# Elizabeth Regan, PhD, DPT

#### eregan@mailbox.sc.edu

221 S Edisto Ave, Columbia, SC 29205 (704) 609-2409

#### **EDUCATION**

Professor

Doctoral Education University of South Carolina; Columbia, SC. PhD in Exercise Science with a

concentration in Rehabilitation (8/2016 - 5/2020)

Elon University; Elon, NC. Doctor of Physical Therapy (DPT) (2003-2005)

Undergraduate James Madison University; Harrisonburg, VA. BBA in Computer Information

Systems (1992-1996)

## **ACADEMIC EMPLOYMENT**

Clinical Associate Physical Therapy Program, University of South Carolina, Columbia, SC

2020-Present; Clinical Assistant Professor 7/2020-7/2025

Graduate Teaching Physical Therapy Program, University of South Carolina, Columbia SC

Assistant 2018-2019

Director of Clinical Physical Therapy Program, Wingate University; Wingate, NC

Education / Assistant 2013-2015

Professor

# TEACHING EXPERIENCE

Instructor of Record Doctor of Physical Therapy Program, University of South Carolina, Columbia, SC

- Orthopedics I (Spring 2021, Spring 2022, Spring 2023, Spring 2024
   Spring 2025)
  - Orthopedics II (Summer 2021, Summer 2022, Summer 2023)
  - Introduction to Examination, Evaluation & Treatment I (Fall 2023, Fall 2024)
  - Introduction to Examination, Evaluation & Treatment II (Spring 2024, Spring 2025)
  - Wellness and Health Promotion (Fall 2021, Fall 2022)
  - Therapeutic Exercise (Spring-Summer 2022, Fall 2022)
  - Foundations of Physical Therapy (undergraduate, Summer 2020)

Physical Therapist Assistant Program, Central Piedmont Community College, Charlotte, NC

• Therapeutic Procedures (Spring 2016)

Doctor of Physical Therapy Program, Wingate University; Wingate, NC

Clinical Practice I&II (2014), Clinical Internship I (Spring 2015)

Elizabeth Kegan, PhD, DP1		
Course Development	Physical Therapy Program, University of South Carolina, Columbia, SC  • EXSC 201 Foundations of Physical Therapy (undergraduate curriculum; distributed learning format)	
Co-Instructor	<ul> <li>Physical Therapy Program, University of South Carolina; Columbia, SC</li> <li>PHYT 777 Health Promotion and Wellness in Physical Therapy (Summer 2018, Summer 2019)</li> </ul>	
Guest Lecturer	<ul> <li>Physical Therapy Program, University of South Carolina; Columbia, SC</li> <li>Relaxation Techniques for PHYT 759: Therapeutic Exercise (Fall 2019)</li> <li>Psychosocial Aspects of Patient Care for PHYT 720: Fundamentals of Physical Therapy (Spring 2017, Spring 2018)</li> <li>Principles of Intervention for PHYT 145: Therapeutic Exercise (Fall 2017)</li> <li>Running Gait Evaluation for PHYT 145 Therapeutic Exercise (Fall 2015)</li> </ul>	
Mentoring	<ul> <li>Physical Therapy Program, University of South Carolina; Columbia, SC</li> <li>Secondary mentor PhD student in Exercise Science, Garrett Hainline (Fall 2021-Spring 2023), Kailyn Horn (Fall 2023-Present)</li> <li>Research mentor to DPT student research projects (Spring 2018-</li> </ul>	

present)

present

# CLINICAL EMPLOYMENT

Physical Therapist (Part-time PRN)	Vertex Physical Therapy Specialists; Columbia, SC (2017-2020)
Physical Therapist / Yoga Therapist	Roper Physical Therapy; Charlotte, NC (2015-2017)
Physical Therapist	Novant Health Rehabilitation Center; Matthews, NC (2009-2013)
	Carolina Neurosurgery and Spine Associates; Charlotte, NC (2006-2009)

Undergraduate Honors Thesis Mentor (Fall & Spring 2021, 2023-

Undergraduate Magellan Journey Award 2023-present

#### **AWARDS**

- Presidential Fellowship Recipient, University of South Carolina; Columbia, SC (8/2016 5/2020).
   \$8,000/year for 4 years. Role: Fellow
- NIH T-32 pre-doctoral research training grant, Behavioral-Biomedical Interface Program, University of South Carolina. (8/2016 8/2018). \$22,920/ year for 2 years. Role: Trainee
- Component Grants for Physical Activity, Exercise and Health Promotion. American Physical Therapy Association. *The NExT (Neurological Exercise Training) Step in Promoting Healthy Lifestyles after Stroke.* (12/2017 11/2018). \$10,000. Role: Co-Investigator
- Adopt-a-Doc Award. Academy of Physical Therapy Education. American Physical Therapy Association. (1/2019). \$3,000. Role: Recipient

- Breakthrough Scholar Award. University of South Carolina 2020.
- Doctoral Student Achievement Award, Arnold School of Public Health, University of South Carolina 2020.
- American Kinesiology Association Doctoral Scholar Award, University of South Carolina 2020.

#### **GRANTS**

- American Physical Therapy Association Health Policy and Administration Section Research Grant.
   Integrating Stroke Survivors into Cardiac Rehabilitation. (5/2018 5/2020). \$15,000. Role: Primary Investigator
- American Heart Association Pre-Doctoral Grant. *Integrating Stroke Survivors into Cardiac Rehabilitation*. (1/2019 12/2020). \$26,844/year for 2 years. Role: Trainee.
- Support to Promote Advancement and Creativity (SPARC) Grant, Office of the Vice President of Research. University of South Carolina. *Integrating Stroke Survivors into Cardiac Rehabilitation*. (4/2019 5/2020). \$5,000. Role: Primary Investigator
- Nielsen Foundation Community Grant to South Carolina Spinal Cord Injury Association. 2021-2023 Wellness for Life. \$119,000. Role: Co-investigator
- National Institute on Aging Grant (1R01AG070004-01A1) *Healthy Living After Knee Replacement*. 2021-2026 \$2,874,843. Role: Co-investigator
- Parkinson's Foundation Optimizing Reach and Sustainability of PD REV+, and Established Community Program for People Living with Parkinson's Disease and their Care Partners. 2022 \$9,987. Role: Coinvestigator
- Foundation of Physical Therapy Research's Center of Excellence in Physical Therapy, Health Services and Health Policy Research and Training Grant. (7/2023 6/2025) \$120,000. Role: Fellow.
- University of South Carolina Brain Health Network. *Implementing USC Brain Health Fitness: an ongoing individual coaching and exercise intervention for people living with mild-moderate cognitive impairments in South Carolina*. (9/2024-8/2025). \$58,764. Role: Primary Investigator.
- Prisma Health Research Seed Grant. *Implementing Fit for Function in South Carolina: An Evidenced-based exercise program for people after stroke.* (1/2025 7/2026) \$17,897. Role: Primary Investigator.
- Center for Clinical and Translational Research. *Train Your Brain Fitness SC: An exercise intervention for people with cognitive impairments.* (7/2025 7/2026). \$75,000. Role: Primary Investigator.

#### **PUBLICATIONS**

- Regan EW, Cameron K, Herrera-Venson A, Juarez GA, Perera S, Vincenzo J, Brach JS. Characteristics of Evidenced-Based Falls Prevention Program Completers and Non-Completers and Difference in Outcomes. *Journal of Aging and Health*. 0(0), 2025. doi:10.1177/08982643251327032
- 2. **Regan EW**, Burnitz O, Hightower J, Dobner L, Flach A. Rock Steady Boxing: A qualitative evaluation of a community exercise program for people with Parkinson's disease. *PLosOne*, 19(12), 2024.
- 3. **Regan EW**, Toto P, Brach J. A Community Needs Assessment and Implementation Planning for a Community Exercise Program for Survivors of Stroke: A Protocol for a Pilot Hybrid Type I Clinical Effectiveness and Implementation Study. *JMIR Research Protocols*, 13(1), e55432, 2024.
- 4. Handlery, R., Handlery, K., Kahl, D., Koon, L., Cabe, L., **Regan, EW**. High Intensity Functional Training for People with Parkinson's & Their Care Partners: A Feasibility Study. *American journal of health promotion.*, no. 5: 648-660, 2024.
- 5. Handlery, K., McQueeney, S., Handlery, R., **Regan, EW**., Fritz, SL. Factors Contributing to Physical Therapist Attrition: A Qualitative Study. *Journal of Allied Health, 53(1), 1E-12E, 2024*.

- 6. **Regan, EW**, & Fritz, SL. Key participant characteristics influencing completion of a phase II cardiac rehabilitation program: A cross-sectional analysis. *American Heart Journal Plus: Cardiology Research and Practice*, 2023.
- 7. Handlery, R. **Regan, E**. Lewis, AF, Larsen, C, Handlery, K, Flach, A and Fritz, S. Active Participation of Care Partners in a Physical Activity Intervention Alongside People with Stroke: A Feasibility Study. *Physiotherapy Canada*, 2022.
- 8. Salerno J, Tow S, **Regan E**, Bendziewicz S, McMillan M, Harrington S. Injury and Injury Prevention in United States Para swimming: a Mixed Method Approach. *International journal of sports physical therapy*, 17(2), 293, 2022.
- 9. **Regan EW**, Handlery R, Stewart JC, Pearson JL, Wilcox S, Fritz, SL. Feasibility of Integrating Survivors of Stroke into Cardiac Rehabilitation: A mixed methods pilot study. *PLOS ONE*, 2021.
- 10. **Regan EW**, Handlery R, Stewart JC, Pearson JL, Wilcox S, Fritz SL. Integrating Survivors of Stroke into Exercise-based Cardiac Rehabilitation Improves Endurance and Functional Strength. *Journal of the American Heart Association*, 2021.
- 11. **Regan, E,** Fredriksson J, Schaefer S, Rorden C, Bonilha L, VanGlider J, Steward JC. Neural Correlates of within-session practice effects in mild motor impairment after stroke: a preliminary investigation. *Experimental Brian Research*. 2021
- 12. Handlery R, **Regan EW**, Stewart JC, Pellegrini C, Monroe C, Hainline G, Handlery K, Fritz SL. Predictors of Daily Steps at 1-Year Poststroke: A Secondary Analysis of a Randomized Controlled Trial. *Stroke*. 2021.
- 13. McDonnell, K. K., Gallerani, D. G., Newsome, B. R., Owens, O. L., Beer, J., Myren-Bennett, A. R., **Regan**, E., Hardin, J.W. & Webb, L. AA Prospective Pilot Study Evaluating Feasibility and Preliminary Effects of Breathe Easier: A Mindfulness-based Intervention for Survivors of Lung Cancer and Their Family Members (Dyads). *Integrative cancer therapies*, 2020.
- 14. **Regan EW**, Wende, M, Blake C, Fritz SL. Yoga for Everyone: A Qualitative Study of a Community Yoga Class for People with Disability. *Physiotherapy Theory and Practice Journal*. 2020.
- 15. **Regan E**, Middleton A, Stewart JC, Wilcox S, Pearson JL, Fritz SL. The Six-Minute Walk Test as a Fall Risk Screening Tool in Community Programs for Persons with Stroke: A Cross-Sectional Analysis. *Topics in Stroke Rehabilitation*. 2019.
- 16. **Regan EW**, Handlery R, Beets MW, Fritz SL. Are Aerobic Programs Similar in Design to Cardiac Rehabilitation Beneficial for Survivors of Stroke? A Systematic Review and Meta Analysis. *Journal of the American Heart Association*. 2019.
- 17. Bujak BK, **Regan E**, Beattie PF, Harrington S. The effectiveness of interdisciplinary intensive outpatient programs in a population with diverse chronic pain conditions: a systematic review and meta-analysis. *Pain Management*. 2019.
- 18. **Regan E**, Handlery R, Liuzzo D, Stewart JC, Burke A, Hainline G, Horn C, Keown J, McManus A, Lawless B, Purcell M, Fritz S. The Neurological Exercise Training (NExT) Program: A Pilot Study of a Community Exercise for Survivors of Stroke. *Disability and Health Journal*. 2019.
- 19. **Regan EW**, Fritz SL Commentary on: Considerations for the selection of time-limited walk tests post-stroke: A systematic review of test protocols and measurement properties. *Journal of Neurologic Physical Therapy*. 2016

#### **RESEARCH PRESENTATIONS**

 Mayson, T, Nakhi, S, Carroll, S, Warren, J, Regan EW. Understanding the Association between Preoperative Exercise Level and Post-Operative Outcomes of Mixed-Major Abdominal Surgery. NC & SC American College of Surgeons Annual Meeting. 2025. Platform Presentation.

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- 2. <u>Cochcroft, C</u>, Horn, K, **Regan, EW**. Using an Adaptive Rower for People Using Power Wheelchairs to Improve Cardiovascular Fitness. Discover USC. 2025 Poster Presentation.
- 3. <u>Brown, K</u>, **Regan EW**. Using an Adaptive Rower for a Manual Wheelchair User: A Case Study. Discover USC. 2025 Poster Presentation.
- Nakhi, S, Mayson, T, Carroll, S, Warren, J, Regan EW. Understanding the Association between Preoperative Exercise Levels and Postoperative Outcomes of Mixed-Major Abdominal Surgery. Discover USC. 2025
- 5. **Regan, EW**., Beganskas, N., Harvey, E., Porter, K., <u>Medina-Reyes, A</u>., Phillips, S. E., ... & Flach, A. D. (2025, February). Physical Therapists' Capability, Opportunity, Motivation and Behavior Related to Physical Activity and Nutritional Behavior Change. *Combined Sections Meeting (CSM)*. APTA. 2025. Poster Presentation.
- 6. <u>Brantley K, Cummings K, Hackler M</u>, Pellegrini C, **Regan E**. Do aerobic capacity and pain levels impact the ability to increase physical activity early after total knee arthroplasty? A secondary cross-sectional analysis. Discover USC, 2024. Poster Presentation.
- 7. **Regan, EW**, Ballard, Z, Johnson P, Handlery R, Handlery K, Hainline G, Fritz SF. Perceptions of Survivors of Stroke and Care-Partners of a Community-Based Exercise Program: A Qualitative Study. APTA Combined Sections Meeting Conference. Boston, MA. February 2024. Poster Presentation.
- 8. **Regan EW**, Devivo K, Fritz SL. Organizational Stakeholder Review and Potential Sustainability of Integrating Stroke Survivors into Hospital-Based Outpatient Cardiac Rehabilitation. Academy Health Dissemination and Implementation Science Conference. Washington, DC. December 2023. Poster Presentation.
- 9. **Regan E**, Handlery R, Sollman M, Gawler T, Delany E, East M, Schmidt R, <u>Flach A</u>. Education and Exercise Support for Individuals Newly Diagnosed with Parkinson Disease and Their Care Partners. World Parkinson Congress. Barcelona, Spain. July 2023. Poster Presentation.
- 10. <u>Regan EW</u>, Scott MJ, Forbes RE, Silverman-Moss C, Handlery K, Fritz SL. Race to Walk: A Qualitative Study of a Community Exercise Program for Individuals with SCI. American Physical Therapy Association Combined Sections Conference. San Antonio, TX Feb 2022. Poster Presentation.
- 11. <u>Handlery K</u>, McQueeney S, Handlery R, **Regan E**, Fritz S. Factors Contributing to Physical Therapist and Physical Therapist Assistant Attrition: A Qualitative Study. American Physical Therapy Association Combined Sections Conference. San Antonio, TX Feb 2022. Poster Presentation.
- 12. <u>Hainline GM</u>, Fritz SL, Handlery R, **Regan EW**. Rating of Perceived Exertion as a measure of aerobic exercise intensity for people with stroke. American Physical Therapy Association Combined Sections Conference. San Antonio, TX Feb 2022. Platform Presentation.
- 13. <u>Regan, EW</u>, Handlery, R, Wilcox, S, Stewart, JC, Pearson, JL, & Fritz, S. (2020). Outcomes From Integrating Stroke Survivors Into Cardiac Rehabilitation. American Heart Association Quality of Care and Outcomes Research Conference. (2020) Online. Poster Presentation.
- 14. Regan, E, Wilcox S, Stewart JC, Pearson JL, Fritz SL. Integrating Stroke Survivors into Cardiac Rehabilitation: Exploring Effectiveness, Feasibility, Physical Therapist Involvement and Policy Implications. (2020). Combined Sections Meeting of the American Physical Therapy Association. Denver, CO. Platform Presentation.
- 15. <u>Salerno J</u>, <u>Bendziewicz SF</u>, <u>McMillan M</u>, **Regan E**, Tow S, Harrington S. Injury Prevention in Paraswimming. (2020). Combined Sections Meeting of the American Physical Therapy Association. Denver, CO. Platform Presentation
- 16. **Regan, E**, Fritz, SL. The Six-Minute Walk Test as a Predictor for Fall Risk in Persons with Stroke. International Stroke Conference. Honolulu, HI. February 2019. Poster Presentation.
- 17. <u>Regan E</u>, Handlery R, Beets M, Fritz, S. Are Aerobic Programs Similar to Cardiac Rehabilitation Beneficial for Stroke Survivors' Aerobic Capacity? A Systematic Review and Meta-Analysis. American Physical Therapy Association Combined Sections Conference. Washington, DC. January 2019. Poster Presentation.

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- 18. Wende M, <u>Regan E</u>. Yoga for Everyone: A qualitative study of a community yoga class for people with disability. USC Discovery Day, Columbia SC. 2018. Poster Presentation.
- 19. Regan E, Fridriksson J, Schaefer S, Rorden C, Boniha L, VanGlider J, Stewart JC. Neural correlates of within session changes on a simulated feeding task in individuals with mild motor impairment after stroke. American Society of Neurorehabilitation Annual Conference. Baltimore, MD November 2017. Poster Presentation.
- 20. **Regan E**, Merlo A, <u>Fritz SL</u>. Determine Responders vs. Non-Responders using the Six-Minute Walk Test to Measure Endurance after Intensive Therapy for Individuals with Post-Stroke Limitations. World PT Conference, Cape Town South Africa. July 2017. Poster Presentation.
- 21. <u>Regan E, Kline J</u>. Overcoming Fear of Feedback: Engaging for Improved Performance and Relationships. SCAPTA Spring Meeting, Asheville, NC. March 2015. Education Session.
- 22. <u>Regan E, Roper C, Ray L.</u> Medical Therapeutic Yoga for Lower Extremity Dysfunction. NCPTA Fall Meeting, Greensboro, NC. October 2016.Education Session.
- 23. <u>Regan E, Kline J</u>. Overcoming Fear of Feedback: Engaging for Improved Performance and Relationships. NCPTA Fall Meeting, Asheville, NC. October 2015. Education Session.
- 24. <u>Regan E, Swiggum M</u>. From the Crying Infant to the Anxious Adult: Strategies to Decrease Behavioral Distress During Physical Therapy Interventions. APTA NEXT Conference, Charlotte, NC. June 2014.Education Session.
- 25. <u>Regan E</u>. Addressing Stress and Anxiety in Patients. NCPTA Fall Meeting., Asheville, NC. October 2014.Education Session.

#### OTHER INVITED AND PEER-REVIEWED PRESENTATIONS

- 1. <u>Baehr, L, Regan, EW, Handlery, K, Handlery R</u>. FIT and SIT: Ramping up Seated Exercise Intensity, Variety, and Inclusivity for Older Adults. *American Physical Therapy Association Combined Sections Meeting*, Houston, TX. Educational Presentation & On-Demand Session, 2025. (refereed)
- 2. <u>Regan EW</u>. The Adaptive Rower for Building Aerobic Capacity for People with SCI: From Concept to Community, Co-Keynote for the SC Spinal Cord Injury Research Fund 2023 Scientific Conference, Fall 2023. (invited)
- 3. **Regan EW** and <u>Flach A</u>. Using TopHat Learning Platform to Engage Students and Promote Learning. Oktoberfest Teaching Symposium, University of South Carolina, Fall 2023 (refereed)
- 4. **Regan EW**. Research 101 for People with Spinal Cord Injury, South Carolina Spinal Cord Injury Association Wheeling in New Directions Conference, Fall 2022 (invited)
- 5. **Regan, EW**. Wellness and Health during Grief and Recovery. Operation Support our Troops America Leap of Faith Seminar. Annually 2014-2020. 2022-2023. (invited)
- 6. **Regan, EW**. Falls and Falls Prevention. Breathe Easier Club for Lung Cancer Survivors and their Caregivers. Leeza's Care Connection. Columbia, SC. October 2018 (invited)

#### PROFESSIONAL ASSOCIATIONS

- American Physical Therapy Association, Member since 2013
  - o Sections: Orthopedics, Neurology, Education, and Health Policy and Administration
- South Carolina Physical Therapy Association, Member 2017-present
- North Carolina Physical Therapy Association, Member 2013-2017
  - o Piedmont District Chair 2015-2017

#### **REVIEWER FOR JOURNALS**

- Physiotherapy Canada, October 2024, December 2024
- Journal of the American Heart Association, August 2023
- Archives of Physical Medicine and Rehabilitation, June 2022, October 2022, October 2023
- BMJ Open, April 2023, July 2023
- Frontiers in Rehabilitation Sciences, December 2022
- Topics in Stroke Rehabilitation, August 2020.
- International Journal of Yoga Therapy, July 2020.
- PLOS One, assisting mentor Stacy Fritz, August 2019.
- Journal of Geriatric Physical Therapy, assisting mentor Stacy Fritz, Sept 2016, February 2017, July 2018.
- Journal of Neurologic Physical Therapy, assisting mentor Stacy Fritz, August 2017.
- Journal of Gerontology, assisting mentor Stacy Fritz, November 2016.

# PROFESSIONAL AND UNIVERSITY SERVICE

#### Professional

- Wheelchair Tennis Committee, United States Tennis Association South Carolina, September 2023present
- Board Member, South Carolina Spinal Cord Injury Association. October 2020-March 2024
- Task Force on Physical Activity, American Physical Therapy Association Academy of Geriatrics July

#### 2023-present

- Research Committee, Health Policy and Administration Section, American Physical Therapy Association 2019-2022. Chair, 2021-2022.
- Clinical provider of physical therapy services, Matthews Free Medical Clinic, Matthews, NC 2013-2017
- Member of the APTA Neurology Academy's Health Promotion and Wellness Task Force 2016-2017
- International PT Service-Learning Mission Trip to Dominican Republic, August 2015

# University

- Faculty Senate Technology Committee, Fall 2023-present, co-chair Fall 2024-present
- Discover USC Research and Scholarship Symposium Reviewer, Spring 2023, Spring 2024
- Arnold School of Public Health Scholastic Standards and Petitions Committee, University of South Carolina 2020-2023
- Faculty Search Committee Member, Physical Therapy Program, University of South Carolina, Columbia, SC 2020-2021
- DPT Advocacy and Service Committee, Physical Therapy Program, University of South Carolina, Columbia, SC 2020-present
- DPT Curriculum Committee, Physical Therapy Program, University of South Carolina, Columbia, SC 2020-present
- DPT Admissions Committee, Physical Therapy Program, University of South Carolina, Columbia, SC Fall 2016-present
- DPT Accreditation Committee, Physical Therapy Program, University of South Carolina, Columbia, SC Fall 2016-2018
- Faculty Search Committee Member, Physical Therapy Program, University of South Carolina, Columbia, SC Fall 2017-Spring 2018
- Instructor for Gateway Freshmen Seminar (1 credit course) Wingate University, Wingate, NC Fall 2013 and Fall 2014
- Faculty Search Committee Member, Physical Therapy Program, Wingate University, Wingate, NC 2013-2014
- Policies and Procedures Committee (Chair), Physical Therapy Program, Wingate University, Wingate, NC 2013-2015
- Clinical Education Committee (Chair), Physical Therapy Program, Wingate University, Wingate, NC 2013-2015

## PROFESSIONAL LICENSURE AND CERTIFICATIONS

- State of South Carolina Licensed Physical Therapist, #8515, 2017-present
- State of North Carolina Licensed Physical Therapist, #P10423, 2006-2023
- Orthopedic Certified Specialist, American Board of Physical Therapy Specialties, APTA; 2008-present