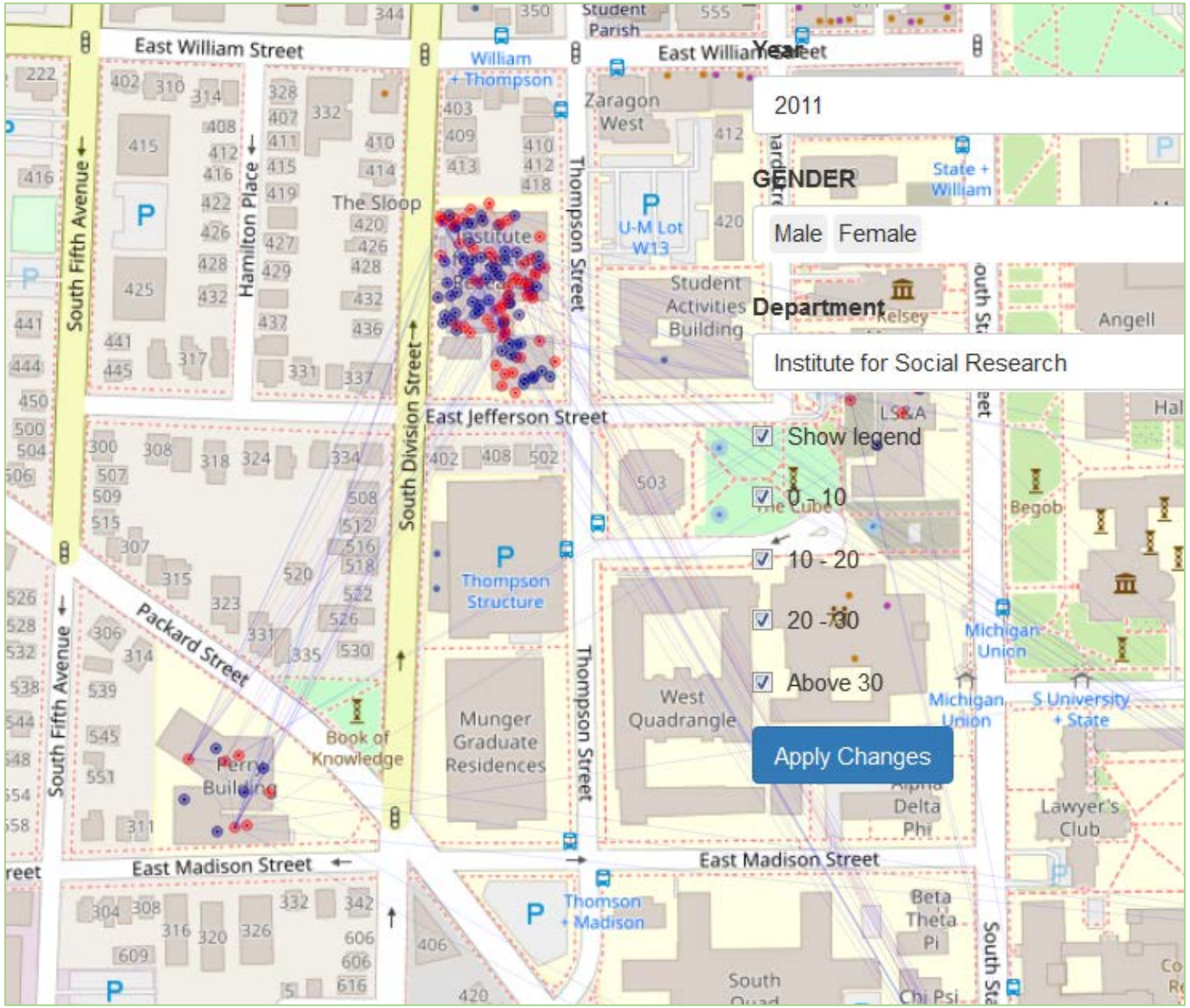
We present results for the two sets of models as follows: (1) for investigators from all units, we examined the relationship between consulting MICHR and TSR in each of the years 2006–2010 (Table 2), and (2) for investigators from subscribing (*Michigan Experts*) units, we analyzed the association between consulting with MICHR in 2006 and the change in ego network reach between 2004 and 2012 (Table 3). To economize on space, we show only the control variables (or levels within variables) that are significant (see Supplementary Tables S2a and S3 for the full models). We performed sensitivity analysis where we also generated models using different pre–post windows, for example, 2002 and 2012. The results were very similar to the ones we obtained using the window between 2004 and 2012. This implies that, despite different specifications of the pre–post window, there was no change in the way that consulting with MICHR impacted the dependent variable of Δ in *Two-step Reach* between 2004 and 2012.

### *Panel Analysis*

We present models with (model 2, Table 4) and without (model 1, Table 4) controls for research productivity. Recall that model 1 captures all investigators in the panel, while model 2 only captures investigators in the panel who are affiliated with "*Michigan Experts*" units. The panel regressions revealed that consulting with MICHR had a robust, significant, and positive longitudinal association with ego network TSR for the period 2006–2010.

The findings for the models with and without controls for research productivity are similar. Therefore, we focused our analysis on model 1 as it allows us to discuss the association with consulting MICHR for the entire panel. Over time (2006–2010), the act of an investigator consulting with MICHR was associated with an increase in TSR by roughly 44 units (44.16 for the model without publications, and 43.88 for the model with publications) – that is, the investigator was able to reach 44 more individuals in two steps compared with a peer who did not consult with MICHR.

# Spatial

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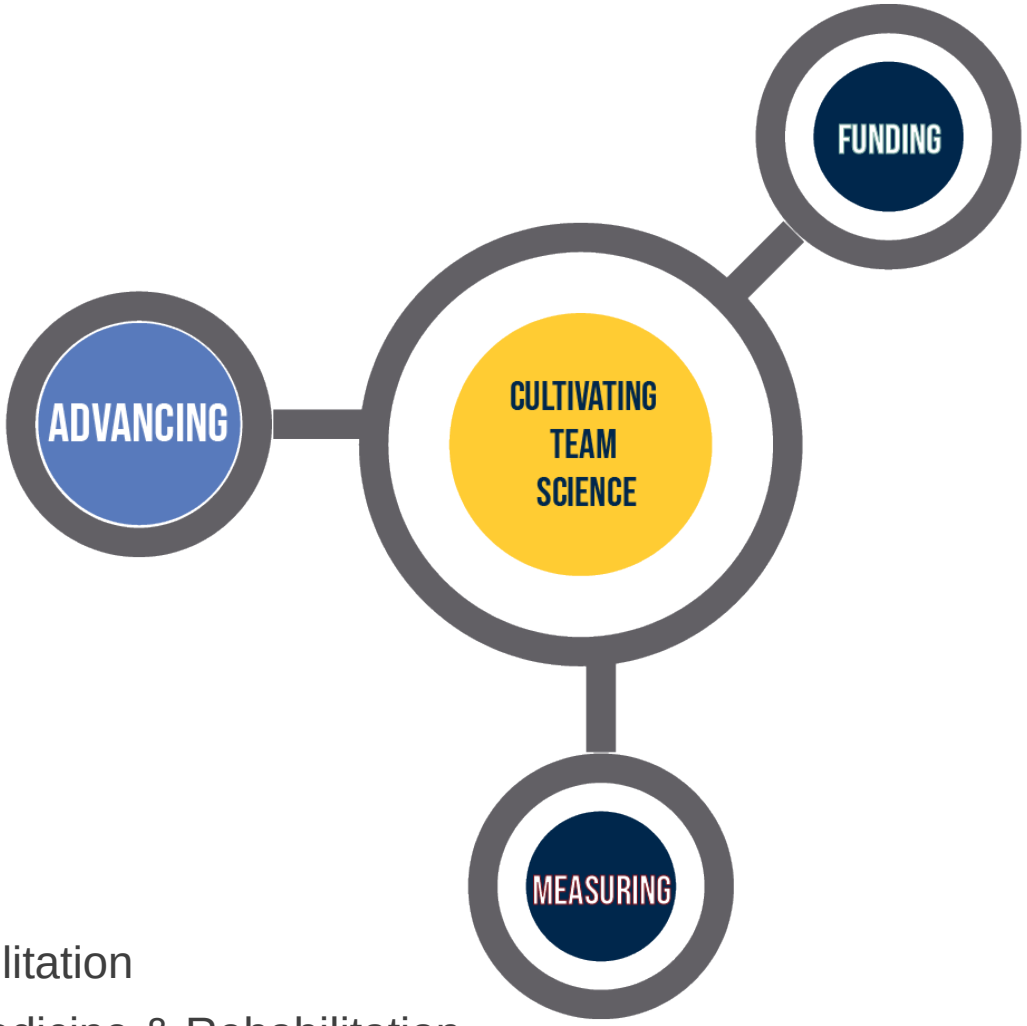
# Advancing Team Science




Susan Murphy, ScD, OTR

Associate Professor, Physical Medicine & Rehabilitation

Director, Clinical Trials Development, Physical Medicine & Rehabilitation

Director, Pain Rehabilitation Interventions for Symptom Management Lab

Michigan Institute for Clinical & Health Research

University of Michigan

# Best Practices for Successful Team Science

Series of 11 short, motivational videos based on the National Cancer Institute's *Collaboration and Team Science: A Field Guide* & the Top 10 Take-Aways

1. Trust
2. Vision
3. Self-Awareness and Emotional Intelligence
4. Leadership
5. Mentoring*
6. Team Evolution and Dynamics
7. Communication
8. Recognition and Sharing Success
9. Conflict and Disagreement
10. Navigating and Leveraging Networks and Systems
11. Diversity*

**Mentoring**

**Diversity**

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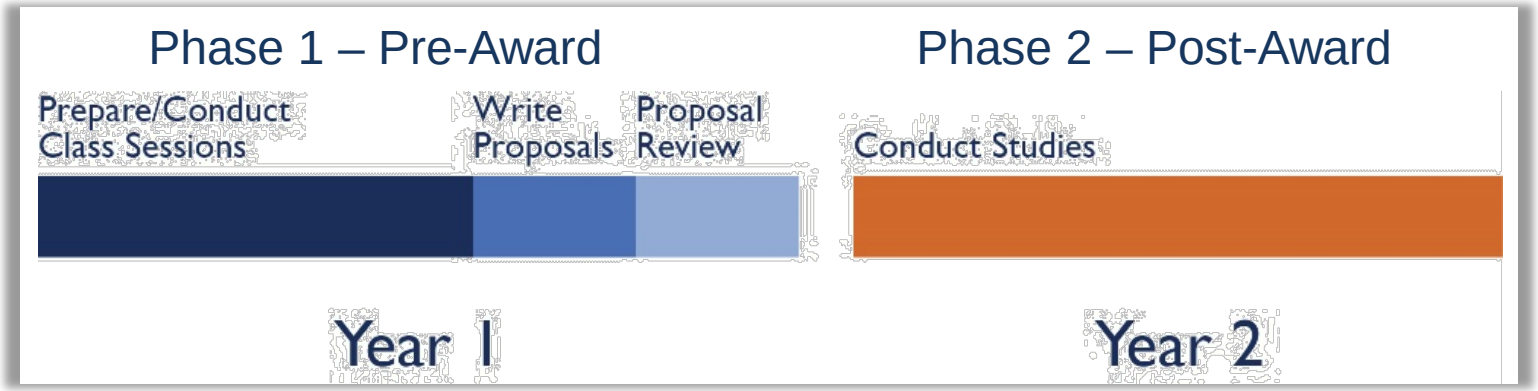
PORT
Practice Oriented Research Training

## Program Goal

Train practicing clinicians with limited research training to become study team members

Through teamwork, participants develop skills to:

- Design a research project
- Apply and be reviewed for funding
- Conduct ethically and fundamentally sound research
- Disseminate findings through presentations and peer-reviewed manuscripts

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JHT Read for Credit Article #199.

# Static Versus Dynamic Splinting for Proximal Interphalangeal Joint Pyrocarbon Implant Arthroplasty: A Comparison of Current and Historical Cohorts

Jeanne M. Riggs, OT, CHT
*Physical Medicine and Rehabilitation Department, University of Michigan Health System, Ann Arbor,*

ABSTRACT:
**Study Design:** Non cohort follow-up study.

**The very first PORT pub!**

## Prevalence of Posterior Shoulder Subluxation in Children With Neonatal Brachial Plexus Palsy After Early Full Passive Range of Motion Exercises

Denise Justice, OTRL, Lynnette Rasmussen, OTRL, Michael Di Pietro, MD, Kate W.-C. Chang, MA, Susan L. Murphy, ScD, OTR, Virginia S. Nelson, MD, MPH, Lynda J.-S. Yang, MD, PhD

## Treatment adherence among adolescents with epilepsy: What really matters?

Loretta Carbone [a,*], Bradley Zebrack [b], Melissa Plegue [c], Sucheta Joshi [d], Renée Shellhaas [d]

[a] *Department of Social Work, University of Michigan Health System, Ann Arbor, MI, USA*
[b] *School of Social Work, University of Michigan, Ann Arbor, MI, USA*
[c] *Center for Statistical Consultation and Research, University of Michigan, Ann Arbor, MI, USA*
[d] *Pediatrics & Communicable Diseases, University of Michigan Health System, Ann Arbor, MI, USA*

## Tolerance of a Standing Tilt Table Protocol by Patients an Inpatient Stroke Unit Setting: A Pilot Study

*Mathew J. Baltz, PT, DPT, Hendrika L. Lietz, PT, DPT, NCS, Ida Trott Sausser, PT, DPT, Claire Kalpakjian, PhD, and Devin Brown, MD*

## Impact of diagnosing diabetic complications on future hemoglobin $A_{1c}$ levels

Maxwell S. Stem [a], Taylor S. Blachley [a], Roni M. Shtein [a], William H. Herman [b,c,d], Thomas W. Gardner [a], Joshua D. Stein [a,d,*]

[a] *Department of Ophthalmology and Visual Sciences, University of Michigan Medical School, USA*
[b] *Department of Internal Medicine, University of Michigan Medical School, USA*
[c] *Department of Epidemiology, University of Michigan, USA*
[d] *Institute for Healthcare Policy and Innovation, University of Michigan, USA*

## It's Not Just a Needlestick: Exploring Phlebotomists' Knowledge, Training, and Use of Comfort Measures in Pediatric Care to Improve the Patient Experience

Julie Piazza,[1,2*] Sandra Merkel,[1] Harry Neuslus,[3] Susan Murphy,[4] Joan Gargaro,[1,2] Brooke Rothberg,[5] and Kristin A. Kullgren[1,6]

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# Finding Research Partners

## Communicating the Value of Your Research to a Broad Audience

- Workshop for faculty focused on developing value propositions
- Strategies for effectively communicating your research to different audiences in compelling ways
- Participants develop “Elevator Pitch” to be used in professional settings


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FASTFORWARD medical innovation

MEDICAL SCHOOL UNIVERSITY OF MICHIGAN

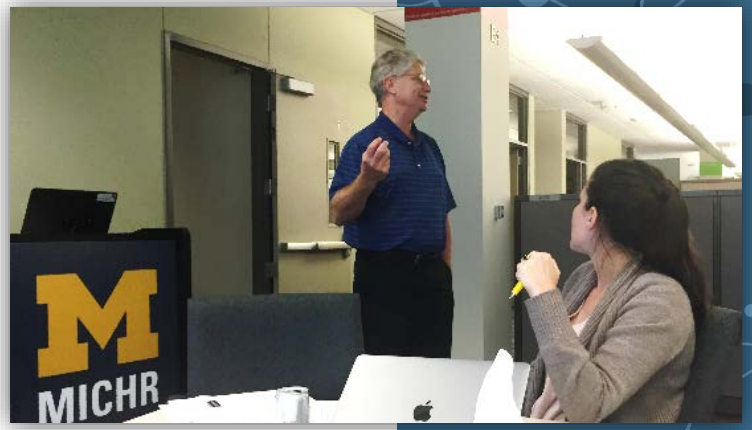
# Community Partner-Scholar Teams

<u>Workshops for Community Partners on Research Development</u>

- Collaboration between Community Engagement, Education, Biostatistics
- Trained partners on research design, qualitative design, and outcome measures
- Focused discussion on community-identified research priorities

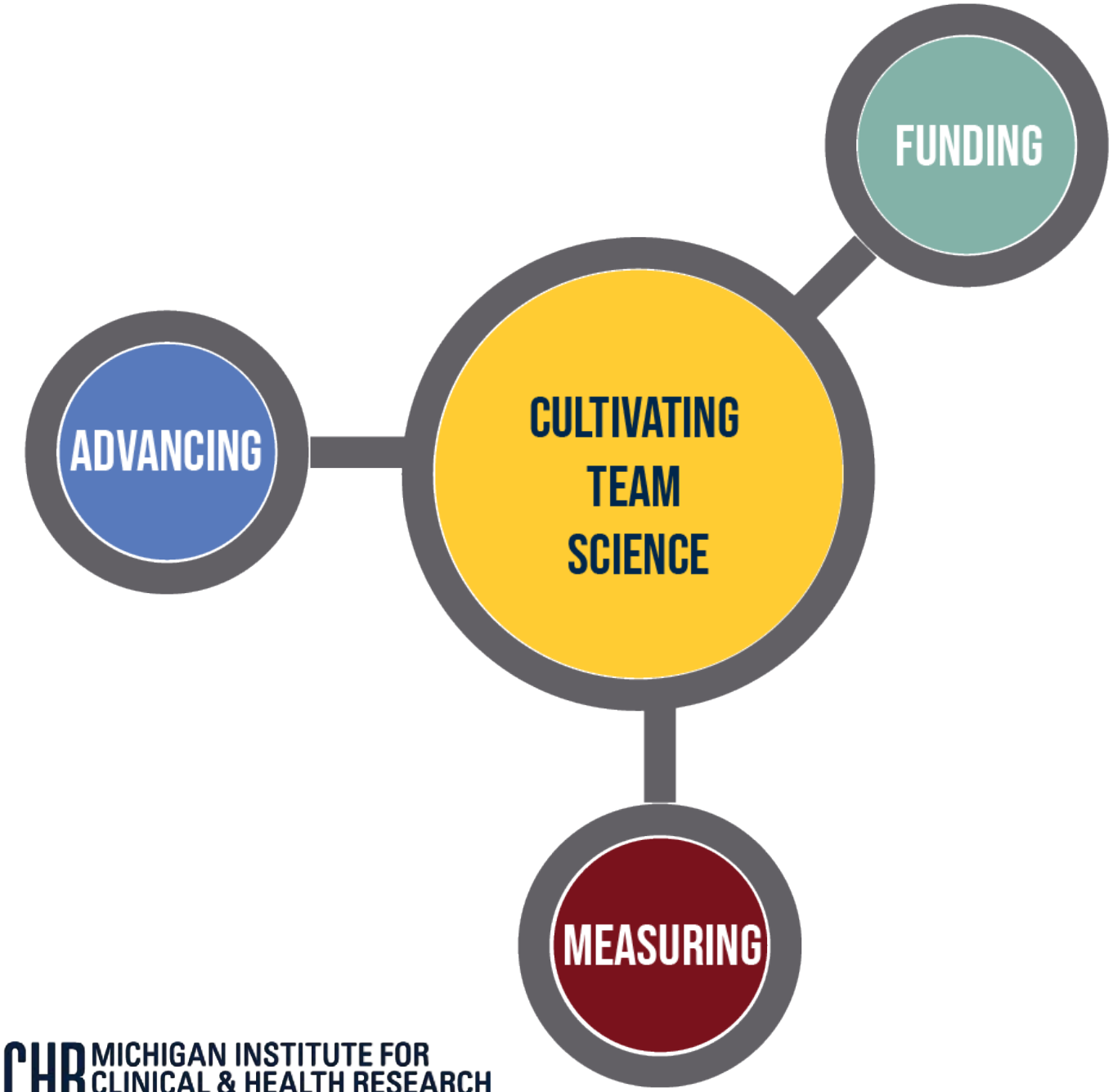
<u>Connect KL2 & TL1 scholars with community partners</u>

- Project driven by community partner needs/interest




MICHR's new **Pathway to Engagement program** provides training in stakeholder-engaged research methods

- Audience: U-M investigators with limited experience engaging community partners for research
- Provides the tools and techniques investigators need to partner with patient and community stakeholders

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