

# CoHSTAR Annual Report

Foundation for Physical Therapy

Year 3 Report: September 2018

Foundation4pt.org

Thanks to the generous support of our donors, the Center on Health Services Training and Research (CoHSTAR) was established with a Foundation for Physical Therapy grant of \$2.5 million, including a lead donation of \$1 million from the American Physical Therapy Association. CoHSTAR is a multi-institutional first-of-its-kind center. Brown University faculty Linda Resnik, PT, PhD, FAPTA, serves as the principal investigator on this award; she assembled a mentorship team of outstanding faculty to catalyze the advancement of health services and health policy research in physical therapy.

## INVESTING IN HSR RESEARCH

**Extends the Foundation model of supporting doctoral trainees**

**Targets postdoctoral and early career faculty**

**Bridges gap between PhD completion and successful independent investigator**

**Targets training to develop health services researchers**

## CoHSTAR GOALS



Build health services research (HSR) infrastructure to facilitate interdisciplinary health services and health policy research by physical therapist scientists



Expand the number of health services and health policy physical therapist researchers through training



Increase the quantity and quality of physical therapy health services and policy research by supporting high quality pilot and small studies.



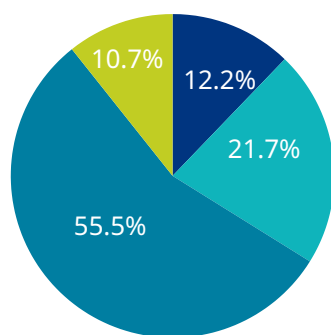
Build upon active and growing research programs at collaborating institutions to build a sustainable, long-term capacity for physical therapy HSR training



“As health delivery continues to evolve and we explore new technologies, models, and systems to meet society’s needs, it is more important than ever that PTs are right there in the mix, sleeves up, working collaboratively with other practitioners to shape and guide that evolution,” said APTA President Sharon Dunn, PT, PhD. “We are a critical part of the health care team, and our participation in research for the future is imperative. What CoHSTAR has been able to do in just 3 short years is so impressive. Their work will, among other things, ensure a steady pool of PT scientists who are properly trained to conduct health services research and to compete for the funding to do so.”

## YOUR INVESTMENT AT WORK

Direct Cost Distribution  
Years 1-3



■ Leadership and Administration (12.19%) ■ Pilot Core (21.68%)  
■ Research and Training (55.44%) ■ Evaluation and Dissemination (10.69%)

	FACULTY FELLOWS	PILOT AWARDEES	POSTDOCTORAL FELLOWS	VISITING SCIENTISTS
Number of Publications (per research program)	44	08	03	04
Number of Presentations (per research program)	42	16	11	04

**CoHSTAR is funded by the**  
Foundation for Physical Therapy  
Funding Research to Optimize Movement and Health

The Foundation for Physical Therapy was established in 1979 as a national, independent nonprofit organization to fund physical therapy research to optimize health and movement. Since its inception, the Foundation has awarded more than \$17 million in research grants, fellowships, and scholarships. Many of today's leading physical therapy researchers, clinicians, and academicians began their careers with this support. Foundation-funded researchers have gone on to secure more than \$800 million in follow-on funding.

## WHY CoHSTAR?

CoHSTAR is uniquely positioned to offer unparalleled health services research training opportunities to the physical therapy community.

The profession continues to work towards gathering evidence to demonstrate the value physical therapy brings to health care outcomes, yet there are few mentored training opportunities to prepare physical therapist investigators to conduct health services research. CoHSTAR prepares new PhDs to become independent investigators and compete for research funding.

## STRUCTURE OF TRAINING

The Research Career Training Program Core, led by Vincent Mor, PhD, and Theresa Shireman, PhD, Brown University, provides training and helps guide the career development of physical therapist health services researchers.

Each trainee is teamed up with one or more mentors and given access to several training opportunities, courses, lectures, and more. The Research Career Training Program also oversees all visiting scientist recruitment activities.

## WHAT DOES THE PROGRAM OFFER?

- Immersion in mentors research program
- Mentored independent research
- Training in grant writing
- Promote skills to succeed as independent investigator
- Develop high-quality research proposals
- Leverage expertise into successful careers in research and academia
- Forge lasting relationships with faculty/other trainees

*"I had spent 9 years as a faculty member prior to starting my CoHSTAR fellowship. I had some success with developing hospital partnerships, conducting small scale health services research projects, and publishing my work; however, I had not been successful in partnering with a hospital that was committed to health services research and completing consistently impactful work. In just over 8 months, the combination of mentorship and funding from CoHSTAR has given me what I was unable to do in the 9 previous years."*



Daniel Young  
PT, DPT, PhD

## FACULTY FELLOWS

**Addie Middleton, PT, PhD**  
Assistant Professor  
Medical University of South Carolina

**Daniel Pinto, PT, DPT, PhD, OCS, FAAOMPT**  
Assistant Professor  
Northwestern University

**Anne Thackeray, PT, MPH, PhD**  
Research Assistant Professor  
The University of Utah

**Meghan Warren, PT, MPH, PhD**  
Associate Professor  
Northern Arizona University

**Jake Magel, PT, DSc, PhD**  
Research Assistant Professor  
The University of Utah

**Daniel Young, PT, DPT, PhD**  
Associate Professor  
University of Nevada, Las Vegas

**Adam Goode, PT, DPT, PhD**  
Associate Professor  
Duke University

## POSTDOCTORAL FELLOWS

**Peter Coyle, PT, DPT, PhD**  
Postdoctoral Scholar  
University of Pittsburgh

**Catherine Schmidt, PT, DPT, PhD**  
Brown University

## VISITING SCIENTISTS

**Katherine Berg, PT, PhD**  
Associate Professor Emeritus  
University of Toronto

**Kristin Archer, PT, PhD, DPT**  
Associate Professor  
Vanderbilt University

**Janet Freburger, PT, PhD**  
Professor  
University of Pittsburgh

*"My experience with CoHSTAR made me competitive for a tenure track, research intensive position at Marquette ... I am practicing the skills necessary for leading a research team and I have started the Behavior, Engagement, and Health Technology Assessment lab at Marquette University."*



Daniel Pinto  
PT, DPT, PhD, OCS,  
FAAOMPT

## PILOT STUDY PROGRAM

The CoHSTAR Pilot Study Program—led by Kelley Fitzgerald, PT, PhD, and Anthony Delitto, PT, PhD, University of Pittsburgh — selects pilot study applications in the field of physical therapy for funding. The program makes it possible to develop projects into full scale research grant applications and apply for extramural funding.

**CoHSTAR has since awarded \$225,000 in funding towards 10 pilot studies.**

## PREVIOUS PILOT STUDIES

*Enabling Physical Therapy Health Services Research: the Development of a Crosswalk for Functional Measures in Post-Acute Medicare Claims*

Christine McDonough, PT, PhD  
Boston University

*Development and Preliminary Implementation of a Registry for Physical Therapists' Management of Knee Pain*

James Irrgang, PT, PhD, ATC, FAPTA  
University of Pittsburgh

*Associations between Continuity of Care (CoC) and Health Care Utilization and Costs in Patients with Low Back Pain*

Jake Magel, PT, DSc, PhD  
The University of Utah

*The Impact of Physical Therapy on Improving Function and Reducing Hospitalizations in Medicare Home Health (HH) Populations*

Jennifer Stevens-Lapsley, PT, PhD  
University of Colorado Anschutz Medical Campus

## CURRENT PILOT STUDIES

***Developing A Prognostic Model for Risk Adjustment in Patients With Back Pain***

Sean D. Rundell, PT, DPT, PhD  
University of Washington

The purpose of this project is to advance risk adjustment methods for outpatient rehabilitation settings using an alternative to the traditional Functional Comorbidity Index.

***The Impact of Hospital-Based Physical Therapy Services on Hospital Readmission: Implications for Bundled Payment***

Amit Kumar, PT, MPH, PHD  
Northern Arizona University

This research will generate evidence on the effectiveness of hospital-based physical therapy and its findings will inform clinical guidelines on the appropriate dose of physical therapy in acute care settings.

***Health Care Utilization for Musculoskeletal Disorders in Adults with Cerebral Palsy: An Analysis of Medicare Data***

Deborah Thorpe, PT, PhD

The University of Northern Carolina at Chapel Hill

The overall goal of this project is to gain a better understanding of health care use for MSK disorders among adults with cerebral palsy (CP) and the extent to which they use rehabilitation care for these disorders as compared to peers without CP.

***Health System Implementation of Clinical Practice Guidelines for Neck and Low Back Pain in Outpatient Physical Therapy Settings***

Jason Beneciuk, PT, DPT, PhD, MPH, FAAOMPT  
University of Florida

This study will determine if physical therapy clinics that receive neck and low back pain CPG training are associated with improved patient outcomes compared to those that have not received training.

***Initial Treatment Approaches and Healthcare Utilization among Veterans with Low Back Pain***

Catherine Schmidt, PT, DPT, PhD  
Brown University

This research aims to quantify the value of physical therapy in the management of Veterans with low back pain (LBP) by gaining a better understanding of initial treatment strategies, including physical therapy and the impact of these strategies on health and utilization outcomes among Veterans with a new diagnosis of LBP.

**For a comprehensive explanation of each study's specific objectives and goals, visit [www.bu.edu/cohstar/research/current-pilot-studies/](http://www.bu.edu/cohstar/research/current-pilot-studies/).**

## NEW FUNDING OPPORTUNITY

CoHSTAR is offering a new postdoctoral fellowship funded jointly with the Comprehensive Post-Acute Stroke Services Trial. The fellowship position is for 2 years, beginning January 2019, and will be located at the University of Pittsburgh. The fellow will be provided with didactic training, travel support, information resources, and secretarial or technical support.

For more information, visit [www.bu.edu/cohstar/training/fellowships/](http://www.bu.edu/cohstar/training/fellowships/).

Since its establishment, CoHSTAR has had over 50 publications accepted and/or submitted for publication.

Allen KD, Arbeeve L, Callahan LF, Golightly YM, **Goode AP**, Heiderscheid BC, Huffman KM, Severson HH, Schwartz TA. Physical therapy vs. internet-based exercise training for patients with knee osteoarthritis: Results of a randomized controlled trial. *Osteoarthritis Cartilage*. (2018)

**Coyle PC**, Pugliese JM, Sions JM, Eskander MS, Schrack JA, Hicks GE. Energy Impairments in Older Adults with Chronic Low Back Pain and Radiculopathy: A Cross-Sectional, Matched Comparison Study. *Archives of Physical Medicine and Rehabilitation*. (2018)

Dunlop DD, Song J, Lee J, Gilbert AL, Semanik PA, Ehrlich-Jones L, Pellegrini CA, **Pinto D**, Ainsworth B, Chang RW. Physical activity minimum threshold predicting improved function in adults with lower extremity symptoms. *Arthritis Care & Research*. (2018)

Fritz JM, **Magel JS**, McFadden M, Asche C, Thackeray A, Meier W, Brennan G. Early Physical Therapy vs Usual Care in Patients With Recent-Onset Low Back Pain: A Randomized Clinical Trial. *JAMA*. (2015)

Levin I, Lewek MD, Feasel J and **Thorpe DE**. Gait training with visual feedback and proprioceptive input to reduce gait asymmetry in adults with CP: A case series. *Pediatric Physical Therapy*. (2017)

Locklear T, DeBar LL, Willig J, **Rundell S**, Blackhall L, Zatzick D, Staman K, Bhavsar N, Weinfurt K, and Abernethy AP. Case Studies from the Clinic: Initiating and Implementing Patient-Reported Outcome Measures. *eGEMS*. (2017)

**Schmidt CT**, Ward RE, Suri P, Kiely DK, Pensheng N, Goldstein R, Anderson DE, Bean JF. Which Neuromuscular Attributes are Associated with Changes in Mobility Among Community-dwelling Older Adults with Symptomatic Lumbar Spinal Stenosis. *Archives of Physical Medicine & Rehabilitation*. (2018)

**Middleton A**, Kuo YF, Graham JE, Karmarkar A, Lin YL, Goodwin JS, Hass A, Ottenbacher KJ. Readmission Patterns over 90-day Episodes of Care among Medicare Fee-for-Service Beneficiaries Discharged to Post-Acute Care. *Journal of the American Medical Directors Association*. (2018)

**Young DL**, Seltzer J, Glover M, Outten C, Lavezza A, Manthey E, Parker AM, Needham DM. Identifying Barriers to Nurse-facilitated Patient Mobility in the Intensive Care Unit. *American Journal of Critical Care*. (2018)

Bagatell N, Chan, D, Rauch KK, **Thorpe D**. Thrust into adulthood: Transition experiences or young adults with cerebral palsy. *Disability and Health Journal*. (2017)

## CoHSTAR Contributors

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American Physical Therapy Association

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