



Shirley Ryan
Abilitylab

Northwestern
University

Center for Smart Use of Technologies to Assess Real World Outcomes (C-STAR)

Melissa Briody, MOT, OTR/L, MS HSM
Senior Project Manager, Shirley Ryan AbilityLab

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







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 • 19 full applications invited • 6 projects awarded	• 40 Letters of Intent • 13 full applications invited • 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)**

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

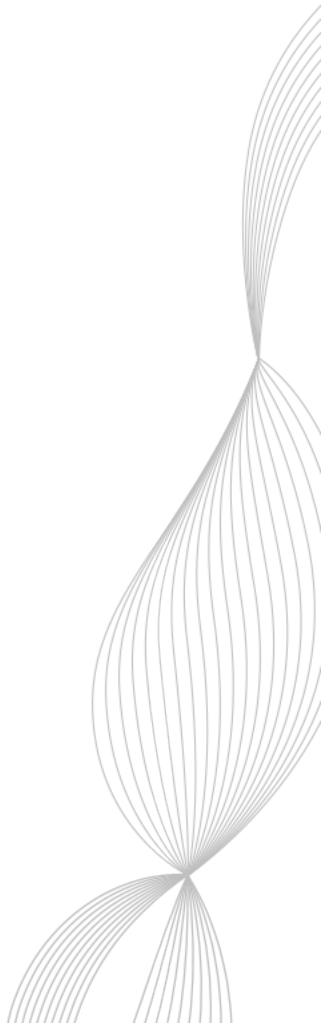
HAMSTER: A low-cost assessment and rehabilitation device for neuromuscular disorders



Hakan Töreyn, 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

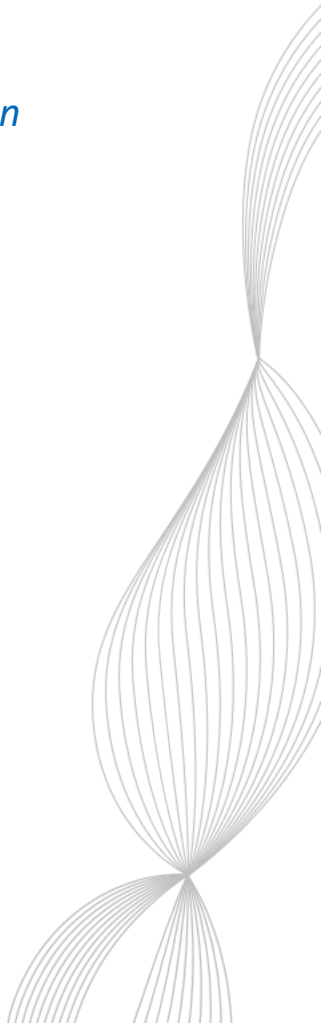
Design and deployment of a sensor-based system for assessing powered mobility use by young children with disabilities in clinical environments



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

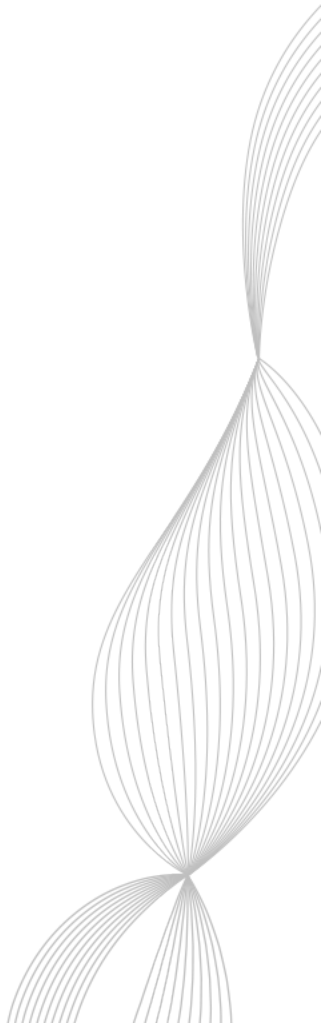
“Balance is vital: Establishing home-based clinical reference data with smartphone accelerometry”

*“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



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

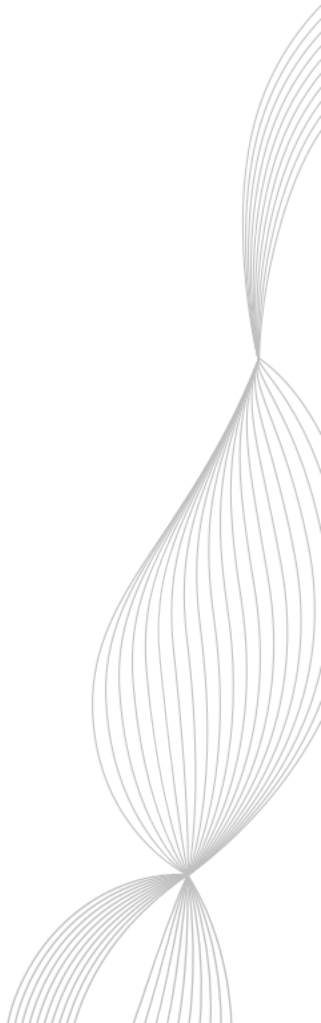


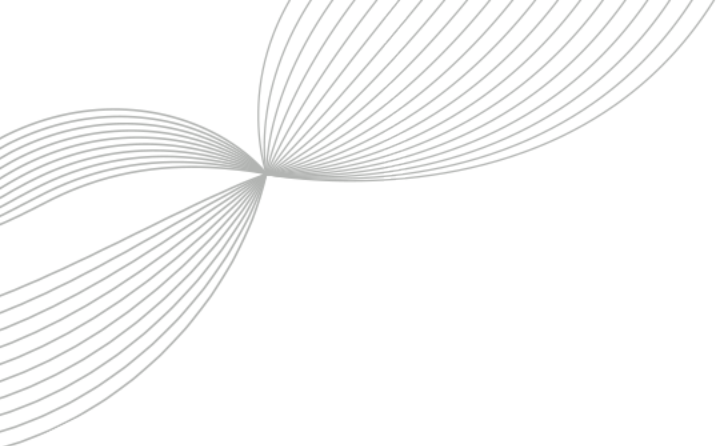


C-STAR Mentorship Awards (2022-2023) Summary of Research Productivity To Date (Updated July 2024)

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

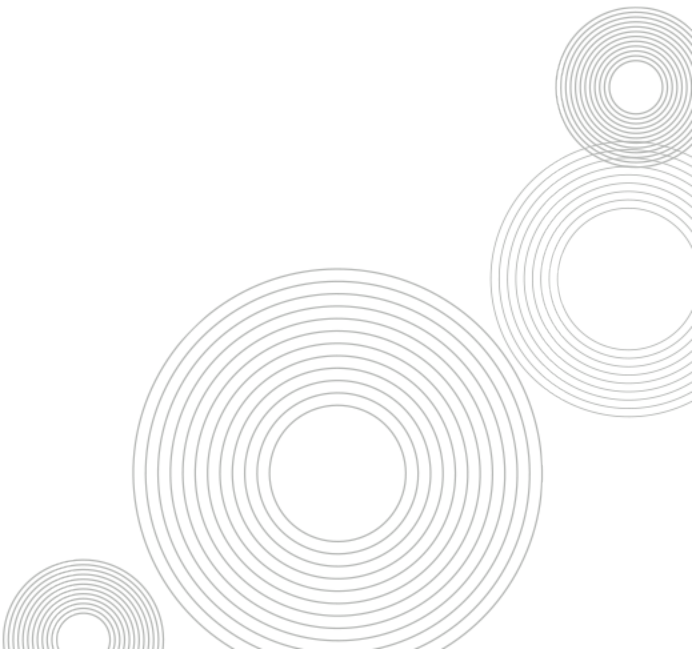




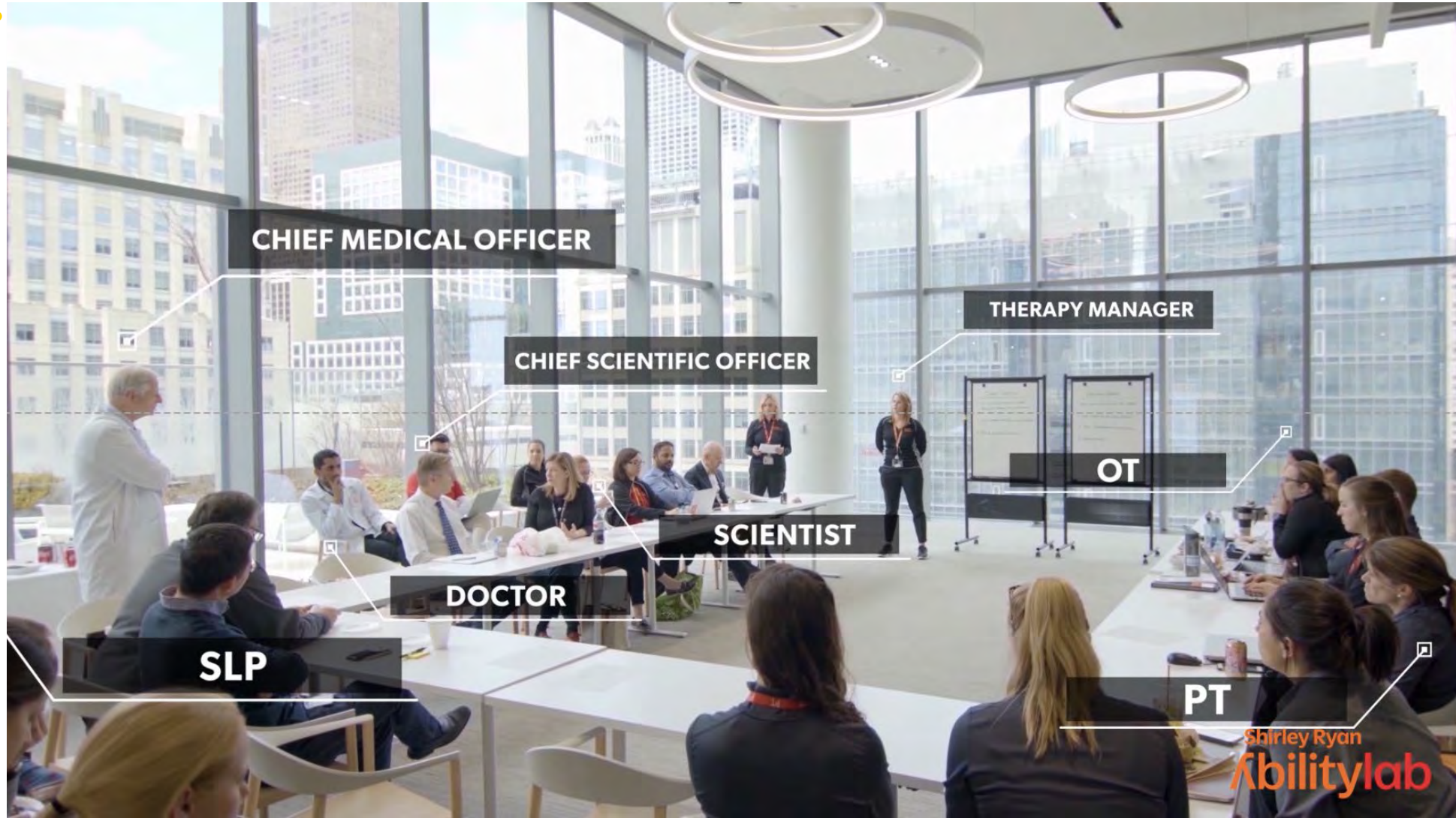
To date...

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

\$7.9M in resulting grant funding!



C-STAR IdeaLabs



Additional Mentorship Opportunities

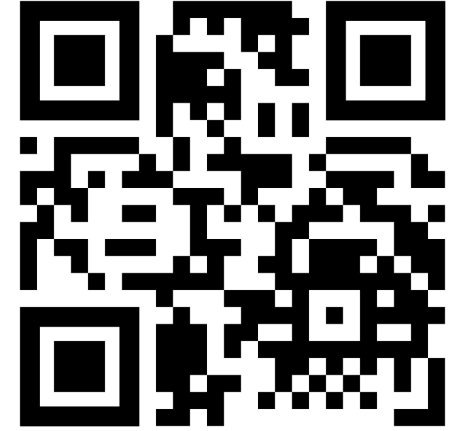


oC-STAR Office Hours

- 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



Register for the
2024 MR3 Scientific Retreat

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.

Questions & Comments



Sign up for
C-STAR newsletter

Melissa Briody
Senior Project Manager, Research
mbriody@sralab.org

