

Elise L. Townsend, PhD, DPT, PCS
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CURRICULUM VITAE

Education

MGH Institute of Health Professions, Boston, MA
Doctor of Physical Therapy (DPT), 2006

University of Minnesota, Institute of Child Development, Minneapolis, MN
September 2000 – July 2005
Developmental Psychology, Neuroscience minor
Doctor of Philosophy (Ph.D.), 2005

Emory University School of Medicine, Department of Rehabilitation Medicine, Atlanta, GA
January 1995 – May 1997
Master of Physical Therapy (MPT) with Highest Honors, 1997

University of Virginia, Charlottesville, VA
September 1990 – May 1994
Interdisciplinary Studies--Biological and Behavioral Sciences,
B.A with Highest Distinction, 1994

Licensure Information/Registration Number

Massachusetts Board of Allied Health, Licensure as a Physical Therapist, 2005-present (#17296)
Minnesota Board of Physical Therapy, Licensure as a Physical Therapist, 2000-2005
Commonwealth of Virginia, Board of Medicine, Licensure as a Physical Therapist, 1997-2000

Certifications:

Board Certified Specialist in Pediatric Physical Therapy (PCS), ABPTS.
Initial certification: May 2009 Re-certified: 2017-2026

Employment and Positions Held:

Associate Professor
MGH Institute of Health Professions
School of Health and Rehabilitation Sciences, Department of Physical Therapy
Boston, MA
July 2011 – present

Associate Director
PhD Program in Rehabilitation Sciences
MGH Institute of Health Professions
Boston, MA
August 2018 – present

Senior Research Physical Therapist
Neurogenetics/Pediatric Motor Disorders Research Program
Massachusetts General Hospital, Center for Genomic Medicine (CGM)
Boston, MA

March 2015 – Dec 2021

Assistant Professor
MGH Institute of Health Professions
School of Health and Rehabilitation Sciences, Department of Physical Therapy
Boston, MA
July 2005 – July 2011

Physical Therapist/Clinical Associate Outpatient Service
Massachusetts General Hospital
MGH Pediatric Neuromuscular Clinic (2008-2014)
Boston, MA
September 2008 – September 2016, per diem

Physical Therapist/Clinical Associate Inpatient Service
Pediatrics Team
Massachusetts General Hospital
Boston, MA
September 2005 – September 2008, per diem

Physical Therapist
Harbor Area Early Childhood Services
East Boston, MA
October 2007 – October 2012, per diem

Physical Therapist
Children's Hospital
Minneapolis, MN
September 2000 – July 2005, per diem

Physical Therapist
Medical College of Virginia Hospital
Richmond, VA
July 1997 - September 1999, full time

Physical Therapist
Children's Hospital
Richmond, VA
August 1998 - August 1999, per diem

Peer Reviewed Publications

Submitted/in progress:

Kiefer M, Khan A, Leiro B, Yavorsky C; Laforet G, Kirby K, **Townsend EL**. A Pilot Study of the Feasibility, Acceptability, and Reliability of Remote Motor Assessment in Children with Canavan Disease. Submitted to Orphanet Journal of Rare Diseases, June 2024.

Kumari P, Sullivan LM, Li Z, Conquest EP, Cornforth E, Hu N, Sizemore JA, McKee BB, Kitchen RR, González-Pérez P, Linville C, Castro K, Gutierrez H, Samaan S, **Townsend EL**, Darras BT, Rutkove SB, Iannaccone ST, Clemens PR, Puwanant A, Das S & Wheeler TM. A central role for disordered renal

metabolism in myotonic dystrophy. Rejected by Nature Medicine as of 11Dec2023; resubmitting to Science Translational Medicine or Nature Communications.

Published/Accepted:

Kiefer M, Townsend E, Goncalves C, Shellenbarger KC, Gochyyev P, Wong BL. Appendicular lean mass index and motor function in ambulatory patients with Duchenne muscular dystrophy. *Muscle Nerve*. 2024 Jun 5. doi: 10.1002/mus.28173. Epub ahead of print. PMID: 38837739.

Kiefer M, Simone M, Eichler FS, **Townsend EL**. Development of an Infantile GM2 Clinical Rating Scale: Remote Assessment of Clinically Meaningful Health-Related Function. *Journal of Child Neurology*. 2024;0(0). doi:10.1177/0883073824124670.

Al-Mfarej D, Vojtech JM, Roy SH, **Townsend E**, Keysor J, Kuntz N, Rao V, Kline JC, Shiwani B. A Virtual Reality Exergame: Clinician-Guided Breathing and Relaxation for Children with Muscular Dystrophy. *2023 IEEE Conf Virtual Real 3D User Interfaces Abstr Workshops*. 2023;2023:270-276. doi:10.1109/vrw58643.2023.00065

Schofield C, Evans K, Young H, Paguinto SG, Carroll K, **Townsend E**, Kiefer M, McGuire M, Sodhi J, Bray P, Bayley K, Vorster NM, Downs J. The development of a consensus statement for the prescription of powered wheelchair standing devices in Duchenne muscular dystrophy. *Disabil Rehabil*. 2022;44(10):1889-1897. doi:10.1080/09638288.2020.1810786

Alves CRR, Petrillo M, Spellman R, Garner R, Zhang R, Kiefer M, Simeone S, Sohn J, Eichelberger EJ, Rodrigues E, Arruda EA, **Townsend EL**, Farwell W & Swoboda KJ. Implications of circulating neurofilaments for spinal muscular atrophy treatment early in life: A case series. *Mol Ther Methods Clin Dev*. 2021;23:524-538. Published 2021 Oct 30. doi:10.1016/j.omtm.2021.10.011

Krosschell KJ, **Townsend EL**, Kiefer M, Simeone SD, Zumpf K, Welty L, Swoboda KJ. Natural history of 10-meter walk/run test performance in spinal muscular atrophy: A longitudinal analysis. *Neuromuscul Disord*. 2022;32(2):125-134. doi:10.1016/j.nmd.2021.08.010

Evans EA, Cook NE, Iverson GL, **Townsend EL**, Duhaime AC; TRACK-TBI Investigators. Assessing Physical Function and Mobility following Pediatric Traumatic Brain Injury with the NIH Toolbox Motor Battery: A Feasibility Study. *Phys Occup Ther Pediatr*. 2021;41(1):56-73. doi:10.1080/01942638.2020.1758985

Schofield C, Evans K, Young H, Paguinto SG, Carroll K, **Townsend E**, ... Downs J. The development of a consensus statement for the prescription of powered wheelchair standing devices in Duchenne muscular dystrophy. *Disabil Rehabil*. 2022;44(10):1889-1897. doi:10.1080/09638288.2020.1810786

Townsend EL, Simeone SD, Krosschell KJ, Zhang RZ, Swoboda KJ; Project Cure SMA Investigator's Network. Stander Use in Spinal Muscular Atrophy: Results From a Large Natural History Database. *Pediatr Phys Ther*. 2020;32(3):235-241. doi:10.1097/PEP.0000000000000713

Evans E, Cook NE, Iverson GL, **Townsend EL**, Duhaime AC; TRACK-TBI Investigators. Monitoring Outcome after Hospital-Presenting Milder Spectrum Pediatric Traumatic Brain Injury Using the Glasgow Outcome Scale-Extended, Pediatric Revision. *J Neurotrauma*. 2020;37(14):1627-1636. doi:10.1089/neu.2019.6893

Yeo CJJ, Simeone SD, **Townsend EL**, Zhang RZ, Swoboda KJ. Prospective Cohort Study of Nusinersen Treatment in Adults with Spinal Muscular Atrophy. *J Neuromuscul Dis*. 2020;7(3):257-268. doi:10.3233/JND-190453

- Weaver PA, Catalino T, **Townsend EL**, Martin K, Dole RL. Assimilation of the Pediatric Essential Core Competencies by Professional Physical Therapist Education Programs. *Pediatr Phys Ther.* 2020;32(3):267-274. doi:10.1097/PEP.0000000000000715
- Evans E, Asuzu D, Cook NE, Caruso P, **Townsend E**, Costine-Bartell B, Fortes-Monteiro C, Hotz G, Duhaime AC. Traumatic Brain Injury-Related Symptoms Reported by Parents: Clinical, Imaging, and Host Predictors in Children with Impairments in Consciousness Less than 24 Hours. *J Neurotrauma.* 2018;35(19):2287-2297. doi:10.1089/neu.2017.5408
- Krosschell KJ, Kissel JT, **Townsend EL**, et al. Clinical trial of L-Carnitine and valproic acid in spinal muscular atrophy type I. *Muscle Nerve.* 2018;57(2):193-199. doi:10.1002/mus.25776
- Townsend EL**, Bibeau C, Holmes TM. Supported Standing in Boys With Duchenne Muscular Dystrophy. *Pediatr Phys Ther.* 2016;28(3):320-329. doi:10.1097/PEP.0000000000000251
- Zaidman CM, Wang LL, Connolly AM, Florence J, Wong BL, Parsons JA, Apkon S, Goyal N, Williams E, Escolar D, Rutkove SB, Bohorquez JL, **DART-EIM Clinical Evaluators Consortium**. Electrical impedance myography in Duchenne muscular dystrophy and healthy controls: A multicenter study of reliability and validity. *Muscle Nerve.* 2015;52(4):592-597. doi:10.1002/mus.24611
- Canapari CA, Barrowman N, Hoey L, Walker SW, **Townsend E**, Tseng BS, Katz SL. Truncal fat distribution correlates with decreased vital capacity in Duchenne muscular dystrophy. *Pediatr Pulmonol.* 2015;50(1):63-70. doi:10.1002/ppul.23004
- Townsend EL**, Tamhane H, Gross KD. Effects of AFO use on walking in boys with Duchenne muscular dystrophy: a pilot study. *Pediatr Phys Ther.* 2015;27(1):24-29. doi:10.1097/PEP.0000000000000099
- Torriani M, **Townsend E**, Thomas BJ, Bredella MA, Ghomi RH, Tseng BS. Lower leg muscle involvement in Duchenne muscular dystrophy: an MR imaging and spectroscopy study. *Skeletal Radiol.* 2012;41(4):437-445. doi:10.1007/s00256-011-1240-1
- Townsend EL**, Richmond JL, Vogel-Farley VK, Thomas K. Medial temporal lobe memory in childhood: developmental transitions. *Dev Sci.* 2010;13(5):738-751. doi:10.1111/j.1467-7687.2009.00935.x
- Choksi A, **Townsend EL**, Dumas HM, Haley SM. Functional recovery in children and adolescents with spinal cord injury. *Pediatr Phys Ther.* 2010;22(2):214-221. doi:10.1097/PEP.0b013e3181dc011a
- Retarekar R, Fragala-Pinkham MA, **Townsend EL**. Effects of aquatic aerobic exercise for a child with cerebral palsy: single-subject design. *Pediatr Phys Ther.* 2009;21(4):336-344. doi:10.1097/PEP.0b013e3181beb039
- Lucas-Thompson R, **Townsend EL**, Gunnar MR, et al. Developmental changes in the responses of preterm infants to a painful stressor. *Infant Behav Dev.* 2008;31(4):614-623. doi:10.1016/j.infbeh.2008.07.004
- Rao R, Tkac I, **Townsend EL**, Ennis K, Gruetter R, Georgieff MK. Perinatal iron deficiency predisposes the developing rat hippocampus to greater injury from mild to moderate hypoxia-ischemia. *J Cereb Blood Flow Metab.* 2007;27(4):729-740. doi:10.1038/sj.jcbfm.9600376
- Callahan J, Parlman K, Beninato M, **Townsend E**. Perspective: impact of the IIISTEP conference on clinical practice. *J Neurol Phys Ther.* 2006;30(3):157-166. doi:10.1097/01.npt.0000281953.71064.44
- Davis EP, **Townsend EL**, Gunnar MR, et al. Antenatal betamethasone treatment has a persisting influence on infant HPA axis regulation. *J Perinatol.* 2006;26(3):147-153. doi:10.1038/sj.jp.7211447

Curtis WJ, Zhuang J, **Townsend EL**, Hu X, Nelson CA. Memory in early adolescents born prematurely: a functional magnetic resonance imaging investigation. *Dev Neuropsychol*. 2006;29(2):341-377. doi:10.1207/s15326942dn2902_4

Davis EP, **Townsend EL**, Gunnar MR, et al. Effects of prenatal betamethasone exposure on regulation of stress physiology in healthy premature infants. *Psychoneuroendocrinology*. 2004;29(8):1028-1036. doi:10.1016/j.psyneuen.2003.10.005

Rao R, Tkac I, **Townsend EL**, Gruetter R, Georgieff MK. Perinatal iron deficiency alters the neurochemical profile of the developing rat hippocampus. *J Nutr*. 2003;133(10):3215-3221. doi:10.1093/jn/133.10.3215

Kapasi ZF, Catlin PA, Joyner DR, Lewis ML, Schwartz AL, **Townsend EL**. The effects of intense physical exercise on secondary antibody response in young and old mice. *Phys Ther*. 2000;80(11):1076-1086.

Peer Reviewed Scientific and Professional Presentations

Laforet G et al. CANaspire Trial of Systemic AAV9-mediated Gene Therapy for Canavan Disease: Biomarker, Imagine, and Clinical Findings from the Low-dose Cohort. Platform presentation at the 53rd Child Neurology Society Annual Meeting, San Diego, CA, Nov. 11-14, 2024

Laforet et al. G. Laforet, A. Fay, A. Nagy, P. Harmatz, B. Kinane, E. Mallack, C. Burton, E. **Townsend**, M. Kiefer, B. Leiro, R. Williams, A. Shaywitz, A. Bley, F. Eichler. Results from the CANaspire Gene Therapy Trial for Canavan Disease: Safety, Biomarker, Imaging, and Clinical Outcome Data from the Completed Low-dose Cohort. Platform to be presented at the European Society of Gene & Cell Therapy (ESGCT), Rome, Italy, Oct. 22-25, 2024.

Dunaway Young S, Harding E, Krosschell KJ, **Townsend E**, Yun C, Montes J, Fitzpatrick J. Exploring Feasibility of Physical Therapy Mentorship Models in SMA: How to Make it Work. Poster presented at the 2024 Cure SMA Research and Clinical Care Meeting, Austin, TX, June 5-7, 2024.

Kelly K, Dahdul M, Nelson L, Dunaway Young S, **Townsend EL**, Reedy K, Duong T, DiDonato A, Marmion DJ, Ip Q, Noman A, Yung E, Cattrly E, Johansen J, Johnson NB, Hack K. Physical therapy use in treated and untreated children and adults with spinal muscular atrophy (SMA): A descriptive analysis using US claims. Poster presented at 2024 Cure SMA Research and Clinical Care Meeting, Austin, TX, June 5-7, 2024.

M Pianta, AHA Kupin, **E Townsend**, J Keysor, N Kuntz, V Rao, JC Kline & B Shiwani. Clinician-Guided Virtual Reality Exergames for Relaxation, Respiration, and Physical Activity for Individuals with Muscular Dystrophy. Poster presented at NIH Rare Disease Day, Feb. 29, 2024.

Kelly K, Dahdul M, Nelson L, Dunaway Young S, **Townsend EL**, Reedy K, Duong T, DiDonato A, Marmion DJ, Ip Q, Noman A, Yung E, Cattrly E, Johansen J, Johnson NB, Hack K. Physical Therapy Use in Treated and Untreated Children and Adults with Spinal Muscular Atrophy (SMA): A Descriptive Analysis Using US Claims. Poster presented at MDA Clinical & Scientific Conference, Orlando, FL, March 3-6, 2024.

F. Eichler, A. Nagy, G. Laforet, E. Mallack, A. Fay, P. Harmatz, Z. Ergonul, C. Burton, K. Kirby, B. Kinane, E. **Townsend**, M. Kiefer, B. Leiro, R. Williams, J. Balser, L. Kratz, A. Shaywitz, A. Bley Systemic AAV9-mediated Gene Addition for Canavan Disease (CANaspire Trial): Managing Immune Responses, Lowering N-acetylaspartate and Impacting Disease Severity. Poster presented at Society for Neuroscience, Washington DC, Nov. 11-15, 2023.

A Nagy, G Laforet, C Burton, B Kinane, **E Townsend**, B Leiro, M Kiefer, R Williams, A Shaywitz, J Balser, A Bley, F Eichler. Preliminary Results from CANaspire, a First-in-Human Phase 1/2 Controlled Open-Label Study of BBP-812, a Recombinant AAV9-hASPA Vector for the Treatment of Canavan Disease. Podium presentation at the 15th Congress of the European Paediatric Neurology Society (EPNS), Prague/Czech Republic. June 23, 2023.

F. Eichler, A. Nagy, G. Laforet, C. Burton, K. Kirby, B. Kinane, **E. Townsend**, M. Kiefer, R. Williams, J. Balser, L. Kratz, A. Shaywitz, A. Bley. Initial Biomarker and Clinical Findings from the CANaspire Canavan Disease Gene Therapy Trial: Exploration of Connections Between NAA and Disease Severity. Podium presentation at the 26th Annual Meeting of the American Society for Gene and Cell Therapy (ASGCT) Los Angeles, May 20, 2023.

Conquest P, McKee B, Cornforth E, Sizemore A, **Townsend E**, Rutkove S, Wheeler T. EIM Phase Angle as a Candidate Biomarker of Muscle Function in DM1 Patients. Abstract presented as poster at the 75th American Academy of Neurology (AAN) Annual Meeting, Boston, MA, April 22-27, 2023.

TR Flotte, O Cataltepe, HL Gray-Edwards, AM Keeler, R Daci, B Owusu-Adjei, R Artinian, S Parajuli, D Kokoski, M Blackwood, T Taghian, M S Shazeeb, X Jiang, H Andonian, M Kiefer, **E Townsend**, A Nagy, O Rapalino, B Wishart, R H Brown, M Sena-Esteves, FS Eichler. Phase 1/2 Clinical Trial of Combined Bilateral Intrathalamic/Intracisternal/Intrathecal Delivery of a rAAVrh8 vector in Infantile and Juvenile Tay-Sachs and Sandhoff Disease: Report of Ongoing Studies. Abstract presented as poster at the European Society for Gene and Cell Therapy Annual Congress in Edinburgh, UK 11-14 Oct 2022.

F Eichler, **E Townsend**, B Leiro, M Kiefer, A Khan, C Yavorsky, K Kirby, C Burton, S Maciel, G Laforet, A Shaywitz, J Balser, A Bley. CANinform, a Retrospective and Prospective Natural History Study of Canavan Disease: Status and Initial Analyses. Poster presented at Child Neurology Society Annual Meeting San Francisco, CA, USA October 8-12, 2022.

Kiefer M, Figueira S, Shellenbarger KC, Jones C, Wong B, **Townsend, E**. Associations between body composition estimates and motor function in ambulatory individuals with Duchenne muscular dystrophy. Abstract presented as poster at the World Muscle Society (WMS) 2022 Congress in Halifax, Canada Oct 11-15.

Kiefer M, Khan A, Leiro B, Liharska L, Balser J, Kenwood C, Yavorsky C, Laforet G, Kirby K, **Townsend E**. Transitioning from in-person to remote motor assessment of children with Canavan disease. Abstract presented as poster at 2022 Autumn Conference of the International Society for CNS Clinical Trials and Methodology Sept 8-9, Boston, MA.

Conquest P, McKee B, Cornforth E, Sizemore A, **Townsend E**, Rutkove S, Wheeler T. Electrical Impedance Myography Predicts Muscle Function in DM1 Patients. Virtual poster presentation at the 13th International Myotonic Dystrophy Consortium Meeting (IDMC-13). June 22, 2022.

Mackey J, **Townsend E**, Leslie C. Interprofessional Student Learning in an Early Intervention Caregiver Group. Presented as pre-recorded Lightning Talk and live Discussion Panel at the Nexus 2020 Summit of the National Center for Interprofessional Practice and Education, Interprofessional Clinical Learning Environments Theme, August 13, 2020.

M Kiefer, **EL Townsend**, RZ Zhang & KJ Swoboda. Growth impairments as potential correlates of motor function in children with Spinal Muscular Atrophy (SMA). Poster for the Cure SMA Research and Clinical Care Annual Meeting, Orlando, FL on June 11, 2020 (cancelled due to COVID-19).

J Chen, S Simeone, **E Townsend**, R Zhang, other authors, Kathryn Swoboda. Phenotype Genotype Variability Among Sibships with Spinal Muscular Atrophy: Implications for Newborn Screening and Early Treatment Intervention. Poster presented at the Cure SMA Research and Clinical Care Annual Meeting, Anaheim, CA on June 28, 2019.

E Townsend, S Simeone K Swoboda. Combined effects of a comprehensive exercise program and nusinersen on motor function in fraternal twins with SMA: A case series. Poster presented at the Cure SMA Research and Clinical Care Annual Meeting, Anaheim, CA on June 28, 2019.

C Yeo, S Simeone, **E Townsend**, K Swoboda. Outcome Measures for Nusinersen efficacy in Adults with Spinal Muscular Atrophy (SMA). Platform presentation at the American Academy of Neurology 71st Annual Meeting, Philadelphia, MA on May 5, 2019.

P Weaver, T Catalino, K Martin, R Dole, **E Townsend**. Implementation of the Essential Core Competencies into Entry-Level Pediatric Physical Therapy Education. Platform presented at APTA Academy of Pediatric Physical Therapy Annual Conference (APPTAC), Chattanooga, TN, November 11, 2018.

P Weaver, T Catalino, K Martin, R Dole, **E Townsend**. Implementation of Pediatric Essential Core Competencies in Entry-Level Physical Therapist Education. Platform presented at APTA Education Leadership Conference (ELC), Jacksonville, FL, October 12, 2018.

R Zhang, J Loutrel, M Kuhlmann, J Whaley, G Labilloy, S Simeone, **E Townsend**, K Krosschell, J Yun H Chen, A Brower, F Nery, K Trautman, P Nwe, A Johnstone, J Siranosian, T Newcomb, R Butterfield, M Watson, and K Swoboda for the Project Cure Investigator's Network. The Project Cure SMA Longitudinal Population Data Repository (LPDR). Poster presented at Cure SMA Annual Meeting, Scientific Conference, Dallas, TX, June 16, 2018.

E Townsend, S Simeone, K Krosschell, R Zhang, K Swoboda. Supported standing in SMA Types 1 and 2: Head rotation control and respiratory support predict meaningful stander use. Poster presentation at Cure SMA Annual Meeting, Scientific Conference, Dallas, TX, June 15, 2018.

E Townsend, S Simeone, K Krosschell, R Zhang, K Swoboda. To Stand or Not to Stand: Using early motor control to inform clinical decision making in Spinal Muscular Atrophy (SMA). Platform presented at APTA Combined Sections Meeting, New Orleans, LA, February 23, 2018.

S Simeone, **E Townsend**, K Krosschell, R Zhang, K Swoboda. To Stand or Not to Stand: Feasibility and Associations of Supported Standing Intervention in Children with Spinal Muscular Atrophy (SMA) types I and II. Poster presented at the MGH Clinical Research Day, Boston, MA on October 5, 2017.

K Krosschell, J Kissel, **E Townsend**, S Simeone. Clinical Trial of L-Carnitine and Valproic Acid in Spinal Muscular Atrophy Type I. Poster presented at the MGH Clinical Research Day, Boston, MA on October 5, 2017.

E Townsend, S Simeone, K Krosschell, R Zhang, K Swoboda for the Project Cure SMA Investigator's Network (2017). Stander use in Spinal Muscular Atrophy (SMA): Findings from a large natural history study. Poster presented at Cure SMA Annual Meeting, Orlando, FL, June 30, 2017.

E Townsend, K Krosschell, R Zhang, Y Zhang, G Acsadi, T Crawford, G D'Anjou, J Kissel, M Schroth, S Reyna, K Swoboda (2016). Natural history of timed motor function tests in SMA type 3: Associations between age and motor outcomes. Poster presented at Cure SMA Annual Meeting, Anaheim, CA, June 16, 2016.

J Baldwin, A Hassan, **E Townsend**, A McCarthy-Jacobson. Effectiveness of Body Weight Supported Treadmill Training on Gait Speed in the Stroke Population: A Systematic Review. Poster presented by first author at APTA Combined Sections Meeting, Neurology Section, San Diego, CA, January 2013.

H Tamhane, **EL Townsend**, KD Gross. Effects of Dynamic Response Ankle Foot Orthosis (DR-AFO) Use on Functional Performance and Walking Endurance in Ambulatory Boys with Duchenne Muscular Dystrophy: A Pilot Study. Poster presented by first author at APTA Combined Sections Meeting, Chicago, IL, February 11, 2012.

EL Townsend. Powered standing mobility in boys with Duchenne Muscular Dystrophy. 27th International Seating Symposium (ISS), Nashville, TN. March 4, 2011.

EL Townsend. Effects of supported standing on range of motion, bone mineral density and health related quality of life in boys with Duchenne muscular dystrophy. Platform presented at the Annual Meeting of the Massachusetts Chapter of APTA. November 6, 2010.

A Choksi, **EL Townsend**, HM Dumas, SM Haley. Functional Recovery in Children and Adolescents with Spinal Cord Injury (SCI). Poster presented at the Combined Sections Meeting, San Diego, CA, February 2010.

R Retaraker, M Fragala-Pinkham, **EL Townsend**. Effects of Aquatic Aerobic Exercise on Endurance, Functional Mobility and Participation In a Child with Cerebral Palsy: A Single Subject Design. Poster presented at the APTA National Meeting, San Antonio, TX, June 2008.

E Maugere, **EL Townsend**, MP Watkins. Physical Therapy Management of Patients with Duchenne Muscular Dystrophy -A Systematic Review. Poster presented at the APTA Combined Sections Meeting, Nashville, TN, February 2008.

EL Townsend, KM Thomas, CA Nelson. Hippocampal functions in childhood: A brain-based approach to studying the development of declarative memory. Poster presented at the Biennial Meeting of the Society for Research in Child Development (SRCD), Boston, MA, April 2007.

EL Townsend, JL Lohr, CA Nelson. Neurocognitive function in school aged children with repaired cyanotic congenital heart defects (CHD). Poster presented at the annual meeting of the MGH Scientific Advisory Committee (SAC), Boston, MA, February 2006.

EL Townsend, JL Lohr, CA Nelson. Neurocognitive sequelae of repaired congenital heart disease. Poster presented at the APTA Combined Sections Meeting, San Diego, CA, February 2006.

EL Townsend, JL Lohr, CA Nelson. Neurocognitive sequelae of repaired cyanotic congenital heart defects. Poster presented at the Biennial Meeting of the Society for Research in Child Development (SRCD), Atlanta, GA, April 2005.

RH Hunt, **EL Townsend**, JW Couperus, CA Nelson, KM Thomas. A developmental fMRI study of Medial Temporal Lobe Function: Differences in Continuous Recognition Memory. Poster presented by first author at the Biennial Meeting of the Society for Research in Child Development (SRCD), Atlanta, GA, April 2005.

RH Hunt, JW Couperus, **EL Townsend**, CA Nelson, KM Thomas. Developmental Differences in Continuous Recognition Memory: An fMRI and ERP study of parametrically manipulated memory load. Paper presented by first author at the Biennial Meeting of the Society for Research in Child Development (SRCD), Atlanta, GA, April 2005.

KM Thomas, RH Hunt, **EL Townsend**, JW Couperus, CA Nelson, BA Mueller. Developmental Differences in Continuous Recognition Memory: an fMRI study of Medial Temporal Lobe Function. Poster presented by first

author at the 10th International Conference on Functional Mapping of the Human Brain, Budapest, Hungary, 13-17 June 2004.

EL Townsend, JL Lohr, CA Nelson. Neurocognitive sequelae of repaired congenital heart disease (CHD). Poster presented at the Annual Meeting of the Pediatric Academic Society, San Francisco, CA, May 2004.

H Sesma, **EL Townsend**, CA Nelson, MK Georgeiff. The role of memory in overall IQ for infants of diabetic mothers and intrauterine growth restricted infants. Poster presented at the Annual Meeting of the Pediatric Academic Society, San Francisco, CA, May 2004.

K Ennis, **E Townsend**, J Wobken, M Georgieff, R Rao. Perinatal iron deficiency increases vulnerability of the developing hippocampus to mild hypoxic-ischemic injury. Poster symposium presentation by first author at Pediatric Academic Societies' Annual Meeting, San Francisco, CA, May 2004. *Pediatric Research* 55:179A.

EP Davis, C Uy, **EL Townsend**, MR Gunnar, MK Georgieff, SF Guiang, CA Sandman, F Waffarn. Antenatal betamethasone exposure impairs stress responses in the healthy preterm infant. Poster presented by first author at the Annual Meeting of the Pediatric Academic Society, San Francisco, CA, May 2004.

EL Townsend, JL Lohr, CA Nelson. Neurocognitive sequelae of cyanotic congenital heart disease: learning, memory, and hippocampal development. Poster presented at the Annual Meeting of the Cognitive Neuroscience Society, San Francisco, CA, April 2004.

KM Thomas, RH Hunt, **EL Townsend**, JW Couperus, CA Nelson, BA Mueller. Developmental Differences in Hippocampal Function: an fMRI study of Continuous Recognition Memory. Poster presented at the Annual Meeting of the Cognitive Neuroscience Society, San Francisco, CA, April 2004.

EP Davis, F Waffarn, C Uy, **EL Townsend**, MR Gunnar, MK Georgieff. Developmental consequences of third trimester glucocorticoid treatment. Paper presented by first author at Gatlinburg Conference on Research and Theory in Developmental Disabilities, San Diego, CA, April 2004.

EL Townsend & T Jacobson. Neurobehavioral functioning in children with chronic fetal insults. Poster presented at the Biennial Meeting of the Society for Research in Child Development (SRCD), Tampa, FL, April 2003.

WJ Curtis, JC Zhuang, **EL Townsend**, XP Hu & CA Nelson. Memory in Early Adolescents Born Prematurely: A Functional Magnetic Resonance Imaging Investigation. Paper Symposium: Neural Correlates of Memory Development Using ERP/fMRI. Paper presented by first author at the Society for Research in Child Development (SRCD), Tampa, FL, April 2003.

R Rao, I Tkac, **E Townsend**, R Gruetter, C Nelson & M Georgieff. Evaluation of Acute and Long-term Effects of Graded Hypoxia (HI) on Hippocampal Metabolites in Iron Deficient v. Iron Sufficient Developing Rats by Magnetic Resonance Spectroscopy at 9.4 T. Paper presented by first author at Pediatric Academic Societies' Annual Meeting, 2002. *Pediatric Research* 51:422A.

B Donzella, J Bruce, DA Kertes, H Eibs, N Talge, **E Townsend** & MR Gunnar. Relation between temperament and Emotion-Modulated Startle in Young Children. Poster presented by first author at the Occasional Temperament Conference, Newport Beach, CA, October 2002.

EL Townsend, EP Davis, MR Gunnar, MK Georgieff, SF Guiang, RF Cifuentes & RC Lussky. Cardiac and Behavioral Responses to Stressful Events in Premature Infants. Poster presented at the International Conference on Infant Studies (ICIS), Toronto, ON, April 2002.

EP Davis, **EL Townsend**, SF Guiang, M Georgieff & MR Gunnar. Cardiac response to potentially stressful events in premature infants. Poster presented by first author at the International Society for Developmental Psychobiology (ISDP), San Diego, CA, November 2001.

E Townsend, Z Kapasi, P Catlin, D Joyner, M Lewis, A Schwartz. Effects of intense exercise on secondary antibody response in young and aged mice. Platform presentation at the 3rd International Society of Exercise and Immunology (ISEI) Symposium, Paderborn, Germany, November 1997.

Non-Peer Reviewed Publications

Kiefer M, **Townsend E**. Commentary on "Seated Outcome Measures in Children With Duchenne Muscular Dystrophy". *Pediatr Phys Ther*. 2022;34(3):381. doi:10.1097/PEP.0000000000000922

Kiefer MJ, **Townsend EL**. Commentary on "Stepping Activity in Children With Congenital Myotonic Dystrophy". *Pediatr Phys Ther*. 2018;30(4):340. doi:10.1097/PEP.0000000000000545

Townsend E, Chastain PA. Commentary on "Reliability and Validity of the TIMPSI for Infants With Spinal Muscular Atrophy Type I." *Pediatric Physical Therapy*. 2013;25(2):149.
doi:[10.1097/PEP.0b013e31828a23c8](https://doi.org/10.1097/PEP.0b013e31828a23c8)

Townsend E, Pallotta S. Commentary on "Volumetric MRI and MRS and early motor development of infants born preterm". *Pediatr Phys Ther*. 2012;24(1):44-45. doi:10.1097/PEP.0b013e31823e0abb

Townsend EL. (2005) Declarative learning and memory in childhood: A brain-based approach to studying the development of hippocampal functions. Dissertation Abstracts International. UMI No. 3180032. 2005.

Townsend, E.L., Georgieff, M.K., & Nelson, C.A. (2005). Neurocognitive functioning in children with chronic fetal insults. *Cognition, Creier, Comportament (Cognition, Brain, Behavior: Special issue on Developmental Cognitive Neuroscience)*, June, 363-381.

Gunnar, M.R. & **Townsend, E.L.** (2003). Cortisol measures in studies of children. Supplement to *International Journal of Behavioral Development*, 27 (3). [International Society for the Study of Behavioural Development (ISSBD) Newsletter, 1 (43), 4-6.]

Townsend, E.L. (1994). Mind-body interactions: Evidence for a biopsychosocial model for health care. Thesis submitted in partial fulfillment of the requirements for a B.A. in Interdisciplinary Studies at the University of Virginia.

Invited Presentations

Engaging caregivers, expert clinicians, and infants with Tay-Sachs, Sandhoff, and AB Variant to develop and validate a novel clinical rating scale: What is Clinically Meaningful Change? NTSAD Annual Family and Research Conference, Chicago, IL. April 12, 2024

Development of an Infantile GM2 Gangliosidosis Clinical Rating Scale: Remote Assessment of Clinically Meaningful Health-Related Function in Children with Tay-Sachs, Sandhoff, and AB variant. 10th European Tay-Sachs and Sandhoff Family Conference, Virtual, Nov 30, 2023.

Clinical Outcome Assessments (COAs) and Scale Development for Clinical Trials in Neurogenetic Rare Pediatric Diseases. MGH Center for Rare Neurological Diseases (CRND) Fall Retreat, Boston, MA, Oct 20, 2023.

Best practice management of Congenital Muscular Torticollis. Crimson Care Collaborative Interprofessional Rounds Presentation to Harvard medical students, and IHP PA and NP students. MGH Revere. May 2, 2019

To Stand or Not to Stand: Feasibility and Factors Associated with Stander Use in Spinal Muscular Atrophy (SMA) Types I and II. MGH IHP PhD in Rehabilitation Sciences, Interdisciplinary Research Seminar, Boston, MA. July 11, 2017.

Physical Therapy and Mobility Resources for Living with Pompe Disease. Massachusetts General Hospital Department of Genetics, Boston, MA. September 9, 2012.

Care Considerations in Duchenne Muscular Dystrophy. Massachusetts General Hospital for Children, Jett Foundation Roundtable, Boston, MA. November 12, 2011.

Managing the physical therapy needs of boys with muscular dystrophy: A team approach. Rhode Island Chapter APTA, Providence, RI. October 25, 2011.

Effects of supported standing on range of motion, bone mineral density and health related quality of life in boys with Duchenne muscular dystrophy. MGH Institute of Health Professions Faculty Research Fellowship presentation, Boston, MA. November 12, 2010.

Physical therapy management of children and young adults with muscular dystrophy. Hasbro Children's Hospital, Providence, RI, September 15, 2010.

Effects of supported standing on body structure/function, activity and participation in boys with Duchenne muscular dystrophy: Preliminary findings. Emory University School of Medicine, Division of Physical Therapy, August 2010.

Effects of supported standing on range of motion, bone mineral density and health related quality of life in boys with Duchenne muscular dystrophy: Preliminary findings. University of Minnesota School of Medicine, Program of Physical Therapy, December 2009.

The role of physical therapy in Duchenne muscular dystrophy (DMD). Massachusetts General Hospital for Children, Jett Foundation sponsored roundtable "Helping your Child LIVE his best Life", November 1, 2008.

Inflicted head injury and the developing brain. University of Minnesota Department of Physical Therapy, Clinical Instructor Continuing Education Series, June 2004.

Pediatric Physical Therapy: Historical and Contemporary Approaches (two-day seminar). Institutul pentru Dezvoltarea Copilului, Regional Conference, Bucharest, Romania, May 2004.

Effects of hypoxemia and cardiopulmonary bypass on memory in children with congenital heart defects: A proposal. Center for Neurobehavioral Development Colloquium, University of Minnesota, April 2003.

Recent Funded/In Review/Submitted Grants and Research Support

Co-Investigator, NIH SBIR Phase II grant: Immersive and Interactive VR Platform for Quantitative Telehealth Rehabilitation of Rare Diseases. PI: Dr. Julie Keysor. Two-year project. 5-10% FTE. Awarded June 2023.

Principle investigator, Construction and Validation of the Infantile GM2 Rating Scale. \$139,793. March 2022 – November 2024. Funding: National Tay-Sachs & Allied Diseases Association (NTSAD).

Co-Investigator, A Phase 1-3, Double-Blind, Randomized, Placebo-Controlled Study to Evaluate the Efficacy, Safety, Pharmacokinetics and Pharmacodynamics of Intrathecally Administered ION373 in Patients with Alexander Disease (AxD). <https://clinicaltrials.gov/ct2/show/NCT04849741>. MGH Site PI: Florian Eichler, MD (MGH Neurology). \$20, 973 via MGH IHP subaward. September 2021 – October 2026. Funding: Ionis Pharmaceuticals. Added Infantile arm with additional funding, Spring 2023. Total award: \$42,769.

Past Funded/Submitted Scholarship and Grants (2009-2022)

NIH R01 submission (Co-Investigator/IHP Site PI): Development of electrical impedance myography as a biomarker of DM1. Expands our MGH work to a multi-center study that includes U Pittsburgh, Wake Forest U, and Beth Israel Deaconess Medical Center. Collaborators Thurman Wheeler at MGH (Neurology) and Seward Rutkove at BIDMC. Submitted Spring 2023, awarded. Transferred role to IHP faculty Elizabeth Cornforth.

Co-investigator, Extracellular RNA biomarkers of myotonic dystrophy. PI: Thurman Wheeler, MD (MGH Neurology). \$41,222. June 2020 - May 2023. Funding: DoD.

Co-Investigator, A Dose-escalation and Safety & Efficacy Study of AXO-AAV-GM2 in Tay-Sachs or Sandhoff Disease. <https://clinicaltrials.gov/ct2/show/NCT04669535>. PI: Terence R. Flotte, MD (University of Massachusetts Medical School); PI: Florian Eichler, MD (MGH Neurology). \$84,677 via MGH IHP subaward. Fall 2020 – June 2022. Funding: Sio Gene Therapies (formerly Axovant).

Co-Investigator, Correlates of motor outcomes in Duchenne Muscular Dystrophy. \$20,000 Funded in 2021 by Ryan's Quest and Michael's Cause.

Research Collaborator of PI Kathryn Swoboda, MD. 20% FTE April 2015 – August 2020; 10% FTE August 2020 – Dec 2021. Funded by the following MGH Neurogenetics - based projects:

- A phase 4 study of nusinersen (BIIB058) among patients with Spinal Muscular Atrophy who received Onasemnogene Apeparvovec. <https://clinicaltrials.gov/ct2/show/NCT04488133>. Sponsor: Biogen, Jan. 2021 – Dec. 2021
- A prospective, multi-center, observational study of the safety, tolerability and effectiveness of SPINRAZA in adult patients with Spinal Muscular Atrophy. <https://clinicaltrials.gov/ct2/show/NCT03709784>. Sponsor: Washington University School of Medicine, February 2020 – Dec. 2021
- AVXS-101-LT-002. A Long-term Follow-up Study of Patients in the Clinical Trials for Spinal Muscular Atrophy Receiving AVXS 10. <https://clinicaltrials.gov/ct2/show/NCT04042025>. Sponsor: AveXis, March 2020 – Dec. 2021
- AVXS-101-CL-304 (Phase 3 Clinical Trial): A Global Study of a Single, One-Time Dose of AVXS-101 Delivered to Infants with Genetically Diagnosed and Pre-symptomatic Spinal Muscular Atrophy with Multiple Copies of SMN2 (SPR1NT). <https://clinicaltrials.gov/ct2/show/NCT03505099>. Sponsor: AveXis, 2018 – Dec. 2021.
- An Open-Label Study to Assess the Efficacy, Safety, Tolerability and Pharmacokinetics of Multiple Doses of ISIS 396443 Delivered Intrathecally to Subjects with Genetically Diagnosed and Presymptomatic Spinal Muscular Atrophy (the NURTURE study). <https://clinicaltrials.gov/ct2/show/NCT02386553>. Sponsor: Biogen, 2015 - 2020
- Newborn screening for identification and follow-up of infants with spinal muscular atrophy: SPOT SMA. Funding: R01 HD69045-05, NICHD. 2015 – 2018

Co-investigator, FDA R01 grant submission: 'Development of exRNA biomarkers of myotonic dystrophy type 1' A Natural History Study Addressing Unmet Needs of Rare Diseases: Orphan Products Research Project Grant. PI: Thurman Wheeler, MD (MGH Neurology). 5% FTE. Submitted Jan 2019, not funded.

Co-investigator, R01 grant submission: 'Extracellular RNA as Biomarkers in Neurogenetic Disorders' PI: Thurman Wheeler, MD (MGH Neurology). 5% FTE. Submitted Nov 2018, not funded.

Consultant/Evaluator

F Eichler (MGH Site PI). A Natural History Study of Molybdenum Cofactor and Isolated Sulfite Oxidase Deficiencies Prospective/Retrospective.
Funded by Alexion Pharmaceuticals, Inc.: \$2800; November 2014 – March 2016.

Author, Editor

Physical Therapy Management for Duchenne Muscular Dystrophy: A Resource for Community-based Providers Handbook/website.
Funded by Dillon Foundation Grant, MGH Department of Neurology: \$10,000; May 2013.

Consultant/ Study staff, sub-contract

CM Zaidman (PI). A Phase 1, Multi-center, Controlled, Prospective Correlative Study of Electrical Impedance Myography in Males with Duchenne Muscular Dystrophy and in Healthy Males.
Funded by DART Therapeutics: \$7500; January 2012 – September 2012

Consultant/ Study staff, sub-contract

N Goyal (PI). Safety, tolerability, and effects of L-Arginine on muscles in boys with dystrophinopathy on corticosteroids: A Pilot MRS study.
Funded by Quest Foundation and Race MD Grants: \$7044; September 2011 – July 2012

Co-Investigator

M Torriani (PI). Magnetic Resonance Spectroscopy (MRS) Biomarkers in Muscular Dystrophy.
Harvard Catalyst Pilot Grant: \$3155; 4% FTE (Total grant \$50,000); November 2009-November 2010

Principle Investigator

Effects of a supported standing program on bone mineral density, muscle length, function and health related quality of life in boys with Duchenne muscular dystrophy.
MGH Institute of Health Professions Faculty Research Fellowship: \$10,000; July 2009-June 2010
Hike for Hope Fund, MGH Pediatric Neuromuscular Clinic: \$4,000; May 2009-May 2011

Membership in Scientific/Professional organizations

TREAT-NMD Alliance Neuromuscular Network, member, Jan 2018 - present

American Physical Therapy Association, member 1995-2000; 2003-present

Pediatrics Section 2005-present; Education Section 2005-10; 2017-present; Neurology Section 2005-10

Physical Therapy Association of Massachusetts, member 2005-present

Physical Therapy Association of Minnesota, member 2003-2005

Physical Therapy Association of Virginia, member 1997-2000

Physical Therapy Association of Georgia, student member 1995-1997

Society for Research in Child Development, member, 2000-2007

Center for Neurobehavioral Development, University of Minnesota,

Member, 2001-2005; alumni member 2005-present

Center for Cognitive Sciences, University of Minnesota, Pre-doctoral Affiliate Member, 2002-2005

Cognitive Neuroscience Society, member, 2003-2005

International Society of Exercise Immunology, member 1997-2000

Consultative and Advisory Positions

STEP IN SMA (Spinal Muscular Atrophy Teaching and Excellence for Physiotherapists: An International Network) <https://www.stepinsma.org/>. Physical therapy training team. August 2021 – present.

Consultant: Biogen Global SMA SPINRAZA Physical Therapy Training Team and Advisory Board. MGH IHP contract for up to \$79,240, June 2020-Sept. 2024.

Subject Matter Expert: Aspa Therapeutics (BridgeBio)

A Phase 1/2 Open-Label Study of the Safety and Clinical Activity of Gene Therapy for Canavan Disease Through Administration of an Adeno-Associated Virus (AAV) Serotype-9 Based Recombinant Vector Encoding the Human ASPA Gene (CVN-102). Jan 2020 – present.

A Combination Retrospective Medical History and Prospective Observational Study of Patients with Canavan Disease for Assessment of Natural History of Canavan Disease (CVN-101). January 2019 – present.

Consultant: Biogen. Medical Advisory Board for Functional Outcome Measures in Teen/Adult Spinal Muscular Atrophy (SMA). June 2018.

Consultant: Casimir, LLC. Development of home-based video outcomes for Duchenne Muscular Dystrophy (DMD). May 2018.

Host committee member: “Tackling Duchenne” Annual Fundraiser for JB’s Keys to DMD. Non-profit organization that aims to raise awareness and support quality care, treatments and research for Duchenne muscular dystrophy.
March 2012 - May 2018

Consultant: Infant and toddler shoe development studies for Stride Rite, Wolverine Worldwide
January - November 2013

Professional Service

National Institute of Neurological Disorders and Stroke (NINDS)/NIH working group to review and revise common data elements (CDEs) for *Neuromuscular diseases*, 2023 – 2024

Key Opinion leader for Outcome Measures Selection in Aicardi Goutieres Syndrome Delphi study: A consensus building approach to select outcome measures in AGS, a rare pediatric genetic condition. Phases 1, 2, 3. Children’s Hospital of Philadelphia, PIs: Drs. Francesco Gavazzi & Anjana Sevagamoorthy.

Spinal Muscular Atrophy (SMA) Newborn Screening Motor Function Delphi Study Working Group. Feb 2023 - present. Developing Best Practice Motor Function Outcomes for Those with SMA Identified and Treated Early. PI: Dr. Kristin J Krosschell.

Global Leukodystrophy Initiative Clinical Trials Network (GLIA-CTN) Data Governance/Data Standards Committee, Jan 2021 – present.

Reviewer: Education session proposals for 2021 Academy of Pediatric Physical Therapy Annual Conference, April – May 2021.

Ad hoc Reviewer:

Archives of Physical Medicine and Rehabilitation, March 2020 – present
Physical Therapy Journal, January 2020 – present
Pediatric Physical Therapy, 2011- present
Child Neurology, 2018 - present
Neurology, 2017- present
Physiotherapy Theory and Practice, 2015 – present
PLOS One, 2017 – present

Item Writer: American Board of Physical Therapy Specialties (ABPTS), Specialization Academy of Content Experts (SACE) in Pediatrics, January 2016 – Dec 2017 (two terms).

Reviewer (Textbook): Fettes and Tilson, 2nd Edition. Evidence Based Physical Therapy. FA Davis. Summer 2017

Proposal reviewer for Academy of Pediatric Physical Therapy (APPTAC), 2017

Scientific Abstract Reviewer: 2016 APTA IV STEP Conference. International summer institute for clinicians, educators and researchers in neurologic and pediatric physical therapy, Summer 2015

Reviewer/Contributor: Rothstein JM, Roy, SH & Wolf SL (2013). Rehabilitation Specialist's Handbook, 4th Ed. Pediatric, Muscular Dystrophy and Juvenile Rheumatoid Arthritis sections. FA Davis.

National Institute of Neurological Disorders and Stroke (NINDS)/NIH working group to develop common data elements (CDEs) for *Duchenne muscular dystrophy*, 2012-2013.

National Institute of Neurological Disorders and Stroke (NINDS)/NIH working group to develop common data elements (CDEs) for *Neuromuscular diseases*, 2011-2013.

Grant Reviewer: MGH Center for Integration of Medicine and Innovative Technology (CIMIT), 2011-2013.

Item Writer: National Physical Therapy Examination, Federation of State Boards of Physical Therapy (FSBPT), 2010-2011.

Reviewer (Textbook): JS Tecklin (2008). Pediatric Physical Therapy, 4th Ed. LWW.

Reviewer (Textbook): M Dranch (2008). The Clinical Practice of Pediatric Physical Therapy, 1st Ed. LWW.

Service to the University/College/School on Committees/Councils/Commissions

Institute Wide/School of Health and Rehabilitation Sciences

Associate Director, PhD Program in Rehabilitation Sciences, Aug. 2018 - present

Faculty Task Force: International Student Support, 2023-present

IHP Mentorship Academy Mentor, 2023-present

New Faculty Mentor for Catherine Leslie (OT), June 2020-Dec 2021

Search Committee for OT pediatric faculty position, March 2019 – June 2020

Search Committee for Dean of Enrollment Services, Spring/Summer 2019

Faculty Senate: Faculty Appointments and Promotion Committee, 2013 - 2019

Chair 2015-2016

Search Committee for SHRS Dean, 2017 - 2018

Search Committee for PT Chair, 2016 - 2017

Mentor to new SRHS faculty (for Provost's Office)

Diane Smith (OT), 2015 - 2016

Emily Zeman (OT), 2016 - 2017

Chris Clock (PT), 2017 - 2018
Search Committee for OT pediatric faculty position, 2014 - 2015
Research and Scholarship Committee, 2009 - 2013
Interdisciplinary Seminar Planning Committee, 2006 - 2009
Course and Curriculum Review Committee, 2006 - 2009

Department of Physical Therapy

DPT Admissions committee, 2005 - 2022
Chair 2016 – 2020; 2021 - 2022
PT Faculty Search Committees, 2008-2014; 2016 - 2018
Neuroscience/Motor Control Faculty Search, 2016 – 2018
Cardiovascularpulmonary Faculty Search, 2017
Project lead, Needs assessment for PT continuing education, 2015-2016.
Advisory Board, PT Center for Clinical Education and Health Promotion, 2009-2015
CAPTE Self-study Committee, 2013 - 2014
tDPT Admissions committee, 2007-2013
Committee on Academic Policy and Procedure (CAPP), 2010 – 2012
Entry-level DPT Curriculum Committee, 2005-2010

- Clinical decision-making task force, 2005-2009
- Chair: ELPT Professional Development Plan redesign task force, 2009-2010

IONTA Grant Award Review Committee, 2007-2008
Human Patient Simulation Task Force, 2005-2006

Honors and Awards

2018	APTA Academy of Pediatric Physical Therapy CSM Outstanding Research Abstract Award
2009	Partners in Excellence Team Award for 'ELPT Admissions Leadership'
2007	Partners in Excellence Team Award for 'Improving Clinical Decision Making' Task Force
2003-2004	Doctoral Dissertation Fellowship, University of Minnesota, Graduate School
2002-2004	NIMH National Research Service Award
2001	Honorable Mention, National Science Foundation Graduate Research Fellowship
1997	Commencement Marshall, Emory University School of Medicine
1994	Phi Beta Kappa, University of Virginia
1992-1994	Distinguished Majors Program, University of Virginia

Continuing Education

Cure SMA Annual Conference, June: 2024, 2023, 2021 (virtual), 2020 (virtual), 2019, 2018, 2017, 2016, 2015

MGB Essentials in Leadership Series: Session 1 (Communicates Effectively and Ensures Accountability, March 21, 2023)
Session 2 (Leaders who Instill Trust – July 8, 2023) and 3 (Manages Complexity and Collaborates – Nov. 1, 2023)

Basic Biostatistics for Clinical Research. MGH Biostatistics Center. Jan – Feb 2021, 7.5 contact hours.
Instructor: Dr. Brian Healy, PhD

Applied Biostatistics for Clinical Trials. MGH Biostatistics Center. Feb – March 2021, 6 contact hours. Instructor: Dr. Brian Healy, PhD

Interpreting and Presenting Results – Qualitative and Mixed Methods. MGH Division of Clinical Research. March 16, 2021, 1 contact hour. Instructor: Laura Traeger, PhD

MGH IHP Faculty Lunch Bites: What Are Inclusive Teaching Practices? February 4, 2020
<https://www.lifescied.org/doi/full/10.1187/cbe.19-01-0021>

APTA Combined Sections Meetings, Feb: 2018, 2017, 2016, 2012, 2011, 2008, 2007, 2006

Cultural Considerations for CDM in Diverse Patient/Client populations. APTA Online Learning Center: August 2017

Compassion in Practice: Achieving Better Outcomes by Maximizing Communication, Relationships and Resilience. Harvard Medical School course: October, 2016.

APTA STEP Conference, July: 2016 (IV), 2005 (III)

Parent Project Muscular Dystrophy Annual Conference, June: 2014, 2013, 2010, 2009, 2008

27th International Seating Symposium (ISS), 2011

Annual Meeting of the Massachusetts Chapter of APTA, 2010

11th Annual Advanced Clinical Practice in Pediatric Physical Therapy Meeting, 2008

Current/Recent Teaching Responsibilities:

Course Coordinator, RS 951 PhD RS Teaching Practicum (2018-present)

Course Coordinator, RS 970 PhD RS Mentored Experience in Research (2018-present)

Academic/Research Advising:

- Primary Research Mentor, PhD-RS student Michael Kiefer 2019 - 2023
- Faculty advisor, PhD-RS student Anya Maloney, 2023- present
- Faculty advisor, PhD-RS student Stephen Grist 2022 – present (Chair, Qualifying exam committee)
- Faculty advisor, PhD-RS student Amber Lamarca, 2021- present (Chair, Qualifying exam committee)
- Faculty advisor, PhD-RS student Brenda Lovette 2022 – 2024 (Chair, dissertation committee)
- Faculty advisor, PhD-RS student Meredith Rogazzo 2022 - present
- Faculty advisor, PhD-RS student Katie Golden 2022 - 2023
- Faculty advisor, PhD-RS student Ben Adams, 2019 – 2022
- Academic advisor, 10 Y1/Y2/Y3 DPT students through August 2022
- Faculty advisor, PhD-RS student Danielle Kline, 2018 – 2021
- Dissertation committee, PhD-RS student Julie Shulman, 2019 – 2020
- Qualls Committee, PhD-RS student Catherine Lesley, 2019