# **C**enter for **S**mart Use of **T**echnologies to **A**ssess **R**eal World Outcomes (**C-STAR**)

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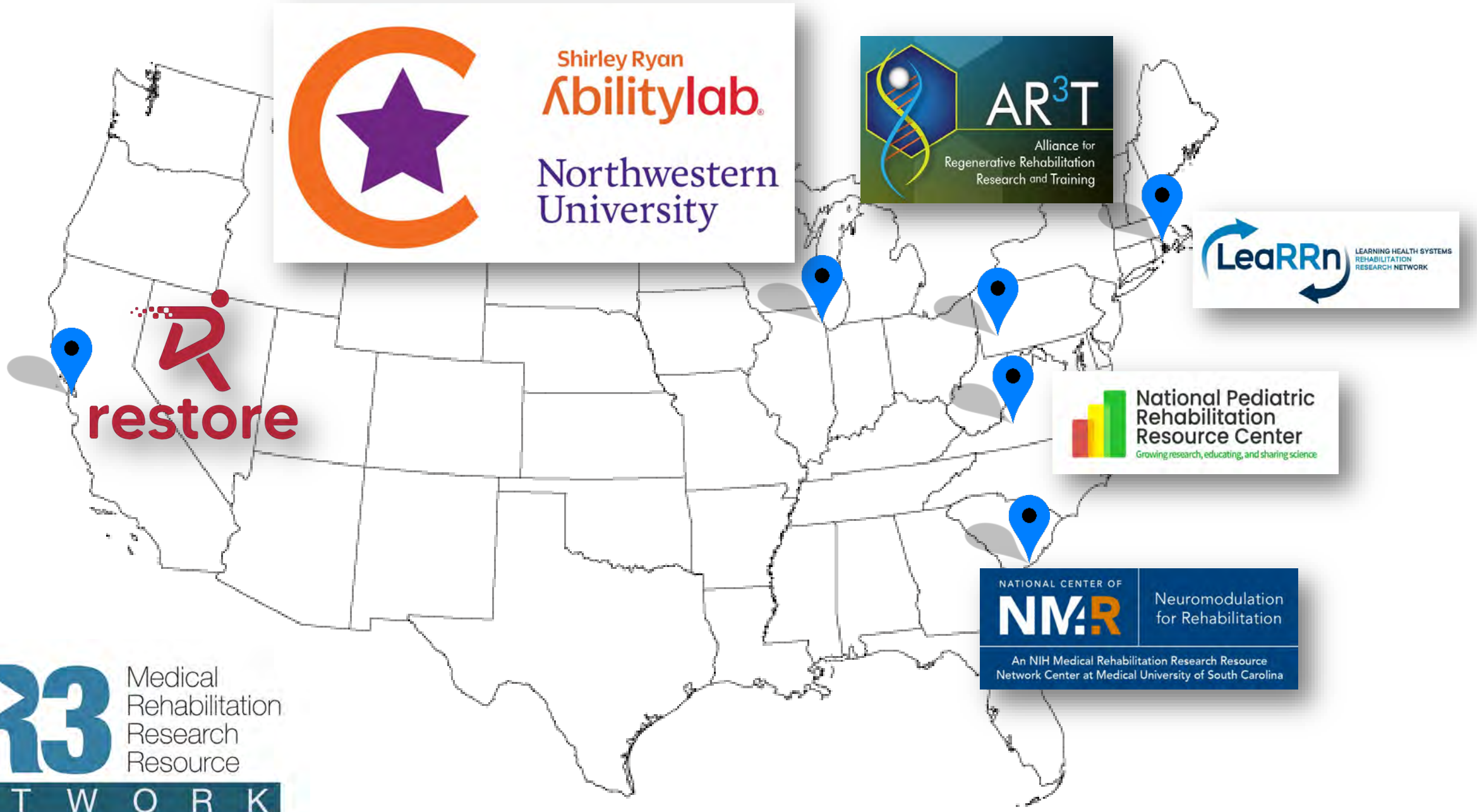
ASIA Early Career Researcher/Clinician Funding Opportunities
August 30, 2024




The MR3 Network is supported by the NIH through the *Eunice Kennedy Shriver* National Institute of Child Health & Human Development (NICHD), along with other partners that include NCCIH, NIBIB, NIDCD, NINDS, and NINR.

Shirley Ryan Abilitylab

Northwestern University

## EDUCATION & TRAINING

Register for webinars, courses, podcasts and workshops.

## RESEARCH INCUBATOR

Join our hands-on learning programs: IdeaLabs, pilot studies and sabbaticals.

## DATA SHARING

Access data from benchmark data sets and Rehab Measures database.

# Find us at SRAlab.org/CSTAR

National Institutes of Health (Grant #P2C HD101899) supported by the Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD) and the National Institute of Neurological Disorders and Stroke (NINDS).

# Pilot Awards

- Clinicians and researchers with innovative ideas for the use of technology in rehabilitation research are eligible to apply.
- Applicants must be affiliated with US-based institutions. They must be eligible to submit an R01 or equivalent and receive NIH funding as Principal Investigators
- Preference is given to clinical and basic scientists who are in the early stages of their independent career in rehabilitation research.

| **2023** Cycle 4 | **2024** Cycle 5 |
|---|---|
| • 69 Letters of Intent<br>• 19 full applications invited<br>• 6 projects awarded | • 40 Letters of Intent<br>• 13 full applications invited<br>• 4 projects awarded |

| Year | Pilots Awarded |
|---|---|
| 2020 | 4 |
| 2021 | 4 |
| 2022 | 6 |
| 2023 | 6 |
| 2024 | 4 |
| Total | **24** |

**Total of $1.2M awarded to 24 pilot projects** (2020-2024)

https://www.sralab.org/c-star-pilot-project-funding

# 2023 Pilot Highlights

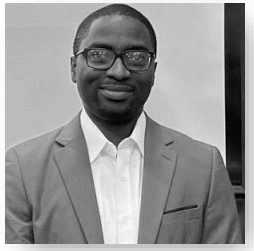
**Kari Kretch PT, DPT, PhD**
University of Southern California
*Wearable technology for measuring everyday experience in infants with cerebral palsy*

**Reza Sharif Razavian, PhD**
Northern Arizona University
*HAMSTER: A low-cost assessment and rehabilitation device for neuromuscular disorders*

**Hakan Töreyin, PhD**
San Diego State University
*Wearable diaphragmatic efficiency monitoring technologies towards in-home respiratory monitoring of people with cervical spinal cord injury*

# 2024 Pilot Highlights

**Anne Fleischer, Ph.D., MPH, OT/L**
University of Cincinnati
*Clinical Implications of Implementing Remote Therapeutic Monitoring for Individuals with Breast Cancer within Real-World Environments*



**Gerald C. Imaezue, Ph.D.**
University of South Florida
*Adaptive Recursive Self-feedback for Improving Speech Production in Patients with Chronic Aphasia*

**Kim Ingraham, Ph.D.**
University of Washington
*Design and deployment of a sensor-based system for assessing powered mobility use by young children with disabilities in clinical environments*

**Preeya Khanna, Ph.D.**
UC Berkeley
*Low-cost, high-comfort wearable for measuring upper limb kinematics in stroke participants at home*

# 2021 Pilot Awardee Spotlight

**Elizabeth Coker, MA, EdD**
Assistant Arts Professor of Dance and Movement Science
New York University

*"Balance is vital: Establishing home-based clinical reference data with smartphone accelerometry"*

*"This award has had **significant effects on my career trajectory,** not least of which is the confidence it has given me in my ideas and my place in the research world. As someone who followed an unusual route from research training to a career in science after a life in the performing arts, I have often felt acute pressure to catch up to my colleagues. Becoming accepted as a member of this cohort and having the opportunity to participate in conversation about our field was profound.*

*This award supported the continuation of my research during a critical year when I submitted a docket for promotion review to Associate Arts Professor at NYU. It also **contributed significantly to future research funding applications.** Along with my colleague, Dr. Lubetzky, and a new collaborator focusing on machine learning in healthcare, I have submitted my **first R21 application to the NIH/National Institute on Aging."***

| C-STAR Pilot Program Outcomes (2020-2022 Cycles) Summary of Research Productivity (Updated July 2024) | |
|---|---|
| Pilot Projects Awarded | 14 |
| Pilot Projects Completed | 9 |
| Amount of C-STAR Funds Awarded | $733k |
| Presentations at a national/international conference | 35 |
| Publications | 15 |
| Academic Promotions | 6 |
| Patent Applications | 2 |
| Resulting Grant Applications | 25 |
| Resulting Grant Awards | 7 |
| Amount of Resulting Grant Funding | **$6.7M*** |
| Funding Agencies | 6* |

*Resulting funding from the following agencies and mechanisms: NIH R01, NIH R21, NSF CAREER (2), NIDLRR SCI Model System, NIH K23 NIDCD, and NIH K01 NICHD/NCMRR

# Pilot Projects: Tips & Tricks

- Follow the application instructions!
  - Include correct versions of all required forms
  - No biosketch = Not reviewed
- Write clearly so there is no question what you're doing and why
- Carefully consider the project scope
  - Appropriate for timeline and funding amount
- Include a clear description of personnel and specific roles on the project
  - Specific people preferred over TBD
- Personalize your biosketch
  - Make it clear why you are qualified to do this work
- Clear about how the funding will help advance your career

# Collaborative Mentorship Program

The Collaborative Mentorship Program provides financial support for a six-month learning opportunity for early-career rehabilitation researchers.

**Funding Options**

- **Remote 1:1 mentorship**
- **In-person sabbatical**
- **Visiting scholar**

**2023 Cycle:** All five awardees submitted grant applications

# Collaborative Mentorship Awardees

**Momona Yamagami, PhD**
Rice University
*Enabling accessible and equitable virtual rehabilitation with biosignals*
-Submitted NIDILRR Field-Initiated Grant

**Robert Matthew, PhD**
The University of California, San Francisco
*Identifying the neurological and biomechanical measures of engaged movement in robot-assisted hand therapy*
-Submitted R03 NCMRR

**Shanie Jayasinghe, PhD**
University of Minnesota
*The role of cognition on the utility of augmented sensory feedback in older adults*
-Submitted R21

| C-STAR Mentorship Awards (2022-2023)<br>Summary of Research Productivity To Date (Updated July 2024) | |
|---|---|
| Mentorship Awards | 11 |
| Amount of C-STAR Funds Awarded | $353k |
| Publications | 3 |
| Resulting Grant Applications | 14 |
| Resulting Grant Awards | 3 |
| Amount of Resulting Grant Funding | **$1.2M** |
| Funding Agencies* | 2 |

*National Institute of General Medical Sciences NIH U54; NIDILLR, Switzer Research Fellowships Program

To date...

**$1.1M** in awarded funds for pilot projects and mentorship led to

**$7.9M** in resulting grant funding!

# C-STAR IdeaLabs

# Additional Mentorship Opportunities

## oC-STAR Office Hours

- Mentoring for specific aims related to a grant application. Topics should include rehabilitation research using technology to measure or address real-world outcomes.
- Each mentee will have 30 minutes to share their drafted aims and receive feedback.
- Next Session
  - “Measurement in Rehabilitation” | Allen Heinemann, PhD
  - December 17, 2024; 11am–1 pm CST

## oConsultation

- Email cstarmentoring@sralab.org

**C-STAR Mentorship Opportunities**
Learn More & Contact our team

The MR3 Network's 4th Annual Scientific Retreat...

# Catalyzing Transdisciplinary Research to Develop Innovative Rehabilitation Approaches with Lasting Impacts

**September 19-20, 2024 | Via Zoom**

**Announcing Keynote Speakers!**

**Diana W. Bianchi, M.D.**
**Director of the *Eunice Kennedy Shriver* National Institute of Child Health and Human Development**

**Michael L. Boninger, M.D.**
**Distinguished Professor, Department of Physical Medicine & Rehabilitation at the University of Pittsburgh, School of Medicine**
**Associate Dean for Sustainability, School of Medicine**
**Chief Medical Sustainability Officer, UPMC**

The MR3 Network is supported in part by the National Institutes of Health through the *Eunice Kennedy Shriver* National Institute of Child Health and Human Development

**Register for the 2024 MR3 Scientific Retreat**

# Questions & Comments

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C-STAR newsletter

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