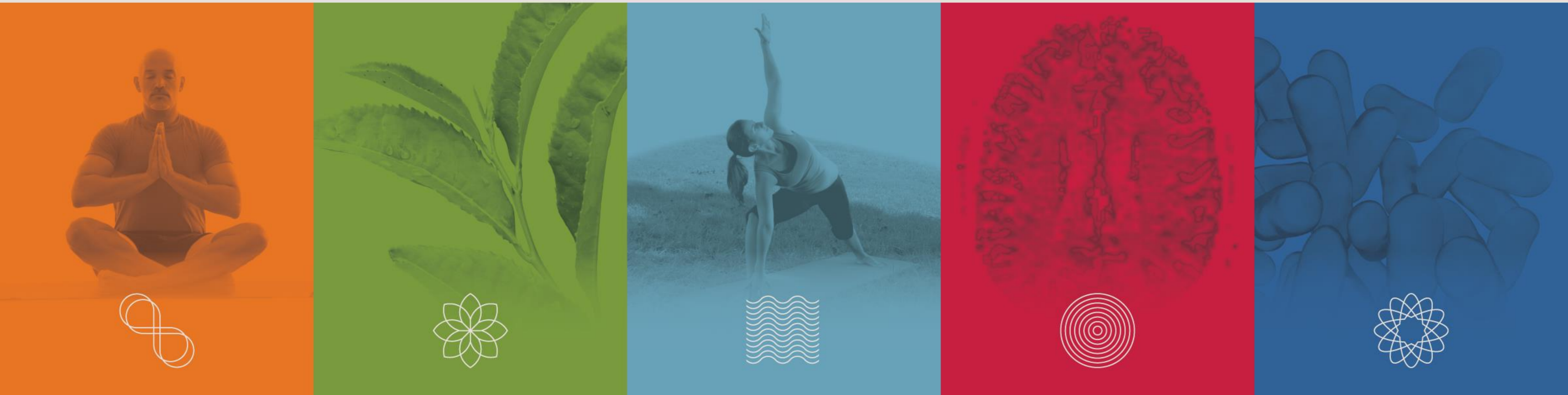




# Innovation in Research Training and Capacity Building at CIH Institutions: The RAND REACH Center

ICIMH Meeting April 11, 2024

Lanay Mudd, PhD, Patricia Herman, ND, PhD, Ryan Bradley, ND, MPH, James Whedon, DC, MS, Paul Amieux, Brian Anderson, DC, MPH, MS, PhD



# Overview

- Goals for the REsearch Across Complementary and Integrative Health Institutions (REACH) Virtual Resource Centers Program
  - Dr. Mudd
- Overview of the RAND REACH Center
  - Dr. Herman
  - Dr. Bradley
- RAND REACH Center Member Perspectives
  - Dr. Whedon
  - Dr. Amieux
  - Dr. Anderson
- Q&A



# NCCIH GOALS FOR THE REACH CENTER PROGRAM





National Center for  
Complementary and  
Integrative Health

# Strategic Plan

FY 2021-2025

Mapping a Pathway to Research  
on Whole Person Health



U.S. Department of Health & Human Services — National Institutes of Health

## Primary Research Objectives:

- Advance fundamental science and methods development
- Advance research on the whole person and on the integration of complementary and conventional care
- Foster research on health promotion and restoration, resilience, disease prevention, and symptom management

## Cross-Cutting Objectives:

- Enhance the complementary and integrative health research workforce
- Provide objective evidence-based information on complementary and integrative health interventions

<https://www.nccih.nih.gov/about/nccih-strategic-plan-2021-2025>



# Enhancing the Complementary and Integrative Health Research Workforce

- **Strategy 1:** Support research training and career development opportunities to increase the diversity and number of well-trained scientists conducting rigorous, cutting-edge research on complementary and integrative health practices
  - Individuals from underrepresented groups
  - **Clinician-scientists**
  - Biomedical and Behavioral research scientists
- **Strategy 2:** Foster interdisciplinary collaborations and partnerships at individual and **institutional levels**
  - ID and address barriers
  - Pilot and evaluate new approaches
  - Speed the trajectory from trainee to independent researcher



# Rationale for REACH Resource Centers

## Research Intensive Institutions

- Strong research infrastructure and environment
- Grantsmanship courses and support
- Research training
- Interdisciplinary networks
- PI's with history of NIH funding
- Lack strong presence of clinician scientists trained in complementary and integrative health disciplines

## Complementary and Integrative Health Clinical Institutions

- Faculty include clinician scientists with clinical training to inform research questions
- Strong clinical training environment to contribute to knowledge generation
- Lack research infrastructure, environment, training, etc to support clinician-scientist careers



# Structure of REACH Resource Centers

## REACH Virtual Resource Center:

- Scientific Hubs
- Foster institutional partnerships
- Support research activities and research training for faculty who work at accredited complementary and integrative health clinical institutions
- Provide resources for clinical research aligned with NCCIH strategic priorities for symptom management



# Virtual Resources

- Support development, submission, and management of federal research grant applications
- Support investigators pursuing clinical research aligned with NCCIH priorities for symptom management
  - Observational, epidemiological, clinical mechanistic, qualitative/mixed methods, intervention development/testing studies
- Resources should be based on the needs of partnering clinical institutions
  - Administrative Support (budgets, regulatory support, subawards, etc)
  - Research Support (research methods, statistical support, IRBs, etc)
  - Grantsmanship (conceptual development, finding funding opportunities, etc)
  - Mentorship and Training (formal and informal mentorship, soft-skills building, etc)
  - Team Building (matchmaking services, training in team science, etc)





# Partnerships with Clinical Institutions

- REACH Centers must partner with at least 3 accredited, U.S. Domestic complementary and integrative health clinical institutions from a breadth of clinical disciplines, such as:
  - Schools of acupuncture, chiropractic, osteopathy (if manual manipulation is included in core curriculum), naturopathy, physical therapy, and music and art therapy
- Partnering institutions must demonstrate willingness to engage with the REACH center
  - Commit in kind support to provide at least 20% protected time for faculty to participate in REACH activities
- Must provide plans for expanding to additional partnerships over time



# REACH Resource Center Goals

- Improve the quality and quantity of **federal research grant applications** submitted by clinician scientist faculty at complementary and integrative health institutions
- Aid the formation of **multi & interdisciplinary partnerships** across partnering clinical institutions
- Help to enhance the **research environment** at partnering clinical institutions to expose more students to research
- Support a **pipeline for clinician scientists** to gain expertise in clinical science and pursue research careers at partnering clinical institutions



# NCCIH Seeking to Expand REACH Center Program!

- [NOT-AT-24-037](#): Notice of Intent to Publish a Funding Opportunity Announcement for REsearch Across Complementary and Integrative Health Institutions (REACH) Virtual Resource Centers (U24 Clinical Trial Not Allowed)
- Estimated Dates
  - Estimated Publication of Funding Opportunity: May 1, 2024
  - Estimated Application Due Date: August 30, 2024
  - Earliest Start Date: April 1, 2025
- Contact me to discuss an application: [Lanay.mudd@nih.gov](mailto:Lanay.mudd@nih.gov)





## Contact

1-888-644-6226  
info@nccih.nih.gov

[nccih.nih.gov](https://nccih.nih.gov)

## Connect



[nccih.nih.gov/connect](https://nccih.nih.gov/connect)



# Innovation in Research Training and Capacity Building at CIH Institutions

The RAND REACH Center



Research Across Complementary and  
Integrative Health Institutions (REACH) Center

Moderators:

Patricia M. Herman, ND, PhD  
*Co-Director, RAND REACH Center*

Lanay Mudd, PhD  
*NCCIH Project Scientist, RAND REACH Center*

# Agenda

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- Goals for the REsearch Across Complementary and Integrative Health Institutions (REACH) Virtual Resource Centers Program
  - Dr. Mudd
- Overview of the RAND REACH Center
  - Dr. Herman
  - Dr. Bradley
- RAND REACH Center Member Perspectives
  - Dr. Whedon
  - Dr. Amieux
  - Dr. Anderson
- Q&A

# Overview of the RAND REACH Center

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The original RAND Center for Collaborative Research in Complementary and Integrative Health and how it became the RAND REACH Center

Patricia M Herman

# Virtual Collaborative Platform



First draft completed 2021

Where members can share and develop research ideas

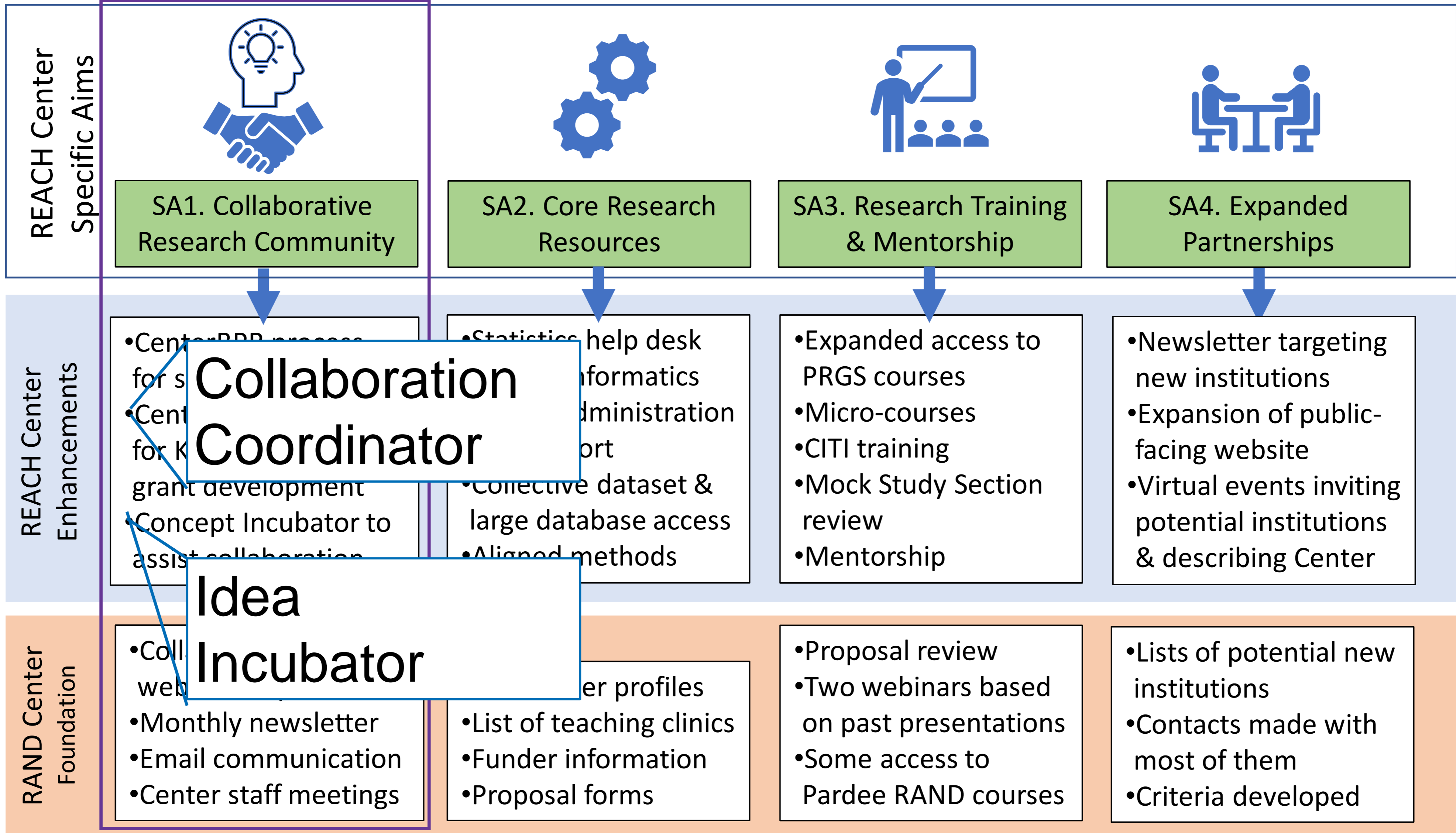
Contains searchable lists of resources and profiles for 100+ CIH researchers

## 12 Proposals Submitted; 7 Awarded

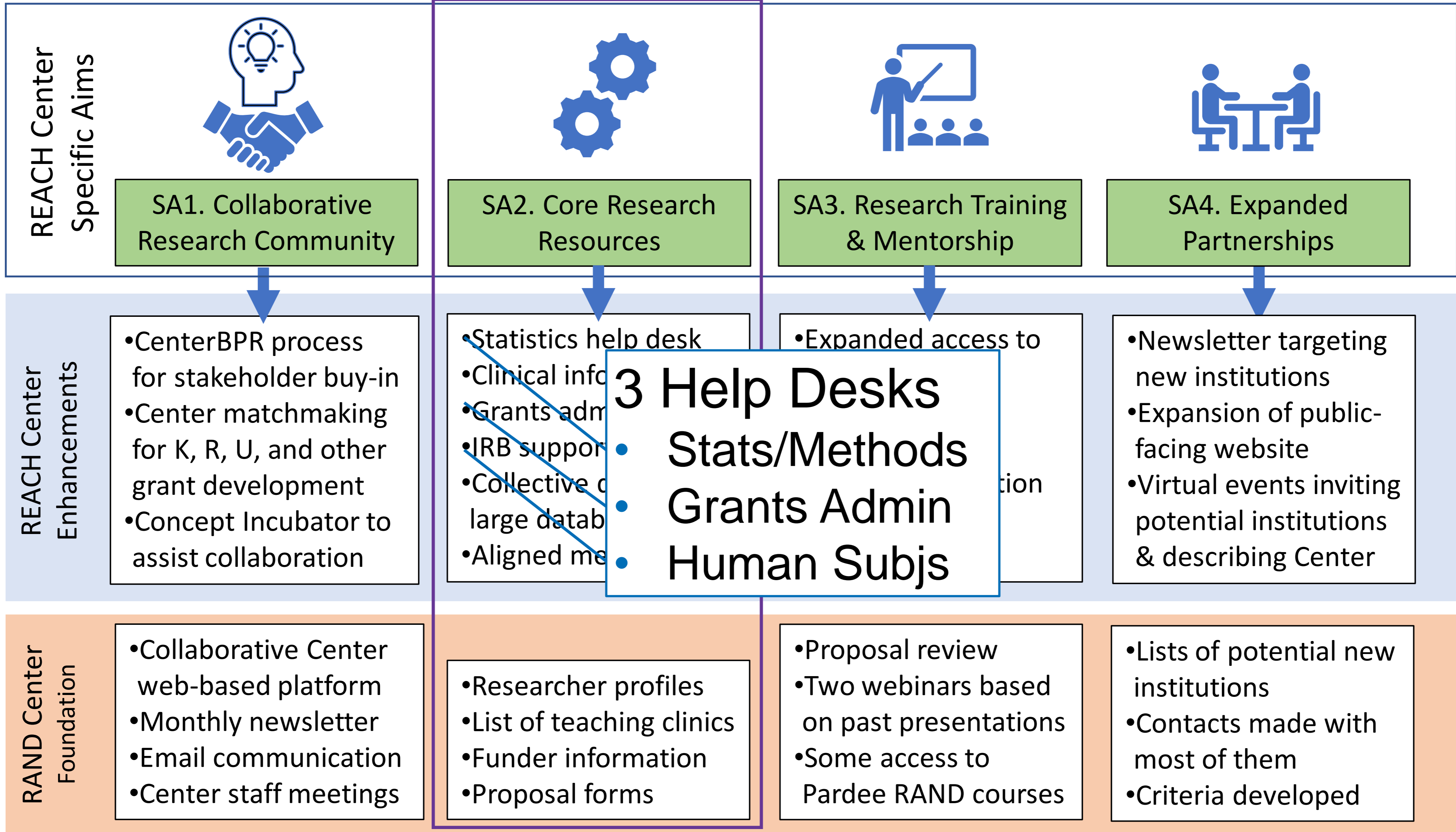
- Approaches to increase uptake of evidence-based non-pharmacologic therapies as alternatives to opioids
- Toolkit creation for use of opioid settlement funds
- Design and develop a web-based clinical decision support tool (app) for back pain
- State of the Science Review and Research Expert Panel (REP) on Homeopathic Research
- Spinal Manipulative Therapy vs Prescription Drug Therapy for Care of Aged Medicare Beneficiaries with Neck Pain (R15)
- The Public Health Role of the CIH Professions in a Pandemic: A Proposal for Examining the Public Health Resources the CIH Professions Could Mobilize and Deliver in a Pandemic



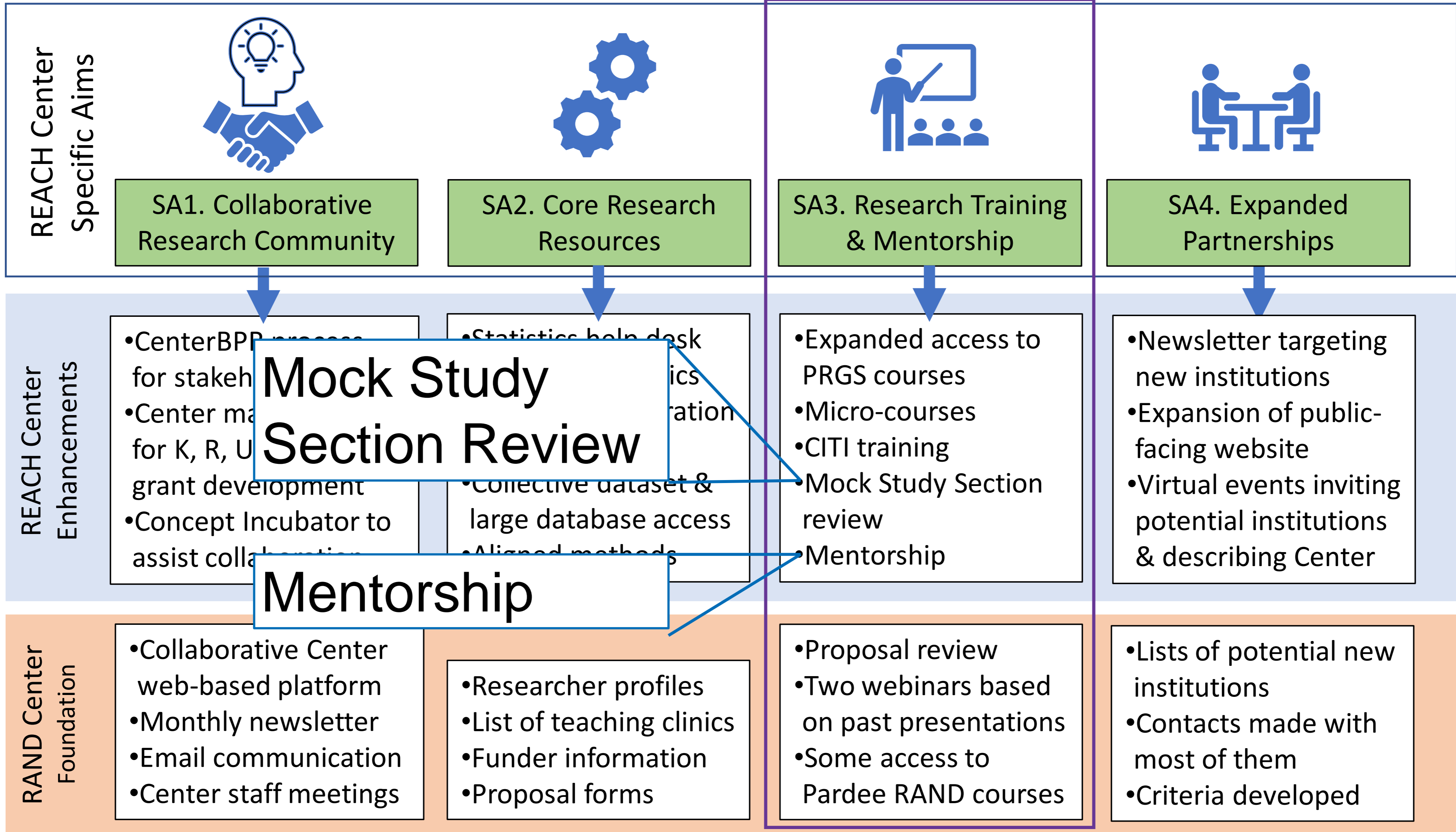
# Aims of the RAND REACH Center



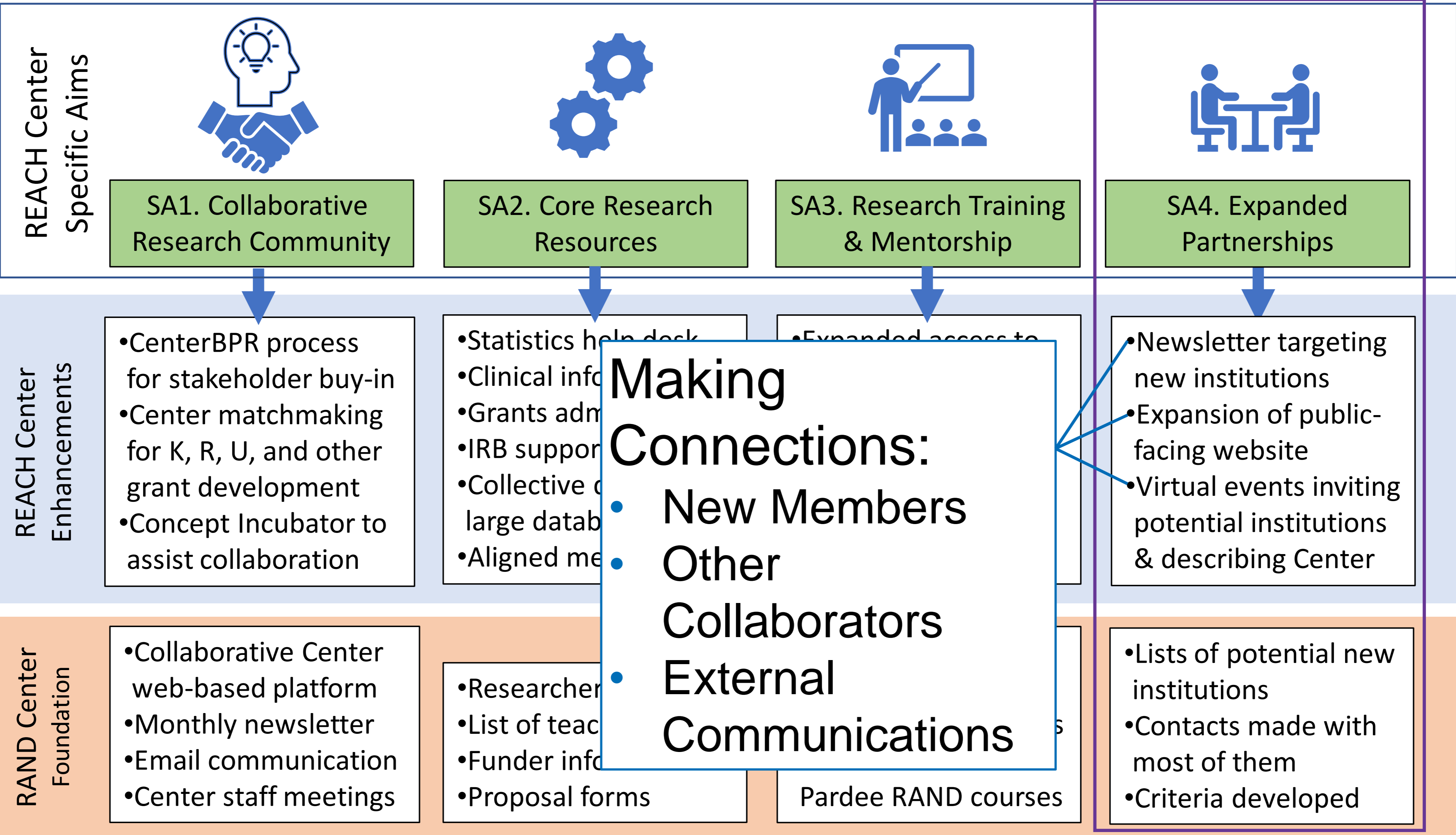
# Aims of the RAND REACH Center



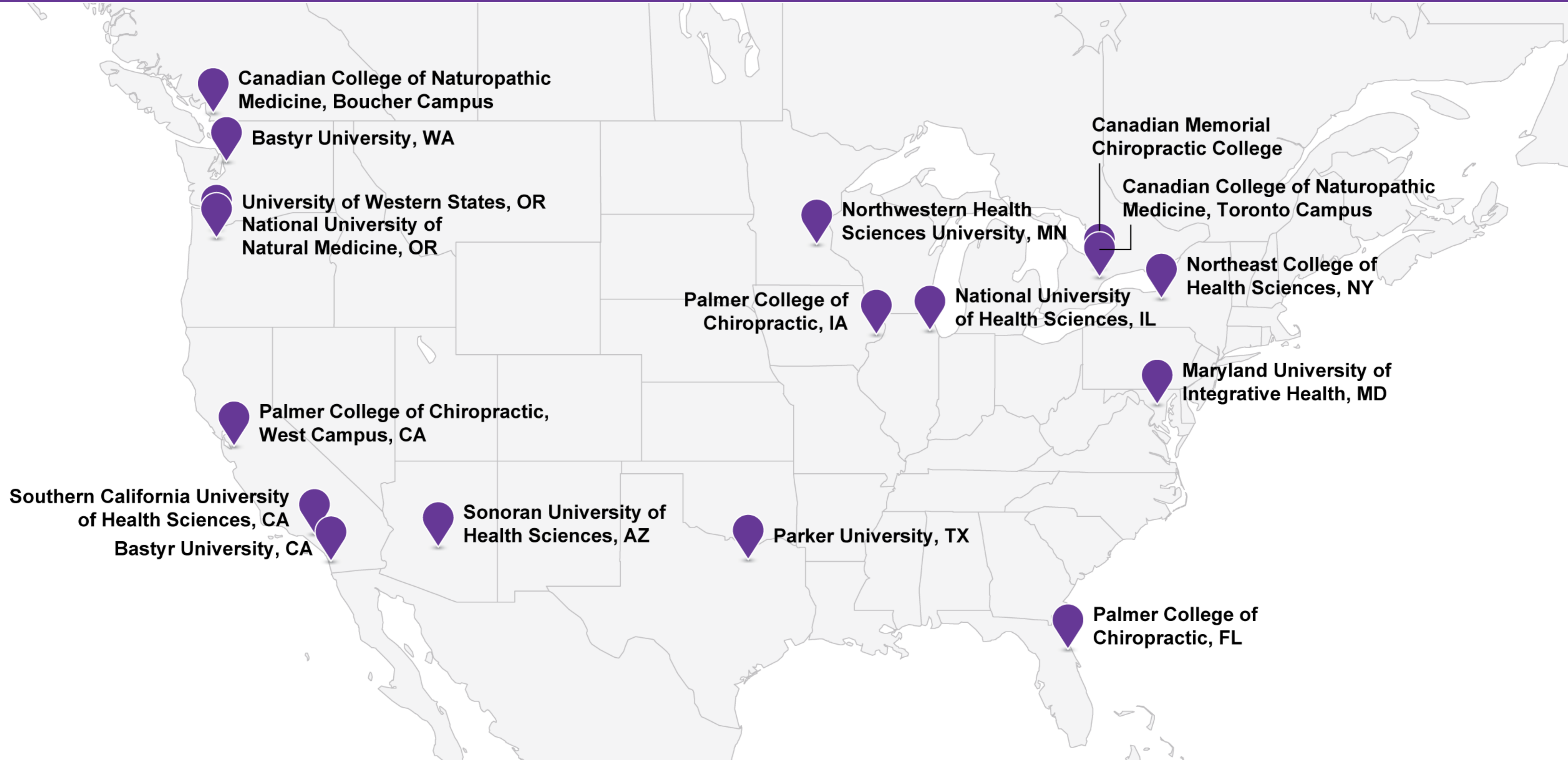
# Aims of the RAND REACH Center



# Aims of the RAND REACH Center



# RAND REACH Center Member Institutions



# RAND REACH Center Staff

## DIRECTORS

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CODIRECTOR

**Ian D. Coulter**

Senior Health Policy  
Researcher



CODIRECTOR

**Patricia M. Herman**

Senior Behavioral and  
Social Scientist



CODIRECTOR

**Michele Maiers**

Executive Director of  
Research and Innovation,  
Northwestern Health  
Sciences University

## STAFF

---



**Donya Avery**

Administrative Assistant



**Ryan Bradley**

Associate Director



**Nipher Malika**

Associate Policy Researcher



**Tiffany Keyes**

Policy Analyst



**Margaret A. Chesney**

Center Advisor



**Margaret D. Whitley**

Associate Policy Researcher

# Overview of the RAND REACH Center

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Training opportunities in the RAND REACH Center compared to others

Ryan Bradley

# Training Programs



- Institutional Awards
  - T32s: Mostly at R1 institutions
  - KL2 and K12: CTSA-awarded institutions
    - Some CIH supplements to both
- Individual Awards
  - F32s
  - Career Development Awards (K01, K08, K23, K99/R00)
    - Require faculty appointment
    - Highly competitive
    - Require mentors with funding
- T90/R90 Clinical Research Training Program
  - T90 at U Washington for CIH Practitioners
  - R90 at NUNM for PhDs
    - Entering Year 10
- RAND REACH
  - Based at RAND
  - Supports trainees *at CIH institutions* to build internal research capacity



# Training Activities in RAND REACH

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- **REACH Research Methods Certificate**
  - Requires 6 courses at the Pardee RAND Graduate School: Designing Empirical Research, Non-experimental Research Design, Introduction to Biostatistics, Systematic Reviews, Scientific Writing, and D&I Science
- **REACH Research Methods Bootcamp**
  - Certificates for each of 5 modules on specific research methods related to: practice-based research, Behavioral Interventions, Clinical Trials, Evidence Synthesis, and Health Services Research
- **Research Concept Incubator Sessions**
  - Peer-led, concept and collaboration development sessions to support a culture of critical feedback and support
- **Mock Grant Review**
  - Qualified reviewers from within RAND, the REACH membership and external organizations. Early-stage investigators are invited to participate as “Discussants”
  - Standard NIH scoring rubrics are used for each review.

# Training Activities in RAND REACH

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- **Grant and Manuscript Writing Workshops**
  - Writing workshops and dedicated community writing sessions.
  - Categorized separately by manuscript or grant section (i.e., Specific Aims, Introduction/Significance, Methods/Approach, etc.).
- **REACH Scholars Program:**
  - REACH Scholars supported by their institutions for at least 20% FTE for 2 years.
  - *Required* to participate in the training activities above.
  - Receive dedicated mentorship from RAND faculty and/or other experienced REACH member faculty.
  - Required develop at least one grant proposal for submission to the NIH, other federal agency or large foundation.

# Benefits and Opportunities for CIH Research

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Members' Perspectives

# Benefits and Opportunities for CIH Research

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Jim Whedon, Southern California University of Health Sciences  
Experienced Investigator Perspective

**My NCCAM / NCCIH  
Applications, 2008-2023:**

18 applications in 15 years;  
3 awards



R01AT012615 WHEDON, JAMES M (PD/PI)

Acupuncture for Medicare Beneficiaries with Chronic Low Back Pain: Access, Utilization, and Value **Pending IRG Review**

R01AT012615 WHEDON, JAMES M (PD/PI)

Acupuncture for Medicare Beneficiaries with Chronic Low Back Pain: Access, Utilization, and Value **Not Discussed**

R21AT012791 WHEDON, JAMES M (PD/PI)

Utilization of Non-pharmacological Therapies for Management of Low Back Pain under US Medicaid Plans (Title) **Pending IRG Review**

R15AT012244 WHEDON, JAMES M (PD/PI)

Medicare Coverage of Acupuncture for Management of Chronic Low Back Pain: Impact on Safety, Efficiency, Costs, and Availability **Not Discussed**

R15AT010035-02 WHEDON, JAMES M (PD/PI)

Spinal Manipulative Therapy vs. Prescription Drug Therapy for Care of Aged Medicare Beneficiaries with Neck Pain (Title) **Awarded. Non-fellowships only**

2R15 000000-00 WHEDON, JAMES M (PD/PI)

Spinal Manipulative Therapy vs. Prescription Drug Therapy for Care of Aged Medicare Beneficiaries with Neck Pain **Rejected**

R15AT010035-01 WHEDON, JAMES M (PD/PI)

Spinal Manipulation Services vs. Prescription Drug Therapy for Long-term Care of Aged Medicare Beneficiaries with Chronic Low Back Pain **Awarded. Non-fellowships only**

R15AT011779 WHEDON, JAMES M (PD/PI)

Medicare Coverage of Acupuncture for Management of Chronic Low Back Pain: Impact on Safety, Efficiency, Costs, and Equitable Access **Administratively Withdrawn by IC**

1R15AT009391-01A1 WHEDON, JAMES (PI)

Spinal Manipulation Services vs. Prescription Drug Therapy for Long-term Care of Aged Medicare Beneficiaries with Chronic Low Back Pain **Administratively Withdrawn by IC**

1R15AT009391-01 WHEDON, JAMES (PI)

Impact of Integrative Spine Care on the cost and safety of prescription drug therapy in Medicare beneficiaries with chronic spinal pain **Administratively Withdrawn by IC**

L30AT010533 WHEDON, JAMES M (PD/PI)

Spinal Manipulation Services vs. Prescription Drug Therapy for Long-Term Care of Aged Medicare Beneficiaries with Chronic Low Back Pain **Not Awarded**

R15AT009391 WHEDON, JAMES M (PD/PI)

Spinal Manipulation Services vs. Prescription Drug Therapy for Long-term Care of Aged Medicare Beneficiaries with Chronic Low Back Pain **Administratively Withdrawn by IC**

R01HS022891 WHEDON, JAMES M (PD/PI)

Rural Trauma System Access and Effectiveness for Elderly US Adults **Not Discussed**

R01AT007554 WHEDON, JAMES M (PD/PI)

Extended Chiropractic Care for Chronic/Recurrent Low Back Pain in Older US Adults **Administratively Withdrawn by IC**

R21AT008083 WHEDON, JAMES M (PD/PI)

The Effect of Regional Supply of Chiropractors upon Use of Chiropractic Services **Administratively Withdrawn by IC**

K01AT005092 WHEDON, JAMES M (PD/PI)

Utilization and Safety of Chiropractic Care in Older Adults **Awarded. Non-fellowships only**

L30AT006261 WHEDON, JAMES M (PD/PI)

Geographic variations in chiropractic care for older US adults. **Not Awarded**

L30AG034839 WHEDON, JAMES M (PD/PI)

Geographic variations in availability, utilization and cost of chiropractic **Not Awarded**

**RAND REACH Center:** *Network with institutions, individuals, access expertise and resources*

- **Virtual community of CIH training institutions and researchers:**  
Collaborate to develop concepts, methods, grants, conduct research
- **Expertise:**  
Biostatistical support, consultation on research design, review of grant applications and manuscripts; research mentoring
- **Resources:**  
Health claims datasets  
Electronic health records  
Research training opportunities for our faculty

*not alone anymore*



# Benefits and Opportunities for CIH Research

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Paul Amieux, Bastyr University

Running a Research Department at a CIH Institution

# How the RAND REACH Center Can Promote a Broader Culture of Research Across CIH Institutions

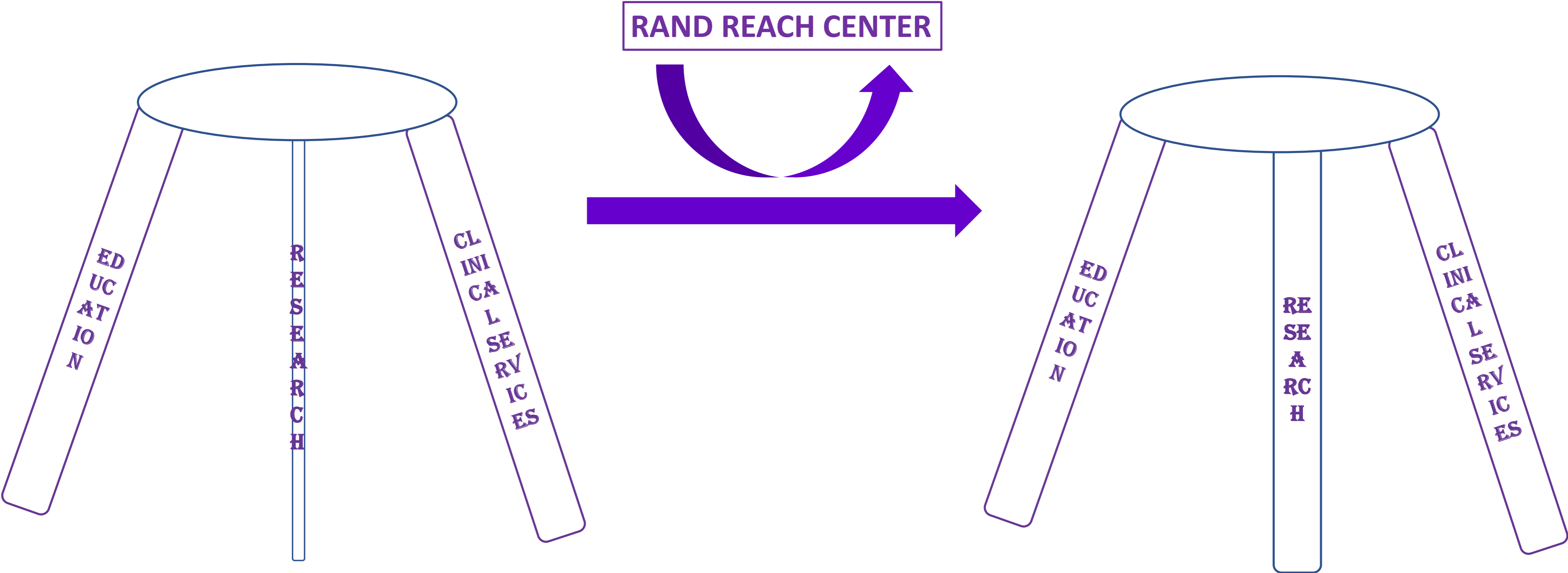
- Supporting **sustainable research infrastructure** is extremely challenging when you are tuition-dependent CIH institution, which is why the NCCIH-funded RAND REACH Center is a critical step forward in creating more sustainable research infrastructure within and across CIH institutions
- CIH institutions must prioritize and create the means to secure **paid faculty and resident release time** to receive additional research training and mentoring from members of the NCCIH-funded RAND REACH Center
- The NCCIH-funded RAND REACH Center models a **culture of research and evidence** that is often absent or underemphasized at CIH institutions
- Because CIH institutions often **lack strong relationships with larger academic health science centers**, the NCCIH-funded RAND REACH Center serves as a large academic health science center-like partner in modeling critical thinking and scientific rigor in conduct of rigorous, high quality research



# How the RAND REACH Center Can Promote a Broader Culture of Research Across CIH Institutions

- The NCCIH Strategic Plan 2021-2025, *Mapping a Pathway to Research on Whole Person Health*, aligns well with the historic vision and mission of many CIH institutions: Bastyr University's mission: "We educate future leaders in the natural health arts and sciences. Respecting the healing power of nature and recognizing that body, mind and spirit are intrinsically inseparable, we model an integrated approach to education, research and clinical service.
- The NCCIH-funded RAND REACH Center mentors and instructors should engage faculty, residents and students from the **standpoint of their unique CIH clinical knowledge, interests and expertise** while mentoring them on projects that engage them in a rigorous research process
- With the NCCIH-funded RAND REACH Center Research Advisory Board (RAB) members as leads and backing from the Presidents, CIH institutions **must create the incentives and build a pipeline** for selected faculty, residents and senior students to engage with the RAND REACH center in systematic ways
- Creating a platform for **easy and accessible collaboration and interaction across CIH institutions** through the RAND REACH center is critical

# If Successful, How the RAND REACH Center Will Strengthen and Amplify Research at Member CIH Institutions



# Benefits and Opportunities for CIH Research

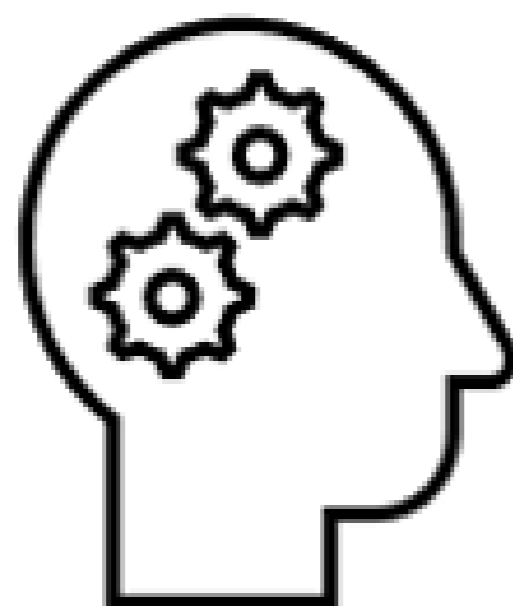
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Brian Anderson, Palmer College of Chiropractic  
New Investigator Perspective

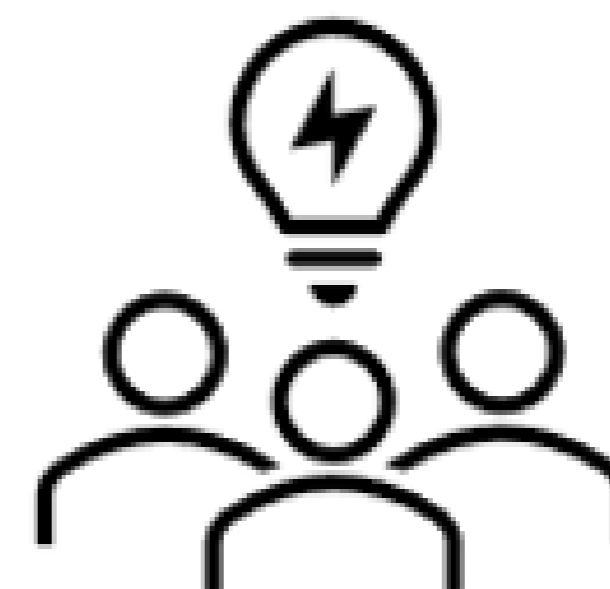
# RAND REACH Center

## Early career investigator perspective

### Grant Review Training



1. Matchmaker
2. Idea Incubator
3. Data Access
  - a. Previous clinical trials
  - b. Commercial sources
4. Grants Help Desk
5. Mock Study Section



### Looking for



**Brian Anderson**

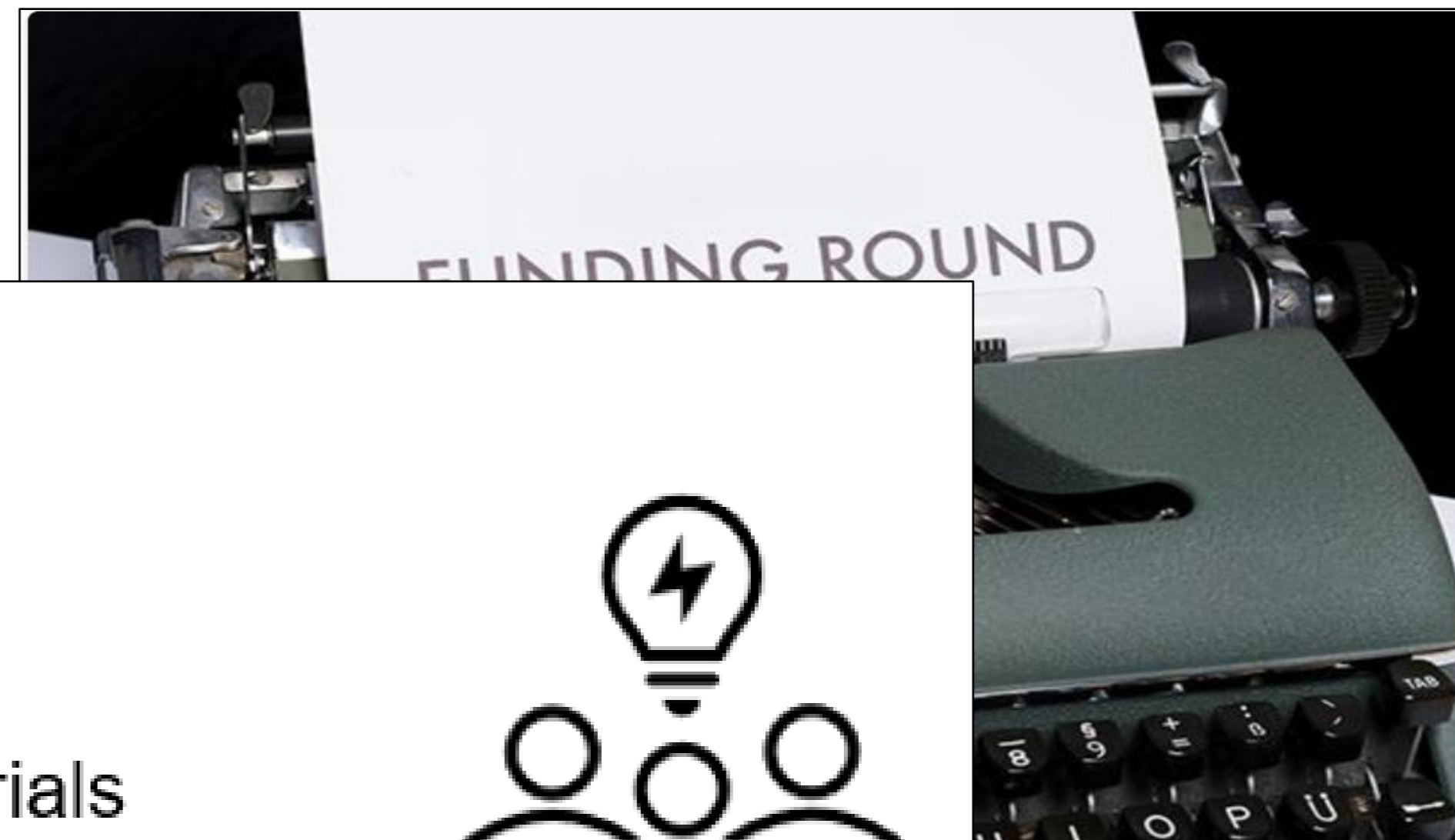
Palmer College of Chiropractic

Greetings-

I am developing a conference abstract and grant proposal utilizing the All of Us research hub, and would be interested in connecting with any CIH researchers with access and interest in utilizing this resource. The abstract is a quick turn around (August 15th), while the grant proposal is due mid-October.

RAND center member institutes with All of Us Institutional Agreements include: Bastyr University, NUNM and Southern California University of Health Sciences.

You can contact me at: [brian.anderson@palmer.edu](mailto:brian.anderson@palmer.edu)



### g at CIH Institutions: The

...t faculty at accredited academic institutions that  
...ed, diverse, and collaborative clinician scientists  
...ative interventions that can be used to improve

health outcomes. Clinician-scientist faculty at CIH institutions are in an optimal position to understand and help answer research questions that are essential to advance the science of CIH. This includes its study in real world settings as called for in the National Center for Complementary and Integrative Health (NCCIH) Strategic Plan. NCCIH supports several successful research training and career development programs to increase the number and diversity of well-trained scientists to conduct rigorous CIH research. These training grants and programs have been highly effective in training CIH practitioners to be researchers. Unfortunately, these CIH practitioners generally leave their institutions for research training and degrees, and without robust research centers at the CIH institutions, they can rarely return to develop research programs or mentor students. Thus, the central problem may not be limited numbers of strong CIH researchers from CIH clinical backgrounds, but instead, barriers to CIH institutions building and/or maintaining the research infrastructure which will allow CIH researchers to work at these institutions, answer their profession's questions, and train and influence students. NCCIH's funding of the RAND Research Across Complementary and Integrative Health (REACH) Institutions virtual resource center offers a new model of researcher training that can address these challenges. Attendees will learn about innovative resources that will be offered through the RAND REACH Center to support faculty-clinician scientists and build capacity for CIH research, including a members-only online platform with resources to support collaboration, idea incubator meetings, a collaboration coordinator, help desks, training, and mentorship.

Q & A

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