CURRICULUM VITAE

Kathleen Joy Manella, PT PhD 3004 Fort Worth Trail Austin TX 78748 786-368-1008 <u>kjmanella@yahoo.com</u>

Education:

- University of Miami, Department of Physical Therapy, Miller School of Medicine PO Box 249117 Coral Gables, FL August 2006 – December 2011 Physical Therapy – Motor Control/Neuroscience Ph.D., December 15, 2011
- University of Southern California, Department of Physical Therapy Los Angeles, CA
 900 W 34th Street
 September 1983 - December 1987
 Physical Therapy – Orthopedics and pediatrics
 M.S., December 1987
- University of Illinois, Department of Physical Therapy West Polk Street Chicago, IL September 1970 – June 1975 Physical Therapy B.S., June 1975

Licensure Information/Registration Number:

- Florida Board of Physical Therapy, #6388, active, 04/03/1990 11/30/2021
- Physical Therapy Board of California, #9016, active, 02/15/1979 12/31/2022
- Texas Board of Physical Therapy Examiners, #1225295, active, 11/19/2012 12/31/2022

Certifications:

- APTA Credentialed Clinical Instructor Level 2 Apr 2022
- APTA Credentialed Clinical Instructor Trainer Level 1 Apr 2014, renewed Apr 2017
- APTA Credentialed Clinical Instructor Level 1 Jan 2014
- Texas Consortium Certified Clinical Instructor Trainer 2013
- Texas Consortium Certified Clinical Instructor 2012

Employment and Positions Held:

Nova Southeastern University Dr. Pallavi Patel College of Health Care Sciences, Clearwater Regional Campus Department of Physical Therapy-FTL-Tampa Professional Hybrid Doctor of Physical Therapy Program 3400 Gulf to Bay Blvd Clearwater FL 33759

• Program Director and Professor May 31, 2022 - present

University of St. Augustine for Health Sciences Doctor of Physical Therapy Program – Austin TX Campus 5401 La Crosse Ave Austin TX 78739

- Associate Professor Jan 2018 May 4, 2022
- Director of Clinical Education Texas Nov 2020 to May 4, 2022
- Assistant Professor Jan 2012 2018
- Academic Coordinator of Clinical Education Jan 2012 Nov 2020
- Teaching Assistant University of Miami, Department of Physical Therapy, Miller School of Medicine PO Box 249117, Coral Gables, FL August 2007 - December 2011
- Research Physical Therapist University of Miami, Department of Neurosurgery, The Miami Project to Cure Paralysis, Miller School of Medicine
 P.O. Box 016960, Mail Locator R-48
 Miami, FL
 June 2006 – January 2010
- Physical Therapist per diem Verdugo Hills Hospital and Home Health Care Glendale, CA January 2006 – May 2006
- Physical Therapist, Owner SouthBay Physical Therapy Pediatric and Home Care Services, Manhattan Beach, CA January1995 – May 2005
- Administrative Director, Support Services California Medical Center – Los Angeles Los Angeles, CA, January1991– January 1995
- Director of Therapies, 1983-1991
 Physical Therapist II Education Supervisor, 1980-1983
 Physical Therapist I, 1978-1980
 Orthopaedic Hospital, Los Angeles, CA,
 October 1978 –January 1991
- Physical Therapist II Supervisor, Orthopedic, Neurology, and Rehabilitation (1977-1978) Physical Therapist I (1975-1977) University of Illinois Hospital, Department of Physical Medicine and Rehabilitation Chicago, IL June 1975 –June 1978

Peer Reviewed Publications:

Peer-reviewed publications, submitted

Campbell DF, Brismee JM, Allen B, Hooper TL, Domenech TA, **Manella K**. Doctor of Physical Therapy Students Clinical Reasoning Readiness and Confidence Treating with Telehealth: A United States Survey. *Journal of Clinical Education in Physical Therapy*. Submitted 05/11/22.

Campbell DF, Brismee JM, Allen B, Hooper TL, Domenech TA, **Manella K**. Ethnicity Does Not Impact Physical Therapy Students' Clinical Readiness and Performance, a United States Exploratory Study. *Internet Journal of Allied Health Sciences and Practice*. Submitted 03/11/2022.

Peer-reviewed publications, accepted, not yet published:

Peer- Reviewed Publications:

- Lewis M, Gleeson P, Wilkinson T, Manella K, Konecne J. Part 1. Payment for clinical education experiences: A historical perspective. *Journal of Physical Therapy Education* 2021; 35(4): 286-293.
- Wilkinson T, Manella K, Myers K, Alhajeri S, Konecne J, Lewis M, et al. Part 2. Payment for clinical experiences in physical therapy: Perspectives from stakeholders. *Journal of Physical Therapy Education* 2021, 35 (4), p 294–306.
- Macon K, Hoang D, Elizondo L, Kallus K, Sulzer J, Manella K. Accuracy and Reliability of Single-Camera Measurements of Ankle Clonus and Quadriceps Hyperreflexia. Arch Rehabil Res Clin Trans, published online 08/27/21 <u>https://doi.org/10.1016/j.arrct.2021.100153</u>
- Akbas T, Kim K, Doyle K, Manella K, Lee RK, Spicer P, Knikou M, Sulzer JS. Rectus femoris hyperreflexia contributes to stiff-knee gait after stroke. *JNER*, 17:117, 2020. https://doi.org/10.1186/s12984-020-00724-z
- Flores MB, Ardolino EM, Manella KJ. Relationship between movement quality, functional ambulation status, and spatiotemporal gait parameters in children with myelomeningocele. *Phys Occup Ther Pediatr.* 2020 Mar 06 [Online ahead of print] https://doi.org/10.1080/01942638.2020.1736233
- Manella K, Wilkinson T. ACAPT NCCE Task Force: Payment for Clinical Experience Report. Jan 21, 2020 <u>https://www.acapt.org/news/news-detail/2020/01/21/current-landscape-payment-for-clinical-experience</u>
- Ardolino EM, Flores MB, Ferreira G, Jeantete SN, Manella KJ: Interrater Reliability of the Pediatric Neuromuscular Recovery Scale in Children with Spina Bifida. *Dev Neurorehabil*, 23:1-6, 2019 doi: 10.1080/17518423.2019.1604581
- Manella KJ, Roach KE, Field-Fote EC: Temporal indices of ankle clonus and their relationship to electrophysiologic and clinical measures in persons with spinal cord injury. *J Neurol Phys Ther*,41:229-238, 2017
- Ardolino E, Flores M, **Manella K**: Gross motor outcomes after dynamic weight bearing in two children with truncal hypotonia: Case Series. *Pediatr Phys Ther*, 29:360-364, 2017

- Kent A, **Manella K**: Aquatic and land-based physical therapy improves functional mobility and quality of life in a patient with Bethlem Myopathy Muscular Dystrophy: A Case Report. *Physiother Rehabil* 2:(1), 1000133, 2017
- Manella KJ, Field-Fote EC: Modulatory effects of locomotor training on extensor spasticity in individuals with motor-incomplete spinal cord injury. *Restor Neurol and Neurosci* 31:633-646, 2013
- **Manella KJ,** Roach KE, Field-Fote EC: Operant conditioning to increase ankle control or decrease reflex excitability improve reflex modulation and walking function in chronic spinal cord injury. *J Neurophysiol 109:2666-2679, 2013*
- **Manella KJ:** Operant conditioning of tibialis anterior and soleus H-reflex improves spinal reflex modulation and walking function in individuals with motor-incomplete spinal cord injury. *Open Access Dissertations,* Paper 679, 2011
- **Manella KJ**, Torres J, Field-Fote EC: Restoration of walking function in an individual with chronic complete (AIS A) spinal cord injury. *J Rehabil Med*, 42:795, 2010
- Manella KJ, Varni JW: Behavioral treatment of ambulatory function in a child with myelomeningocele. *Physical Therapy*, 64(10): 1536-1539, 1984
- Feldman WS, **Manella KJ**, Varni JW: A behavioural parent training programme for single mothers of physically handicapped children. *Child: Care, Health and Development,* 9: 157-168, 1983
- Killam PE, **Manella KJ**, Apodaca L, Varni JW: Behavioral pediatric weight rehabilitation in myelomeningocele: program description and therapeutic adherence factors. *The American Journal of Maternal Child Nursing*, 8: 280-286, 1983
- Feldman WS, **Manella KJ**, Apodaca L, Varni JW: Behavioral group parent training in spina bifida. *Journal of Clinical Child Psychology*, 11(2): 144-150, 1982
- **Manella KJ**, Varni JW: Behavior therapy in a gait training program for a child with myelomeningocele. *Physical Therapy*, 61(9): 1284-1287, 1981
- **Manella KJ**: Comparing the effectiveness of elastic bandages and shrinker socks for lower extremity amputees. *Physical Therapy*, 61(3): 334-337, 1981. Reprinted in: *Orthotics and Prosthetics*, 30-34, 1982

Peer Reviewed Scientific and Professional Presentations:

Abstracts Submitted

Abstracts Accepted:

• Tucker-Roghi G, Manella K, Williams K, Anderson J. Ensuring a Knowledgeable Geriatric Workforce: Interdisciplinary Education in Long Term Services and Supports. The Gerontological Society of America Annual Scientific Meeting. Symposium #1225319. Inidanapolis IN November 2-6, 2022.

Abstracts Presented

- Campbell DF, Brismee JM, Allen B, Hooper TL, Domenech MA, Manella K. Clinical Reasoning Readiness and Confidence of DPT Students with PT Interventions Using Telehealth. Combined Sections Meeting (CSM) 2022. Poster #3034. San Antonio TX February 2-5, 2022.
- Flores MB, **Manella KJ**, Ardolino EM. The Disconnect Between Quality of Movement Versus Quality of Life in Children with Spina Bifida. Combined Sections Meeting (CSM) 2022. Poster #1220. San Antonio TX February 2-5, 2022.
- **Manella KJ**, Macon KB, Elizondo L, Kallus K, Sulzer JS. Smartphone video reliably measures reflex threshold angles related to ankle clonus and quadriceps spasticity. Combined Sections Meeting (CSM) 2022. Poster #1095. San Antonio TX February 2-5, 2022.
- K. Kim, K. Manella, R. Lee, and J. Sulzer. Operant conditioning of RF H-reflex for treatment of spasticity. Society for Neuroscience Conference (SfN) 2021. Poster. online November 8-11, 2021
- **Manella K**, Anderson J, Williams K. Providing students with a Virtual Telehealth Clinical Experience through an Academic/Clinical Partnership ELC 2021 Conference, Oct 22 2021, poster #172
- Manella K, Anderson J, Williams K. Amidst the COVID-19 environment: Providing students with a virtual telehealth clinical experience through an academic/clinical partnership. WCPT Congress 2021 Virtual Conference, Apr 8-10, 2021, poster # 1447.
- Manella KJ, Macon KB, Elizondo L, Kallus K, Sulzer JS. Clinical Innovation: Reliability of single-camera smartphone video to measure plantar flexor and quadriceps reflex threshold angles in people with ankle clonus or quadriceps spasticity. WCPT Congress 2021 Virtual Conference, Apr 8-10, 2021, platform presentation #1472
- Flores M, Manella K, Ardolino A. Choosing the right tool: Quality outcome measures for children with spina bifida. APTA Pediatrics Annual Conference 2020 Virtual Conference, Nov 13 – 15, 2020. Platform Presentation
- Manella K, Wilkinson T, Alhajeri S, Dunn J, Lewis S. Stakeholder perspectives on payment for clinical experience: NCCE taskforce summary findings and final recommendations. ELC 2020 Virtual Conference, Platform Presentation Oct 16-18, 2020
- Manella KJ, Hidalgo L, Demers K, Rogulj B. Simulation expands student physical therapist professional skills and clinical reasoning. International Meeting of Simulation in Healthcare (IMSH) 2020, San Diego CA, Hot Topic Presentation, 01/20/20
- Kim K, Manella K, Lee R, Sulzer J. Operant conditioning of monosynaptic spinal reflexes for treatment of post-stroke quadriceps hyperreflexia. Real-Time Functional Imaging and Neurofeedback Conference. Maastricht-Aachen Switzerland, Poster accepted, 12/07-11/19
- Manella K, Wilkinson T. Staying on Task: Successful Strategies of the NCCE Task Force on Payment for Clinical Experience. Educational Leadership Conference (ELC) 2019, Bellevue WA, Educational Presentation, 10/18/19

- **Manella K**, Building the Next Rehabilitation Health Care Workforce. North Texas State of Reform Health Policy Conference 2019. Irving TX, Panel Presentation, 09/12/2019
- Kim K, Akbas T, **Manella K**, Lee R, Sulzer J. Operant conditioning of RF H-reflex for treatment of spasticity. UT-Austin Center for IPE Health Showcase, Poster, 05/03/19
- Macon K, **Manella K**, Sulzer J. Validating a single camera method for measuring ankle clonus impairment. UT-Austin CARE Research Day, Austin TX, Poster, 04/05/19
- **Manella KJ,** Field-Fote EC. Overground locomotor training modulates ankle flexor and extensor reflex activity in people with spinal cord injury. UT-Austin CARE Research Day, Austin TX, Poster, 04/05/19
- Ardolino E, Flores M, Ferreira G, Jeantete S, Manella K. Interrater reliability of the Pediatric Neuromuscular Recovery Scale in children with spina bifida. CSM 2019 Washington DC, Poster, 01/25/19
- Nitsch W, **Manella K**, Liphart J, Peters-Brinkerhoff C. Roberts T. Development of a physical therapy faculty workload measurement tool. CSM 2019, Washington DC, Poster, 01/24/19
- Nitsch W, Manella K, Liphart J, Peters-Brinkerhoff C. Roberts T. Development of a physical therapy faculty workload measurement tool. WASC Academic Resource Conference Burlingame CA, Poster, 04/26/18.
- Doyle K, Neuendorff E, Kathuria R, Akbas T, Manella K, Lee R, Sulzer J. Revealing the underlying neurophysiology behind abnormal lower-limb reflex couplings in post-stroke gait using H-reflex stimulation. UT CARE Research Day, University of Texas at Austin. Poster. 04/13/18
- Kyoungsoon K, Akbas T, **Manella K**, Lee R, Sulzer J. Operant conditioning of RF H-reflex for treatment of spasticity. CARE Research Day, University of Texas at Austin. Poster. 04/13/18
- Ardolino E, Flores M, **Manella K**. Beyond positioning: Addressing truncal hypotonia in the pediatric population. CSM 2018 New Orleans, Educational Session. 02/23/18
- Akbas T, **Manella K**, Lee R, Sulzer J. Revealing the underlying neurophysiology behind abnormal lower-limb reflex couplings in post-stroke gait using H-reflex stimulation. Mission Connect Symposium TIRR Foundation. Houston TX, Poster, 12/08/17
- Kyoungsoon K, Akbas T, Manella K, Lee R, Sulzer J. Operant conditioning of RF H-reflex for treatment of spasticity. Mission Connect Symposium TIRR Foundation. Houston TX, Poster, 12/08/17
- **Manella KJ.** Measuring Ankle Clonus: There's an App for That! UT-Austin CARE Initiative Blitz Presentation, Austin TX, 11/17/17
- Manella KJ, Field-Fote EC. Locomotor training effects on pulmonary function, mobility, and participation in four children with spinal cord injury. WCPT 2017 Cape Town South Africa, Poster No. RR-PO-09-02-TUE, 07/04/17
- **Manella KJ**, Roach KE, Field-Fote EC. Operant conditioning of tibialis anterior and soleus *H*reflex improves spinal reflex modulation and walking function in individuals with motorincomplete spinal cord injury. WCPT 2017 Cape Town South Africa, Poster No. RR-PO-09-

01-TUE, 07/04/17

- Nitsch W, Liphart J, Manella K, Peters-Brinkerhoff C. Development of a physical therapy faculty workload measurement tool. WCPT 2017 Cape Town South Africa, Poster No. SI-PO-02-18-TUE, 07/04/17
- Manella KJ, Sawtelle, M. Opportunities for Collaboration in Translational Research, UT-Austin CARE Initiative Lecture, Austin TX, 08/12/16
- Manella KJ, Field-Fote EC. Overground locomotor training modulates ankle flexor and extensor reflex activity in people with spinal cord injury. Columbus OH: IV STEP 2016. Poster No. 36. 07/17/2016
- **Manella KJ,** Field-Fote EC. Locomotor training effects on pulmonary function, mobility, and participation in four children with chronic incomplete spinal cord injury. Anaheim CA: APTA CSM 2016. Poster No. 3281. *Pediatric Physical Therapy*, 28(1): E8-E54, 2016
- Ardolino E, Barta K, Flores M, Sawtelle M, Manella K. Neuroplastic Treatment Approach: Optimizing movement and function. Arlington TX: TPTA Annual Conference 2015. Professional Course. 10/24/2015
- Manella KJ, Field-Fote EC. Operant conditioning of tibialis anterior and soleus H-reflex improves spinal reflex modulation and walking function in individuals with motor-incomplete spinal cord injury. Salt Lake City, UT: APTA 2013. Poster No. 1037.h. Online. <u>http://apps.apta.org/custom/abstracts/pt2013/AbsAuthIndex.cfm</u>
- Manella KJ, Field-Fote EC. Operant conditioning of tibialis anterior and soleus H-reflex improves spinal reflex modulation and walking function in individuals with motor-incomplete spinal cord injury. Program No. 475.1. 2012 Neuroscience Meeting Planner. New Orleans, LA: Society for Neuroscience, 2012. Online. <u>http://www.abstractsonline.com/Plan/SSResults.aspx</u>
- **Manella KJ**, Field-Fote EC. Operant conditioning of tibialis anterior and soleus H-reflex improves spinal reflex modulation and walking function in individuals with motor-incomplete spinal cord injury. Chicago, IL: CSM, 2012. Online. <u>http://journals.lww.com/jnpt/Documents/NeurologyPosterAbstracts_CSM_2012.pdf</u>
- Manella KJ, Field-Fote EC. Ankle Clonus Drop Test and angle of muscle reaction for assessing plantar flexor spasticity after spinal cord injury. 2010 Combined Sections Meeting, San Diego, CA: American Physical Therapy Association, 2010. Online. http://journals.lww.com/jnpt/Documents/Neuro%20Posters%20CSM%202010.pdf
- **Manella KJ**, Field-Fote EC. Biomechanical measures of ankle clonus correlate with clinical and electrophysiologic reflex measures. Program No. 861.16. 2009 Neuroscience Meeting Planner. Chicago, IL: Society for Neuroscience, 2009. Online. http://www.sfn.org/
- **Manella KJ**, Field-Fote EC: Disordered motor output in spinal cord injury: Ankle clonus, electromyographic activity, and neurological mechanisms. (*Poster presentation; Section on Research Retreat, APTA, August 10, 2009*)
- Manella KJ, Field-Fote EC: EMG activation patterns during ankle clonus in individuals with

incomplete spinal cord injury. (*Poster presentation; Annual Conference, American Physical Therapy Association, Baltimore MD, June 11, 2009*)

- **Manella KJ**, Field-Fote EC: EMG Activation patterns of plantar flexor and tibialis anterior muscles during clonus in chronic spinal cord injury. (*Platform presentation #617.7; Neuroscience 2008, Society for Neuroscience, Washington DC, November 18, 2008*
- **Manella KJ,** Field-Fote E: Ankle Clonus Drop Test: The validity of a new biomechanical test of plantar flexor hyperexcitability in spinal cord injury. *JNPT, 31:198, 2007.(Platform Presentation; Combined Sections Meeting, APTA, Nashville, TN, February, 2008*
- **Manella KJ**, Walker JM, Hislop HJ: Isokinetic torque of ankle musculature in adolescent females and males. *13th International Congress Proceedings of the World Confederation for Physical Therapy (WCPT)*, May, 1999. (Platform Presentation; Yokohama, Japan, May, 1999)
- Horlick KA, Manella KJ: A safety committee that works. 4th National Symposium and Trade Exhibition on Health Care Safety, Proceedings, Book 2, pp 1099-1125, February, 1994. (Platform Presentation; Orlando, FL, February, 1994)
- **Manella KJ**, Jeffries JS, Varni JW: Adherence to healthcare behaviors in the prevention of pressure sores by adolescents with spina bifida. *Tenth International Congress Proceedings of the World Confederation for Physical Therapy (WCPT),* Book I, pp 298-302, May, 1987. (Platform Presentation; Sidney, Australia, May 1987)
- **Manella KJ**: Behavioral medicine in the management of spina bifida, *Ninth International Congress Proceedings, World Confederation for Physical Therapy,* pp 381-385, May 1982. (Platform Presentation; Stockholm, Sweden, May 1982)

<u>Peer Reviewed Scientific and Professional Presentations (those not previously cited above under abstracts)</u>:

- *Isokinetic Ankle Strength in Adolescence.* Poster Presentation, APTA/CPA Joint Conference, Las Vegas, NV, June, 1988
- *Percent Body Fat in Adolescent Females.* Poster Presentation, APTA Annual Conference, San Antonio, TX, June, 1987
- Comparing the effectiveness of elastic bandages and shrinker socks for lower extremity amputees. Speaker Presentation, APTA, Post Conference, Cancun, Mexico, June, 1984
- *Wheelchair Cushion Center.* Poster Presentation, APTA Annual Conference, New Orleans, LA, June, 1984
- Prevention of Pressure Sores by Adolescents with Spina Bifida. Speaker Presentation, 5th Annual Meeting, Society of Behavioral Medicine, Philadelphia, PA, May, 1984

Invited Lectureships:

- **Manella KJ**. Clinical tests and interventions for lower extremity hyperreflexia. UT-Austin Dept Kinesiology & Health Education, Movement and Cognitive Rehabilitation Science Graduate Seminars, Lecture, Dec 6, 2021.
- **Manella KJ**, Macon KB. Clinical tests and interventions for lower extremity hyperreflexia to improve function in individuals with spinal cord injury. UT-Austin Rehab Engineering Class guest lecturer, March 10, 2020
- **Manella KJ**. *Finding evidence in a clinic minute.* Texas Consortium Biennial Clinical Educators Workshop, Dallas TX, July 09, 2017
- **Manella KJ.** *Opportunities for collaboration in translational research.* University of Texas CARE Initiative, Austin TX, August 10, 2016.
- Barta K, Manella K, Sawtelle M, Flores M, Ardolino A. Neuroplastic treatment approach: Optimizing movement and function. TPTA Annual Conference, Arlington TX, October 24, 2015
- **Manella KJ,** Mike Geelhoed, Steve Spivey, Chad Jackson. *Clinical Instructor Certification: Part II.* Texas Consortium for Physical Therapy Education. Austin TX, May 3, 2014
- **Manella KJ**. *What's Hot in Governmental Affairs*. Capital Area District Meeting. Austin TX. 1-1-hour presentation broadcasted to 5 satellite locations. March 30, 2014
- **Manella KJ.** *Clinical education in your physical therapy practice.* USAHS-TXAU Physical Therapy Symposium, Austin TX, February 9, 2013.
- Ardolino E, **Manella KJ.** *Theory of locomotor training in adult and pediatric neurologic disorders.* USAHS-TXAU Physical Therapy Symposium, Austin TX, February 9, 2013.
- Ardolino E, **Manella KJ**, Werner T. *Evidence-based physical therapy practice*. USAHS-TX AU Physical Therapy Symposium, Austin TX, February 9, 2013.
- **Manella KJ.** Operant conditioning of tibialis anterior and soleus H-reflex improves spinal reflex modulation and walking function in individuals with motor-incomplete spinal cord injury. TWU Annual PT/PTA Faculty Summit, Houston TX, April 14, 2012
- Manella KJ. Innovation Required: Locomotor training and summer camp for children with spinal cord injury. 7th Annual Pediatric Brain and Spinal Cord Injury Conference, Coconut Grove, FL, November 10, 2009
- Manella KJ. Neuroplastic and functional effects of increasing voluntary control versus decreasing reflex activity. The Miami Project to Cure Paralysis Seminar Series, Miller School of Medicine, University of Miami, Miami FL, April 22, 2009
- **Manella KJ.** *Importance of Residual Limb Wrapping and Gait Training.* Amputations and Prosthetics Seminar for Physicians and Therapists, Austin, TX, September, 1984
- Manella KJ. Comparing the effectiveness of elastic bandages and shrinker socks for lower extremity amputees. American Academy of Orthotists and Prosthetists, San Diego, CA, May, 1982

Funded/In Review Grant Activity:

• **Participation:** Principle Investigator, 01/2018 – ongoing \$1,500

Using the ankle clonus drop test, quadriceps pendulum test, smartphone, and software application in the lived environment to measure plantar flexor and quadriceps reflex threshold angle and oscillations

Aim: to create an inexpensive, easy to use clinical tool for objective measurement of ankle clonus and quadriceps spasm severity

Funding: University of St. Augustine for Health Sciences, DPT Program Director (Manella K)

• **Participation:** Principal Investigator, 09/15/2016 – 12/15/2016 \$6,000

Development of a clinical tool for the Ankle Clonus Drop Test.

AIM: To design a clinically useful and cost-effective tool for measuring ankle clonus plantar flexor reflex threshold, oscillations in 10 seconds, and soleus/tibialis anterior coactivation ratio.

Funding: University of St. Augustine Internal Research Grant (Manella, KJ)

- Participation: Co-Investigator, 12/16/2015 12/31/2018
 - \$11,634

Interrater Reliability of the Pediatric Neuromuscular Recovery Scale for Children with Spina Bifida

Aim: To investigate the interrater reliability of the Pediatric NRS for children with spina bifida. Funding: University of St. Augustine BOD Grant (Ardolino, E)

• **Participation:** Content Expert Clinician, 01/09/14 – 02/19/14 \$15,000

Aim: Establish content validity and inter-rater reliability of the Pediatric Neuromuscular Recovery Scale (NRS) for measuring function after SCI and 1) recovery of pre-injury, typical movements or 2) ability to perform developmentally-expected motor behaviors in children. Funding: Craig H. Nielsen Foundation, 260284 (Behrman, A)

 Participation: Co-investigator, 04/01/08 – 01/22/10 \$55,000
 Locomotor training in children with spinal cord injury: a summer camp format Aim: Investigate optimal frequency for locomotor training effects on outcome measures for walking, mobility, balance and quality of life in children with incomplete spinal cord injury 04/01/08 – 03/31/10

Funding: James Annenberg LaVea Charitable Foundation (Field-Fote, EC)

- Participation: Test Administrator, 09/20/07 01/22/10 Improving Hand and Arm Function in Individuals with SCI Aim: Identify optimal parameters for training skilled hand and arm use in individuals with tetraplegia. Measures include functional, neurophysiologic and quality of life outcomes. 09/20/07 – 07/31/12 Funding: National Institutes of Health, NICHD R01HD053843-01A1 (Field-Fote, EC)
- Participation: Study Coordinator, Test Administrator, 06/01/06 12/31/08 Improving the Physical and Mental Health Status of Individuals with Motor-Complete Spinal Cord Injury

Aim: Determine whether locomotor training can improve the health and health-related quality of life of individuals with motor-complete spinal cord injury 06/01/06 – 05/31/08 Completed: 12/31/08 Funding: Craig H. Nielsen Foundation (Field-Fote, EC)

 Participation: Study Coordinator, Test Administrator, 06/01/06 – 12/31/08 \$233,006
 Comparison of post-SCI locomotor training techniques.
 Aim: Compare functional and neurophysiologic outcomes associated with four different

forms of body weight supported treadmill-based locomotor training versus body weight supported overground locomotor training 06/01/02 – 05/31/08 Completed: 12/31/08 Funding: National Institutes of Health, NICHD, R01HD41487 (Field-Fote, EC)

 Participation: Investigator (Master's degree thesis research project) \$1000
 Isokinetic Evaluation of Ankle Musculature in Adolescent Males & Females Aim: Establish normative isokinetic data for ankle muscles in adolescent population Approved: 01/10/86, Completed: 9/04/87
 Funding: California Physical Therapy Association, CAL-PT-Fund (Manella KJ)

Current/Active Research Activity:

- Flores M, Manella K. Effects of Whole Body Vibration on Motor Function in Children with Neurologic Deficits (2021- present)
- Flores M, Ardolino E, Manella K. Pediatric Outcome Measures for Children with Spina Bifida Survey (2021 present)
- UT CARE Spinal Cord Injury Research Interest Group (SCI-RIG) 01/23/20 Founding Member
- Upadhyaya R, **Manella K**, Sulzer J. Normative Data for Plantar Flexor and Quadriceps Reflex Threshold Angle using a Single-Camera Video Test. Co-Investigator, UT Rehab Engineering Class Project Proposal Development (2020 – present)
- Sulzer J, **Manella K,** Lee R Investigating abnormal reflex coordination during gait after stroke. Funding: Planned R01 Grant Application, University of Texas (2019 - present)
- **Manella KJ**, Macon K, Hoang D, Sulzer J. Development of a web-based clinical tool for the Ankle Clonus Drop Test and Quadriceps Pendulum Test, (2017- present)
- Salinas F, Okedara O, Macon K, Abdul-Habib C, Sulzer J, Manella K Prototype of clinical tool for ankle clonus drop test. Funding: Internal, University of St. Augustine, University of Texas (08/2016 - 12/2016)
- Manella KJ, Field-Fote EC EMG Activation during ankle clonus in SCI (to be submitted to Muscle & Nerve) Funding: Internal, University of St. Augustine (2016 - present)
- Manella KJ, Field-Fote EC

Effects of vibration-enhanced locomotor training on pulmonary function, mobility, and quality of life in children with spinal cord injury: A case series (to be submitted to Ped Phys Ther) Funding: Internal, University of St. Augustine (2016 – present)

Continuing Education Workshops Presented:

- CCIP Level 1 Course (1.6 CCU) Virtual 10/02-03/2021
- Texas Consortium CI Course Part 2, (0.4 CCU) Virtual 07/14/20
- CCIP Level 1 Course (1.6 CCU) Austin TX 09/20-21/2019
- CCIP Level 1 Course (1.6 CCU) Dallas TX 08/03-04/2019
- CCIP Level 1 Course (1.6 CCU) Houston TX 03/30-31/2019
- CCIP Level 1 Course (1.6 CCU) Austin TX 11/10-11/2018
- CCIP Level 1 Course (1.6 CCU) Dallas TX 08/03-04/2018
- CCIP Level 1 Course (1.6 CCU) Houston TX 04/07-08/2018
- CCIP Level 1 Course (1.6 CCU) Dallas TX 08/05-06/2017
- *Finding evidence in a "clinic minute".* 2017 Clinical Educators Biannual Workshop, Texas Consortium for Physical Therapy Clinical Education, Texas Woman's University, Dallas TX, July 14, 2017
- CCIP Level 1 Course (1.6 CCU) Frisco TX 03/10-11/2017
- CCIP Level 1 Course (1.6 CCU) Oak Brook IL 04/09-10/2016
- CCIP Level 1 Course (1.6 CCU) Mesquite TX, 11/06-07/2015
- Neuroplastic Treatment Approach: Optimizing Movement and Function (.4 CCU) TPTA Annual Conference, Arlington TX, 10/24/2015
- CCIP Level 1 Course (1.6 CCU) Austin TX 08/07-08/2015

Manuscript Reviewer:

- Journal of Spinal Cord Medicine, 2018 present, number of reviews: 5
- Journal of Neurologic Physical Therapy, 2017 present, number of reviews: 2
- Journal of Neuro Engineering and Rehab, 2013, number of reviews: 1
- Experimental Brain Research, 2013 2014, number of reviews: 2
- Clinical Neurophysiology 2011 2014, number of reviews: 2

Continuing Education Workshops Organized:

- <u>Getting and Keeping Your Texas PT License</u> (0.2 CCU) Austin TX 10/04/18 Organized presentation by Texas Board of PT Examiners for students and clinicians on license application, renewal, remaining in good standing, and updates to Practice Act
- <u>Capital Area District Ethics Course</u> (.2 CCU) Austin TX Organized course across a network of 5 satellite locations using GoToMeeting. Course is required for Texas PT Licensure Renewal *Ethics for Physical Therapist Practice. 09/14/15 Foundation for Decision Making: Influence of Values.* 09/22/14
- <u>Capital Area District Continuing Education Courses</u> (.4 CCU) Austin TX Concurrent topics. *Best Practices in Concussion Management and Innovative Strategies for Preserving Bone Health: Osteoporosis Across the Lifespan 09/12/14*
- <u>Tools for Implementing Evidence-Informed Practice</u> (.2 CCU) Dallas TX, 07/11/14 Workshop presented at the 28th Biannual Clinical Educators' Workshop to promote

discussion and sharing of how to implement evidence-informed practice.

 <u>Physical Therapy Symposium</u> (.6 CCU) (Austin TX, 02/09/13 Current topics in physical therapy included: Orthopedics/TMJ, Adult/Pediatric Neurology Locomotor Training, Integumentary/Diabetes & Wound Healing, Practice Management, Anatomy & Anatomical Arts

Membership in Scientific/Professional Organizations:

- Society for Simulation in Healthcare (SSH), member, 2019 present
- Clinically Applied Rehabilitation Research and Engineering (CARE) Initiative, Cockrell School of Engineering, University of Texas-Austin, member, 2014 present
- American Physical Therapy Association (APTA), 1973 present Texas Physical Therapy Association, 2011– present Education Section, APTA, 2011 - present Pediatrics Section, APTA, 1995 – present Neurology Section, APTA, 2006 - present Research Section, APTA, 2006 – present Florida Physical Therapy Association, 2006 – 2011 California Chapter APTA, 1978 – 2006 Home Health Section, APTA, 1995 - 2005 Private Practice Section, APTA, 1995 – 2000 Education Section, APTA, 1980-90 Illinois Chapter APTA, 1973 – 1978
- Texas Consortium for Physical Therapy Clinical Education
 - Chair October 2020 July 2021
 - Associate Member, January 2013 2022
- Society for Neuroscience, member 2009 2012
- Appointed and Elected Positions: North Texas State of Reform Health Policy Conference 2019, Convening Panel Member, 5/2019 – 09/2019
 NCCE Task Force on Payment for Clinical Experience, 2017-2019 Co-Chair, 2017 - 2021
 NCCE (ACAPT APTA) Director at Large, 2015 - 2018
 TPTA Liaison to Texas Board of PT Examiners, 2015 - 2021
 Government Affairs Liaison, Capital Area District, TPTA, 2012 – 2019
 Vice – Chair, Pediatrics SIG, TPTA, 2012 - 2014
 Director, Area 3, Chapter Board, California Chapter APTA, 1988 - 1990
 Coordinator, Research Program, California Chapter APTA, 1988 – 1990
 Delegate, California Chapter, House of Delegates, APTA, 1983-85, 1987-89
 Chairperson, Nominating Committee, Education Section, APTA, 1982, 1983

Consultative and Advisory Positions Held:

- Member, Healthcare Workforce Alliance of Central Texas (2011 2018)
 - Health Industry Steering Committee
 - Allied Health Subcommittee

Member, AISD, Career and Technical Education Advisory Committee (CTEAC) (2011 – present)

Community Service:

- Volunteer, Project Medishare for Haiti, Miami, FL, Hospital Bernard Mevs, Port-au-Prince, Haiti (2011)
- Ambassador, Downtown Los Angeles Neighborhood Council, Los Angeles Community Policing Program, Los Angeles Police Department (1991 – 1995)
- Coordinator/Consultant, Downtown Los Angeles Beautification Program, Los Angeles Conservation Corps (1991 – 1995)
- Wellness/Fitness Consultant, Road Runner/LA Leggers Training Program, Los Angeles Marathon (1985 1990)
- Medical Aid Station Coordinator, Los Angeles Marathon (1985 1990)
- CPR, BCLS Instructor, Greater Los Angeles Area, AHA (1983 1991)

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

- USAHS University-wide
 - Student Clinical Education Experience Design Team 2021
 - Work Group on CAPTE Standards Reaffirmation, 2019 2022
 - Work Group on Simulation curricular thread, 2019 2022
 - Work Group on Development of IPE curricular thread 2019 2022
 - Faculty Council
 - Vice Chair 01/2018 05/01/2021
 - Member 08/2015 01/2018
 - Curriculum Change Taskforce
 - Member 01/2015 12/2017
 - Faculty Workload Taskforce
 - Member 10/2014 to 2021
- USAHS DPT Program
 - Faculty Advisor TPTA Capital Area District Student Liaisons Committee 2012 - 2021

Honors and Awards:

- 2021 Nomination USAHS Excellence in Innovation Faculty Award
- 2021 Nomination USAHS Excellence in Scholarship Faculty Award
- Featured Researcher Award, California Physical Therapy Association, CAL-PT-Fund, 2016
- Recipient, Margaret Whelan Graduate Student Scholarship Fund, Travel Award, Medical Faculty Association, University of Miami, 2008
- Recipient, Signe Brunnstrom Award for Excellence in Clinical Teaching, American Physical Therapy Association, 1988
- Recipient, Mary McMillan Scholarship, American Physical Therapy Association, 1987

Continuing Education Attended: last 5 years

- 2022 CSM APTA San Antonio
- 2021 ELC APTA Atlanta
- 2021 WCPT Virtual

- 2020 ELC APTA Virtual
- 2020 IMSH, San Diego CA
- 2019 ELC APTA, Bellevue WA
- 2019 CSM APTA, Washington DC
- 2018 ELC APTA, Jacksonville, FL
- 2018 CSM APTA, New Orleans, LA
- 2017 ELC APTA, Columbus OH
- 2017 WCPT Cape Town, South Africa

<u>Current Teaching Responsibilities in the Entry-level Physical Therapy/Physical Therapist</u> <u>Assistant Program, if any (in sequence by term; specify term)</u>:

Proposed Teaching Responsibilities in the Proposed Entry-level Physical Therapy/Physical Therapist Assistant Program (in sequence by term; specify term):

Thesis and Dissertation Projects

- Jeonghwan Lee. Sensitivity comparison of inertial to optical motion capture during gait: implications for tracking recovery. Walker Department of Mechanical Engineering, Cockrell School of Engineering, University of Texas at Austin, dissertation development, Sep 2021 – present, advisor.
- Kyoungsoon Kim. Operant conditioning of rectus femoris H-reflex for treatment of spasticity in post stroke stiff knee gait. Walker Department of Mechanical Engineering, Cockrell School of Engineering, University of Texas at Austin, dissertation development, Sep 2018 – present, advisor.
- Keith B. Macon. Reliability of Single Camera-Motion Capture for Clinical Tests of Plantar Flexor and Quadriceps Hyperreflexia. Walker Department of Mechanical Engineering, Cockrell School of Engineering, University of Texas at Austin, thesis development, Sep 2018 – 2020, advisor, reader.
- Sung Yul Shin. Towards better assessment and training of kinematics in post-stroke gait therapy, Mechanical Engineering, School of Engineering, University of Texas at Austin, Dissertation, May 2019, committee member.