

CURRICULUM VITAE

Elizabeth M. Ardolino, PT, PhD

Clinical Associate Professor
Doctor of Physical Therapy Program
Baylor University, Waco, TX

Education:

Ph.D.
Seton Hall University, South Orange, NJ
Health Sciences, Movement Science Track
Degree Awarded May 2010

MSPT
Temple University, Philadelphia, PA
Physical Therapy
Degree Awarded January 2008

MPT
University of Scranton, Scranton, PA
Physical Therapy
Degree Awarded May 2002

BS
University of Scranton, Scranton, PA
Health Sciences
Degree Awarded May 2001

Licensure Information:

State and Registration Number: State of Texas, Active Physical Therapist license, #1203320

Employment and Positions Held:

Clinical Associate Professor
Non-tenure track
Baylor University, Waco, TX
August 2022-Present

Assistant Program Director
Non-tenure track
University of St. Augustine, Austin, TX
January 2019-August 2022

Associate Professor

Non-tenure track
University of St. Augustine, Austin, TX
July 2012-Present

Physical Therapist
Riverkids Home Health
Austin, TX
April 2011-November 2014

Clinical Supervisor, Locomotor Training Clinic
Senior Physical Therapist, Spinal Cord Injury Unit
Magee Rehabilitation Hospital
Philadelphia, PA
September 2004-March 2011

Lecturer
non-tenure track position
Thomas Jefferson University
Philadelphia, PA
February 2005-February 2011

Lab Assistant
non-tenure track position
Drexel University
Philadelphia, PA
September 2005- September 2007

Lab Assistant
non-tenure track position
Temple University
Philadelphia, PA
September 2006-May 2007

Physical Therapist, Team Leader, Staff Level II position
HEALTHSOUTH Rehabilitation Hospital of Toms River
Toms River, NJ
August 2002-September 2004

Physical Therapist (part-time)
LADACIN Network (Early Intervention)
Wanamassa, NJ
April 2003-September 2004

Peer Reviewed Publications:

Flores MB, Manella KJ, **Ardolino, EM**. Relationship between Movement Quality, Functional Ambulation Status, and Spatiotemporal Gait Parameters in Children with Myelomeningocele. *Physical & Occupational Therapy In Pediatrics*. 2020. DOI: 10.1080/01942638.2020.1736233

Behrman AL, Trimble SA, Argetsinger LC, Roberts MT, Mulcahey MJ, Clayton L, Gregg ME, Lorenz D, **Ardolino EM**. Interrater Reliability of the Pediatric Neuromuscular Recovery Scale for Spinal Cord Injury. *Top Spinal Cord Inj Rehabil*. 2019; 25(2):120-129. doi:10.1310/sci2502-120

Ardolino EM, Flores MB, Ferreira G, Nickelson Jeantete S, Manella K. Interrater Reliability of the Pediatric Neuromuscular Recovery Scale in Children with Spina Bifida. *Developmental Neurorehabilitation*. 2019. doi: 10.1080/17518423.2019.1604581

Ardolino E, Flores M, Manella K. Gross motor outcomes after dynamic weight bearing in two children with truncal hypotonia: a case series. *Pediatr Phys Ther*. 2017;29:360-364.

Behrman AL, **Ardolino EM**, Harkema SJ. Activity-Based Therapy: from basic science to clinical application for recovery after spinal cord injury. *JNPT*. 2017;41:S39-S45.

Ardolino E, Mulcahey MJ, Trimble S, Argetsinger L, Beinkowski M, Mullen C, Behrman AL. The Development and initial validation of the Pediatric Neuromuscular Recovery Scale. *Pediatr Phys Ther*. 2016;28:416-428. doi: 10.1097/pep.0000000000000285

Harkema S, Shogren C, **Ardolino E**, Lorenz D. Assessment of functional improvement without compensation for human spinal cord injury: extending the Neuromuscular Recovery Scale to the upper extremities. *Journal of Neurotrauma*. June 2016. doi: 10.1089/neu.2015.4213

Ardolino E, Watson E, Behrman A, Schmidt-Read M, Harkema S. Case Study: Spinal Cord Injury- Locomotor Training in Interventions to Improve Functional Outcomes for Physical Rehabilitation, 2nd edition. O'Sullivan SB and Schmitz TJ. 2016. F.A. Davis, Philadelphia.

Veloza C, Moorhouse M, **Ardolino E**, Lorenz D, Suter S, Basso DM, Behrman AL. Validity of the Neuromuscular Recovery Scale: a measurement model approach. *Arch Phys Med Rehabil*. 2015; 96(8), 1385–1396. <http://doi.org/10.1016/j.apmr.2015.04.004>

Behrman AL, Watson E, Freid G, D'Urso K, D'Urso D, Cavadini N, Brooks M, Kern M, Wenzel L, Taylor H, and **Ardolino E**. Restorative rehabilitation entails a paradigm shift in pediatric incomplete spinal cord injury in adolescence: An illustrative case series. *Journal of Pediatric Physical Medicine*. 2012 Nov; 5(4):245-259.

Behrman AL, **Ardolino EM**, VanHiel L, Kern M, Attkinson D, Lorenz D, Harkema SJ. Assessment of Functional Improvement Without Compensation Reduces Variability of Outcome Measures After Human Spinal Cord Injury. *Arch Phys Med Rehabil*. 2012 Sept; 93(9): 1518-1529.

Harkema SJ, Hillyer J, Schmidt-Read M, **Ardolino E**, Sisto SA, Behrman AL. Locomotor Training: In the Treatment of Spinal Cord Injury and the Progression of Neurologic Rehabilitation. *Arch Phys Med Rehabil*. 2012 Sept; 93(9): 1588.

Ardolino E, Hutchinson K, Pinto Zipp G, Clark M, Harkema SJ. The ABLE Scale: The Development and Psychometric Properties of a New Outcome Measure for the Spinal Cord Injury Population. *Phys Ther*. 2012 Aug; 92: 1046-1054.

Ardolino E, Watson E, Behrman A, Schmidt-Read M, Harkema S. Case Study: Spinal Cord Injury- Locomotor Training in Interventions to Improve Functional Outcomes for Physical Rehabilitation. O'Sullivan SB and Schmitz TJ. 2009. F.A. Davis, Philadelphia.

Datta S, Lorenz D, **Ardolino E**, Morrison S, Harkema SJ. A Multivariate Examination of Temporal Change in Berg Balance Scale Variables for Patients with ASIA C and D Spinal Cord Injuries. *Arch Phys Med Rehabil.* 2009 Jul;90(7):1208-17

Hakim RM, DiCicco J, Burke J, Hoy T, **Roberts E**. Differences in Balance Related Measures Among Older Adults Participating in Tai Chi, Structured Exercise, or No Exercise. *Journal of Geriatric Physical Therapy.* 2004; 27(1): 11-15.

Peer Reviewed Scientific and Professional Presentations:

Flores M, Manella K, **Ardolino E**. The Disconnect Between Quality of Movement Versus Quality of Life in Children with Spina Bifida. Poster presentation. Combined Sections Meeting. San Antonio, TX. February 2022.

Hanover M, Flores MB, **Ardolino EM**. Standing to Improve Form and Function in a Child with Spina Bifida: A Case Study. Poster presentation. Combined Sections Meeting. San Antonio, TX. February 2022.

Haro H, **Ardolino E**, Flores M, Atkinson D. Plasticity and Play in Pediatrics: Assessment & Treatment of Children Using A Neuroplastic Treatment Approach. Education Session. Combined Sections Meeting. San Antonio, TX. February 2022.

Ardolino E, Atkinson D, Flores M. A Neuroplastic Treatment Approach in Pediatric Spinal Cord Injury: Optimizing Neuromotor Recovery and Participation. Poster presentation. Howard Steel Conference. Orlando, FL. December 2021.

Wilford K, Anderson H, **Ardolino EM**. A Pilot Exploration of the Relationship Between Grit and Reflection-In-Learning Scores in DPT Students. Educational Leadership Conference. Atlanta, GA. October 2021

Ardolino E, Flores M, Atkinson D. Experiential Learning in a DPT Program: All Hands on Deck. Virtual poster presentation. APTA Combined Sections Meeting. January 2021.

Ardolino EM, Flores M, Manella K. Choosing the Right Tool: Quality Outcome Measures for Children with Spina Bifida. Education Session. Academy of Pediatric Physical Therapy Annual Conference. Virtual. November 2020.

Ardolino EM, Flores M, Manella K. Interrater Reliability and Initial Validation of the Pediatric Neuromuscular Recovery Scale in Children with Spina Bifida. Poster presentation. Pediatric NeuroRecovery Summit. Louisville, KY. May 2019

Ardolino E, Flores M, Ferreira G, Jeantete S, Manella K. Interrater Reliability of the Pediatric Neuromuscular Recovery Scale in Children with Spina Bifida. Poster presentation. APTA Combined Sections Meeting. January 2019.

Ardolino E, Flores M, Manella K. Beyond positioning: Addressing truncal hypotonia in the pediatric population. Education session. APTA Combined Sections Meeting February 2018

Bowers J, **Ardolino E**. Sensory Integration in Physical Therapy for Motor Planning and Development in a 5 year old with Cerebral Palsy. Poster Presentation.

APTA Combined Sections Meeting
February 2018

Flores M, Barta K, Sneary M, Ferreira G, **Ardolino E**. Feasibility and preliminary outcomes of a standardized exercise program in adults with Down Syndrome: A pilot study. Poster presentation.

APTA Combined Sections Meeting
February 2018

Flores M, Manella K, **Ardolino E**. Upsee Daisy! Gross motor outcomes after dynamic weight bearing in two children with truncal hypotonia: a case series. Poster presentation.

APTA NEXT Annual Conference and Exposition
June 2017

Ardolino E. Field-testing a New Outcome Measure: The Pediatric Neuromuscular Recovery Scale. Platform Presentation.

Third World Congress of Spina Bifida
March 18, 2017

Flores M, Manella K, **Ardolino E**. Upsee Daisy! Gross Motor Outcomes After Dynamic Weight Bearing In Two Children With Truncal Hypotonia: A Case Series. Poster presentation.

APTA Academy of Pediatric Physical Therapy Annual Conference (SoPAC)
November 2016

Ardolino E, Behrman A

The Pediatric Neuromuscular Recovery Scale: A Competency Course. Pre-conference course
Section on Pediatrics Annual Conference
November 11, 2016

Harkema S, **Ardolino E**, Behrman A

Activity-dependent Plasticity for Neuromuscular Recovery: Use of Classifications to Drive Therapies and Outcomes. Plenary Session.

IV STEP Conference
July 15, 2016

Ardolino E, Trimble SA, Mulcahely MJ, Bienowski M, Mullen C, Argetsinger L, Behrman AL.

The Pediatric Neuromuscular Recovery Scale: Development, Validity, and Reliability of a New Assessment of Neuromuscular Capacity. Poster Presentation.

IV STEP Conference
July 17, 2016

Ardolino E, Trimble S

The Pediatric Neuromuscular Recovery Scale. Education Session.
Section on Pediatrics Annual Conference

November 2015

Ardolino E, Barta K, Flores M, Sawtelle M, Manella K
The Neuroplastic Treatment Approach: Optimizing Movement and Function. Education Session.
Texas Physical Therapy Association Annual Conference
October 2015

Ardolino EM, Mulcahely MJ, Trimble SA, Bienowski M, Mullen C, Argetsinger L, Behrman AL
Development and Validity of the Pediatric Neuromuscular Recovery Scale. Poster Presentation.
Society for Neuroscience Annual Conference
November 2014

Behrman A, **Ardolino E**, Kern M
Neuromuscular Recovery Scale: A New Measure of Recovery Based on Pre-Injury Performance.
Education Session.
ASIA 39th Annual Scientific Meeting
May 2013

Watson E, **Ardolino E**, Taylor H
Locomotor Training Effects on Functional Mobility, Health, and Emotional Well-Being in Three
Adolescents with Incomplete Spinal Cord Injuries—A Case Series. Panel Presentation.
Howard Steel Conference
November 2012

Ardolino EM, Basso DM., Behrman AB., Behar-Horenstein L, Sisto S, Watson E
A Learning Module for Rehabilitation Curriculum: Walking Recovery, Locomotor Training, and
Incomplete Spinal Cord Injury. Education Session.
APTA Combined Sections Meeting
February 2010

Ardolino EM, Zipp, G
The ABLE Scale: The Development of a New Balance Outcome Measure for the Spinal Cord Injury
Population. Poster Presentation.
APTA Combined Sections Meeting
February 2010

Ardolino EM
Locomotor Training: From Basic Science to Clinical Practice. Education Session.
APTANJ Annual Conference
April 11, 2009

Ardolino EM, Basso D.M, Behrman A.B, Hutchinson K.M, Peschel C.L, Sisto S.A, VanHiel L.R
Selecting, Using, and Interpreting Outcome Measures for Recovery After Spinal Cord Injury: Evidence
from the NeuroRecovery Network. Education Session.

APTA Combined Sections Meeting
February 11, 2009

Agard S, **Ardolino E**, Watson E, Mitchell K
The Effects of Locomotor Training on the Recovery of Balance and Improvement in Gait Quality in Two Individuals with Incomplete Lower Motor Neuron Lesions—A Case Series. Poster Presentation.
APTA Combined Sections Meeting
February, 2009

Ardolino E, Zipp G, Basso D.M, Hutchinson K, Harkema S
The Interrater Reliability of the Berg Balance Scale and the Tinetti Performance-Oriented Mobility Assessment in Individuals with Incomplete Spinal Cord Injury. Poster Presentation.
APTA Combined Sections Meeting
February, 2009

Ardolino E, Watson E, Green J.
The Effects of Locomotor Training on the Recovery of Gait and Balance in an Individual with an Incomplete Lower Motor Neuron Injury: A Case Report. Poster Presentation.
APTA Combined Sections Meeting
February 8, 2008

Datta S, Lorenz D, Schmidt-Read M, **Ardolino E**, Morrison S, Harkema SJ.
A Multivariate Examination of Temporal Change in Berg Balance Scale Variables for Patients with ASIA C and D Spinal Cord Injuries. Poster Presentation.
ASIA National Meeting
May 16, 2007

Hakim RM, DiCicco J, Burke J, Hoy T, **Roberts E**.
Differences in Balance Related Measures
Among Older Adults Participating in Tai Chi, Structured Exercise, or No Exercise. Poster Presentation.
APTA Combined Sections Meeting
February 2003

Funded/In Review Grant Activity:

Principle Investigator
\$15,755

Assessing Neuromuscular Recovery in Adults with Traumatic Brain Injury
Funded through University of St. Augustine Board of Director's Grant (2018)

Principle Investigator
\$11,634

The Interrater Reliability of the Pediatric Neuromuscular Recovery Scale in the Spina Bifida Population
January 2016-December 2016, Funded through University of St. Augustine Board of Director's Grant (2016)

Co-Investigator

\$300,000

Measuring Recovery after Pediatric Spinal Cord Injury

Grant funded through the Neilsen Foundation, July 2013-June 2015 (No cost extension granted through July 2016)

Current/Active Research Activity:

Assessing Neuromuscular Recovery in Adults with Traumatic Brain Injury. Principal Investigator: Elizabeth Ardolino, PhD, PT; Co-Investigators: Kunal Singhal, PT, PhD; Kristen Johnson, PT, EdD; Heather David, PT, EdD. (Data collection on hold secondary to COVID-19)

Assessment of Grit and Reflective Learning in Graduate Students Enrolled in a DPT Program. Principal Investigator: Elizabeth Ardolino, PhD, PT; Co-Investigators: Katherine Wilford, PT, DPT; Hazel Anderson, PT, DPT. (Data collection ongoing)

Standing to Improve Form and Function in Children with Spina Bifida. Principal Investigator: Mariann Hanover, PT, DP; Co-Investigators: Elizabeth Ardolino, PT, PhD; Megan Flores, PT, PhD. (Initial Manuscript submitted; follow up study data collection in progress)

Augmentation of activities-based therapies with transcutaneous spinal cord stimulation in children with cerebral palsy. Principal Investigator: Darryn Atkinson, PT, PhD; Co-Investigators: Elizabeth Ardolino, PT, PhD; Megan Flores, PT, PhD. (data collection to be initiated Fall 2022)

A collaborative clinical education model in a pediatric clinical experience: A Qualitative Case Report. Principal Investigator: Elizabeth Ardolino, PT, PhD; Co-Investigators: Megan Flores, PT, PhD; Darryn Atkinson, PT, PhD; Kathryn Sawyer, PT, PhD. (data collection in progress)

The Pediatric Neuroplasticity Program: Initial Outcomes in Children with Cerebral Palsy. Principal Investigator: Megan Flores, PT, PhD; Co-Investigators: Elizabeth Ardolino, PT, PhD; Darryn Atkinson, PT, PhD. (poster submitted; manuscript in preparation)

The impact of Activity-based Locomotor Training on body functions and structure, activity, and participation domains of health in children with CP: a scoping review. Principal Investigator: Darryn Atkinson, PT, PhD; Co-Investigators: Elizabeth Ardolino, PT, PhD; Megan Flores, PT, PhD; Jessica Cain, MLS. (data collection in progress)

Membership in Scientific/Professional Organizations:

Steel Assembly Member, 2020- Present

APTA Member, 2001-Present

Neurology Section Member, 2001-Present

Pediatrics Section Member, 2004-Present

Education Section Member, 2012- Present

Consultative and Advisory Positions Held:

Director of Research
Fortis Non-Profit Physical Therapy, Board of Directors
April 2022- Present

Committee Member
Academy of Neurologic Physical Therapy Annual Conference Planning Committee
March 2022- Present

Editorial Board Member
Physical and Occupational Therapy in Pediatrics
January 2021-Present

Manuscript Reviewer
Various journals, including Developmental NeuroRehabilitation, Physical and Occupational Therapy in Pediatrics, Journal of Spinal Cord Medicine, and Sports Medicine Journal
September 2017- Present

Assistant Director
The Christopher and Dana Reeve Foundation's NeuroRecovery Network
Austin, TX
April 2011-December 2015

Community Service:

Volunteer Catechist- second grade
St. Martin de Porres Catholic Church
2016-2020

Organizer
Exercise Camp for children with Autism, in collaboration with Kiker Elementary School
July 2013 and July 2014

Services to the University/College/School on Committees/Councils/Commissions:

Assessment Committee, DPT Program, August 2022- Present

Continuing Education Attended:

Combined Sections Meeting, San Antonio, TX, February 2022

- Designing Meaningful Course Assessments for Physical Therapy Education
- For Better or Worse: Is Stretching Beneficial or Detrimental for Functional After Spinal Cord Injury?

- Ten Years After Research Summit III: State of Dosing Research for Children with CP
- A Motor Control-Based Framework for Movement Analysis of Tasks Across Patient Populations
- Plasticity & Play in Pediatrics: Assessment & Treatment of Children Using a Neuroplastic Treatment Approach
- Multiple poster sessions

Combined Sections Meeting, Virtual, February 2021

- Experiential Learning in Pediatric Physical Therapy Professional Education: Is the Juice Worth the Squeeze?
- Designing and Implementing a Transdisciplinary Approach to Applied Nutrition Education for Physical Therapist Students
- Did Major Research in the Last Decade Change Practice? Locomotor Training, Gadgets, Intensity, or Everything Works!
- Having Difficulty Removing the Kid Gloves? Implementing High-Intensity Training in Neurologic and Geriatric Rehabilitation
- Little Big Leagues: Youth Overhead Athlete Performance Considerations with Seres, Strokes, and Throws
- Reevaluating Clinical Success: Differentiating Capacity Versus Performance
- Faster, Stronger, Younger? Embracing and Enhancing the Movement of Young Athletes
- Teaching Clinical Reasoning Using Illness Scripts, Rehab Scripts, and ICF-Based Concept Mapping
- Anne Shumway-Cook Lectureship- Physiology, Genes, and Lifestyle: Decade of Disruption in Rehabilitation After SCI

Academy of Pediatric Physical Therapy Annual Conference, Virtual, November 2020

- Nelson et al. Assessing the Value of Interprofessional Collaborative Activities for Therapy Students in Pediatric Practice
- Schwab et al. Collaborative Motor Task Performance in Children with Cerebral Palsy and Their Caregivers: A Case Series
- Martin et al. Community-based Integrated Clinical Experiences in Pediatrics: Opportunities and Challenges
- Iammarino et al. In-home Body-weight Support System Can Be Used Post-treatment to Maximize Function in Young Children with Spinal Muscular Atrophy
- Anderson et al. Partner Up! Developing and Assessing Experiential Learning Opportunities to Enhance Clinical Practice in Pediatrics

CAPTE Self-Study Workshop for PT Programs, Virtual, October 2020

Educational Leadership Conference, Bellevue, WA October 2019

Pediatric NeuroRecovery Summit, Louisville, KY May 2019

APTA Combined Sections Meeting, New Orleans, LA February 2018

- Imaging of Spinal Trauma: Can Protons Inform Prognosis and Improve Outcomes?

- Assessment to Inform DPT Program Outcomes: Accreditation to Program Excellence
- Beyond Positioning: Addressing Truncal Hypotonia in the Pediatric Population
- Academy of Neurologic Physical Therapy Platform Sessions

Third World Congress of Spina Bifida, San Diego, CA March 2017

APTA Combined Sections Meeting, San Antonio, TX February 2017

- Pusher Syndrome: Neuroscience, Evidence, Assessment, and Treatment
- Who's in Charge? A Debate Over Motor Dysfunction in Brain and Spinal Cord Injury
- Teaching Tips I Can Use On Monday: A Primer on Easy to Integrate Technology
- Pauline Cerasoli Lecture: The Sunk Cost Fallacy
- Harnessing Neuroplasticity with Brain Stimulation and Rehabilitation
- Academy of Neurologic Physical Therapy Platform Sessions

IV STEP Conference, Columbus, OH July 2016

APTA Combined Sections Meeting, Indianapolis, IN February 2015

- Reasonable Accommodations for Students with Disabilities: Legal and Ethical Perspectives on Fair Examination Policies
- Research Forum: Challenges and Innovations in Measuring Activity
- Setting Yourself Up to Succeed at Institutions without an Established Research Culture
- Walking the Walk: Translation of Scientific Findings to Improve Locomotor Recovery Poststroke
- A Systems-Based Approach to Evidence-Based Practice: Reconceptualizing and Reinvigorating and Overworked Topic
- Neurology Section Moderated Platform Sessions

Current and Teaching Responsibilities in the Entry-Level Program for Academic Year:

Fall 2022

Neuromuscular I

Neuromuscular II

Spring 2023

Pediatric Physical Therapy

Summer 2023

Clinical Neurosciences