MARGHURETTA DAKOTA BLAND PT, DPT, MSCI Board-Certified Clinical Specialist in Neurologic Physical Therapy CURRICULUM VITAE

DATE June 22, 2023

CITIZENSHIP USA

CONTACT INFORMATION

Work: Program in Physical Therapy 4444 Forest Park Blvd MSC: 8502-66-1101 St. Louis, MO 63108 314-273-5660 blandm@wustl.edu

PRESENT POSITION

2018-present

Associate Professor Physical Therapy, Neurology, Occupational Therapy Washington University

EDUCATION

2004 BS	Biology	Canisius College, Buffalo, NY
2007	T32 Pre-Doctoral Clinical Fellowship	Washington University, St. Louis MO
2008 DPT	Physical Therapy	Washington University, St. Louis MO
2008 MS	Clinical Investigation	Washington University, St. Louis MO

ACADEMIC POSITIONS/EMPLOYMENT

2008-2009	Physical Therapist, Brooks Rehabilitation Hospital, Jacksonville FL
2009	Physical Therapist (part-time), St. Catherine Laboure Manor, Jacksonville FL
2009-2011	Research Physical Therapist, Program in Physical Therapy, Washington University, St.
	Louis MO
2010-2011	Physical Therapist (part-time), Des Peres Hospital, St. Louis MO
2011-2013	Instructor, Physical Therapy and Neurology, Washington University, St. Louis MO
2013-2018	Assistant Professor, Physical Therapy, Neurology, Occupational Therapy, Washington University, St. Louis MO
2015-2019	Physical Therapist (part-time), The Rehabilitation Institute of St. Louis, St. Louis MO
2018-present	Associate Professor, Physical Therapy, Neurology, Occupational Therapy, Washington University, St. Louis MO

TEACHING TITLE and RESPONSIBILITIES

Current Teaching Responsibilities:

25% Effort

Module 2, Professions and Movement Lecturer Class Size: 75-100 Professional Clinical Doctorate (DPT) Curriculum (WUSM)

Module 3, Movement & Population Health Lecturer, Laboratory Teaching Assistant Class Size: 75-100 Professional Clinical Doctorate (DPT) Curriculum (WUSM) Module 5, Prevention, Diagnosis, and Management of Movement-Related Problems Lecturer, Laboratory Teaching Assistant Class Size: 75-100 Professional Clinical Doctorate (DPT) Curriculum (WUSM)

Module 6, Prevention, Diagnosis, and Management of Complex Movement-Related Problems Module Team, Lecturer, Laboratory Teaching Assistant Class Size: 75-100 Professional Clinical Doctorate (DPT) Curriculum (WUSM)

UNIVERSITY and HOSPITAL APPOINTMENTS and COMMITEES

2009-2018	Coordinator, Brain Recovery Core
2016-2021	Member, Transitions of Care Committee, Washington University CIPE
2022	Chair, Transitions of Care Committee, Washington University CIPE

CURRENT PHYSICAL THERAPY LICENSURE and CERTIFICATION

	Missouri #2008021477
2008	Credentialed Clinical Instructor, American Physical Therapy Association
2011, 2020	Certified Specialist in Neurologic Physical Therapy (NCS), American Board of Physical
	Therapy Specialties

HONORS and AWARDS

Canisius College Co-Curricular Leadership Scholarship for students exhibiting		
leadership in academics as well as community involvement		
ECAC All-Academic Honors		
Academic All-American, Synchronized Swimming		
National Collegiate Athletic Association, Division I		
Canisius Earning Excellence Program Grant Recipient for combined student and		
faculty research, Washington University Department of Psychiatry in collaboration with		
Canisius College Department of Biochemistry		
Canisius College James Jordan Scholarship for students entering the medical		
profession		
Steven J. Rose Research Award Co-recipient for a physical therapy student		
demonstrating excellence in research		
Academy of Neurologic Physical Therapy, Emerging Leader Award		

MANUSCRIPT REVIEWER AND EDITORIAL RESONSIBILITIES

- Reviewer for: Archives of Physical Medicine and Rehabilitation
 - Clinical Interventions on Aging Disability and Rehabilitation International Journal of Physical Medicine and Rehabilitation Journal of Neurologic Physical Therapy Journal of the American Physical Therapy Association Physiotherapy Canada Qualitative Health Research Research in Developmental Disabilities Topics in Stroke Rehabilitation

NATIONAL PANELS, COMMITTEES, BOARDS

- 2010-2017 Advocacy and Consumer Affairs Committee, Neurology Section, American Physical Therapy Association
- 2012, 2017 Neurologic Standard Setting Committee
- 2013 Federation of State Boards of Physical Therapy Item Writer
- 2013-2016 American Board of Physical Therapy Specialties Item Writer, Neurology
- 2016-2017 Stroke Edge Revision Task Force
- 2016-2019 American Board of Physical Therapy Specialties, Neurology Council
- 2017-present Knowledge Translation Outcome Measure Task Force Co-Chair, Academy of Neurologic Physical Therapy
- 2021-2022 American Board of Physical Therapy Specialties, Clinical Content Expert, Neurology

COMMUNITY SERVICE CONTRIBUTIONS

	I BERVICE CONTRIDUTIONS
2006-2007	Coach, University of Georgia Synchronized Swimming Club
2007-2008	Coach, St. Louis Gateway Synchro Club
2006-2008	Volunteer, Washington University School of Medicine Program in Physical
	Therapy, Pro Bono Clinic
2008-2009	THINK FIRST Presenter, Jacksonville Chapter
2009-2013	Coach, St. Louis Gateway Synchro Club
2012	Presenter, Hazelwood High School, Careers in Physical Therapy
2013-2014	Presenter, Washington University, Camp Neuro
2013-2017	Coach, St. Louis YMCA Synchro
2014	Supervising Physical Therapist, Guatemala Mission Trip
2015	Missouri Physical Therapy Association, Poster Reviewer
2015-2022	Washington University Program in Physical Therapy, Admission Committee
2016	Physical Therapist, International Medical Assistance Foundation, Catacamas, Honduras
2017	Physical Therapist, International Medical Assistance Foundation, Catacamas, Honduras
2017	UCC Presentation on Role of Physical Therapist in Catacamas, Honduras
2017	Physical Therapist and Lecturer, Mekelle University, Mekelle, Ethiopia
2020	American Board of Physical Therapy Specialties, Neurologic Professional Development
	Portfolio Reviewer
2021-present	Academy of Neurologic Physical Therapy, Annual Conference Submission Reviewer

PROFESSIONAL SOCIETIES and ORGANIZATIONS

- 2004-present American Physical Therapy Association
- 2009-present Academy of Neurologic Physical Therapy
- 2021-present Academy of Education

INVITED LECTURES

- 1. 2007. How does restricted AROM at various upper extremity segments affect hand function? *Washington University Program in Physical Therapy, Research Seminar, St. Louis, MO.*
- 2. 2010. The Brain Recovery Core: building a model system for organized stroke rehabilitation. *Washington University Program in Physical Therapy, Research Seminar, St. Louis, MO.*
- 3. 2011. The Brain Recovery Core: building a model system for organized stroke rehabilitation. *DePaul Hospital, Acute Therapy Staff, St. Louis, MO*.
- 4. 2011. The Brain Recovery Core: building a model system for organized stroke rehabilitation. *APTA Combined Sections Meeting, New Orleans, LA.*
- 5. 2012. Neurologic practice essentials: exploring neuroplasticity and its rehabilitation implications. APTA Neurology Section. Course developer (clinical representative).
- 6. 2012. Improving patient care: The importance of measuring treatment intensity and progress to yield optimal outcomes. *Meramec Community College, St. Louis, MO*.

- 7. 2012. Improving care for patients post-stroke: the importance of measuring treatment intensity and progress to yield optimal outcomes. *MPTA Annual Conference, Columbia, MO*.
- 8. 2012. The Brain Recovery Core: building a model system for organized stroke rehabilitation. *St. Louis University, Research Seminar, St. Louis, MO.*
- 9. 2012. The Brain Recovery Core: building a model system for organized stroke rehabilitation. *Mercy Rehabilitation Hospital, Inpatient Therapy Staff, St. Louis, MO.*
- 10. 2013. Neurologic practice essentials: clinical application of the principles of neuroplasticity to maximize patient outcomes. APTA Neurology Section. Presenter, Co-Course Developer. *Kaiser Permanente, Redwood City, CA*.
- 11. 2013. The Brain Recovery Core 5 years in: utilization of a large clinical database at the patient, program, and institutional levels. *Washington University Program in Physical Therapy, Research Seminar, St. Louis, MO.*
- 12. 2013. Neurologic practice essentials: clinical application of the principles of neuroplasticity to maximize patient outcomes. APTA Neurology Section. Presenter, Co-course Content Coordinator, Co-Course Developer. *TIRR Memorial Hermann, Houston, TX*.
- 13. 2013. Stroke rehabilitation: optimizing treatment to improve patient outcomes. *The Rehabilitation Institute of St. Louis Research Day. St. Louis, MO.*
- 14. 2014. Outcome measures: there's nothing routine about implementation into clinical practice. *APTA Combined Sections Meeting, Las Vegas, NV.*
- 15. 2014. Standardized assessments: administration and application in the acute care setting. *Boone Hospital, Acute Therapy Staff, Columbia, MO.*
- 16. 2014. Advanced neurological practice: the impact of physical therapy interventions on neuroplasticity. APTA Neurology Section. Presenter, Co-course Content Coordinator, Co-Course Developer. *Frazier Rehabilitation, Louisville, KY*.
- 17. 2015. Advanced neurological practice: the impact of physical therapy interventions on neuroplasticity. APTA Neurology Section. Presenter, Co-course Content Coordinator, Co-Course Developer. Swedish Covenant Hospital, *Chicago, IL*.
- 18. 2015. Standardized assessments: is there a benefit for clinical practice? *Mercy Rehabilitation Hospital, Inpatient Therapy Staff, St. Louis, MO.*
- 19. 2015. Clinical guidelines: determining prognosis, maximizing function, and navigating the healthcare system post-stroke. *Missouri Physical Therapy Association Annual Conference, St. Louis, MO*.
- 20. 2015. New Perspectives on Stroke and Aphasia Recovery. *MACDG Fall Conference*, St. Louis, MO.
- 21. 2015. The Brain Recovery Core: Building and utilization of the system, within the changing healthcare environment. *Mary Free Bed Rehabilitation Hospital Grand Rounds, Grand Rapids, MI*.
- 22. 2016. Clinical Guidelines: Determining prognosis, understanding assessments, and maximizing function across the healthcare system post-stroke. *PT Special Interest Group, Memorial Physical Therapy Center, Belleville, IL.*
- 23. 2016. Standardized Assessments: Administration and application across the continuum of care. *Illinois Physical Therapy Association Southern District Meeting, Southwestern Illinois College, Belleville, IL.*
- 24. 2016. Treatment delivery for patients with neurological deficits across the continuum of care. Human Movement System: Moving Evidence into Clinical Practice, Washington University Program in Physical Therapy, St. Louis, MO.
- 25. 2016. Pulling it all together: key information to guide clinical decision making for people poststroke. *Rehabilitation Management of the Acute Stroke Patient Through the Continuum of Care, Barnes Jewish Hospital, St. Louis, MO.*
- 26. 2016. An in-depth understanding of stroke and rehabilitation: where evidence and clinical practice meet. *Hawaii Physical Therapy Association, Oahu, Hawaii.*

- 27. 2016. Stroke rehabilitation: examining outcomes and next steps. Annual Stroke Conference, Mary Free Bed Rehabilitation Hospital, Grand Rapids, MI.
- 28. 2016. Evidence-based assessment and treatment post-stroke. *Annual Stroke Conference, Mary Free Bed Rehabilitation Hospital, Grand Rapids, MI.*
- 29. 2017. Customizing stroke rehabilitation: The importance of specificity, intensity, and timing of interventions. *Saint Francis Medical Center, Cape Girardeau, Missouri.*
- 30. 2018. "The Witch Doctor:" A case of stroke prognosis and practice. *Washington University Program in Physical Therapy, Clinical Rounds, St. Louis, MO.*
- 31. 2018. Stroke: The logistics of evidence-based practice. *Carle Brain Injury Symposium, Urbana, IL*.
- 32. 2018. "The Witch Doctor" Putting stroke prognosis into practice. Anderson Hospital, Acute and Inpatient Therapy Staff, Maryville, IL.
- 33. 2018. Enhancing therapy through active time. *Annual Stroke Conference, Mary Free Bed Rehabilitation Hospital, Grand Rapids, MI.*
- 34. 2019. Implementing core set of outcome measures for adults with neurologic conditions." APTA Combined Sections Meeting, Washington, D.C.
- 35. 2019. NCS Breakfast: I got my NCS, which door do I open next and how do I open it? *APTA Combined Sections Meeting, Washington, D.C.*
- 36. 2019. Interprofessional collaboration to improve transitions of care: a case-based educational pilot experience. *National Academies of Practice Annual Meeting & Forum, Washington, D.C.*
- 37. 2019. Clinical Decision Making and Maximizing Outcomes Post-Stroke. *Mercy Hospital, St. Louis, MO.*
- 38. 2021. Re-Evaluating Clinical Success: Differentiating Capacity Versus Performance. *APTA Combined Sections Meeting, Virtual.*
- 39. 2021. Beyond the Score. Academy of Neurologic Physical Therapy Annual Conference, Virtual.
- 40. 2021. Do We Measure Up? Academy of Neurologic Physical Therapy Annual Conference, Virtual.
- 41. 2023 (scheduled). International Stroke Rehab and Rehabilitation Conference, Houston, TX.

RESEARCH SUPPORT

Doct

2007	Predoctoral Clinical Research Training (RMI) T32RR023255 (Trainee, PI-Piccirillo)	100% Effort	
	This predoctoral project investigated the effect of restricted active range throughout the upper extremity on hand function.	e of motion	
2009-2011	"Model system for organized stroke rehabilitation" New Resource Proposal (Research Physical Therapist; PI-Lang) McDonnell Center for Systems Neuroscience	50% Effort	
2009-2011	Pilot funds are provided to develop a model system of organized stroke rehabilitation across institutions and across the continuum of care.		
	"Effects of movement context on hemiparetic grasping early after strok NIH R01 HD055964 (Research Physical Therapist; PI-Lang)	e" 25% Effort	
	This project examines how various movement contexts affect the control and performance of grasping movements in people with stroke with the goal of determining optimal practice conditions for motor rehabilitation.		

1/12-6/15	"A Brain Recovery Core for measuring the efficacy of acute stroke ca and TRISL"	re at BJH, WU
	Barnes Jewish Foundation (Coordinator; PI-Lang, Corbetta, Lee)	10% Effort
	This project expands the Brain Recovery Core (BRC), a stroke outcor the effectiveness of the BJH tissue-plasminogen activator (tPA) stroke month outcomes. It also evaluates the economic impact of tPA use or utilization costs from a provider perspective.	ne core, to evaluate e protocol on 6- 1 healthcare
8/15-7/16	"Remote Limb Ischemic Conditioning to Enhance Performance and L HealthSouth (Research Physical Therapist; PI-Lang)	earning" 5-20% Effort
	There is a growing need for better rehabilitation for people with stroke option for improving rehabilitation is to prime the nervous system so responsive to behavioral training, i.e. the key active ingredient of strol. This project will test if a priming method, remote limb ischemic cond enhance performance and learning in health adults. This is the first, n process of translating a method developed in animal models to improve people with stroke.	e. A promising that it is more ke rehabilitation. itioning, can ecessary step in the yed outcomes for
7/15-10/16	"A multicenter, prospective, randomized, placebo-controlled, double- group clinical trial to assess the efficacy and safety of immune globul (human) flebogamma® 5% DIF in patients with Post-Polio Syndrome EudraCT Number: 2013-004503-39/ Protocol Number: IG1104 (Research Physical Therapist; Site Physician-Wice)	blind, parallel- in intravenous 2" 5% Effort
	This is a phase II/III multi-center, prospective, randomized, placebo-c blind, parallel-group clinical trial with an adaptive design (flexible gro design with adaptive dose selection) in subjects with Post-Polio Syndr	ontrolled, double- oup sequential rome.
10/15-8/16	"Harnessing neuroplasticity to enhance functional recovery in allogen and heterotopic hand replant recipients"	ic hand transplant
	This project seeks to develop, implement, and evaluate an innovative transplant and -replant rehabilitation of the hand.	25% Effort
9/13-8/18	"Enhanced Medical Rehabilitation for older adults" R01 MH099011A1 (Co-Investigator; PI-Lenze)	20% Effort
	This clinical trial will test the effectiveness of Enhanced Medical Rehabilitation, a higher-intensity and higher engagement form of physical and occupational therapy in the post-acute rehabilitation (skilled nursing facility) setting to improve functional recovery and reduce depressive symptoms in older adults.	
04/16-03/22	"Ischemic conditioning as a neurorecovery agent for stroke" R01 HD085930 (Research Coordinator; PI: Lang)	10% Effort

	The central hypothesis is that the multifactorial mechanism of Remote Limb Conditioning (RLIC) can be harnessed as a neurorecovery agent to enhance rehabilitation and outcomes.) Ischemic stroke
8/19-6/22	"Core Set of Outcome Measures for Adults with Neurologic Conditions: Tra Evidence into Practice" (Co-PI) 0% Effort/ funds s	anslating upplies
	The goal of this project is to develop a knowledge translation toolkit for clir academics to assist with dissemination and implementation of the Core Mea Practice Guideline.	icians and sures Clinical
10/18-1/23	"Modified Application of Cardiac Rehabilitation (CR) for Older Adults (MA R01AG060499-01 (Consultant; PI: Lenze) 59	ACRO)" 6 Effort
	The goal of this project is to evaluate the impact of tailored cardiac rehabilit improve the process and outcomes of cardiac rehabilitation for older adults cardiovascular disease.	ation to with
7/21-6/23	"Enhancing Physical Function after COVID-19 among the Underserved" (PI) 29	6 Effort
	The overarching aim is to determine the benefits of individualized physical treatment on physical function and quality of life among underserved individual covID-19.	therapy (PT) duals who

Current

2/12-7/27+	"Translation of in-clinic gains to gains in daily life" R01/R37 HD068290 (Research Coordinator; PI: Lang)	35% Effort	
	This project will examine the discrepancy between capacity and performance, with the long-term goal of using the knowledge gained to develop new or modify current rehabilitation interventions that will improve performance in daily life. <i>The third cycle of this project has been chosen for funding as a MERIT award</i> .		
5/21-4/26	"Variation in early motor function in autism, cerebellar injury, and r NIH R01MH123723 (Research PT; PI: Lang, Marrus and Limperopoulis)	ormal twins." 10% Effort	
	This project deploys wearable-sensor methodology in infants to identify two critical neural liabilities contributing to the development of autism: hyperactivity and impairment in motor coordination. These liabilities result in high risk of developing autism, but cannot yet be reliably measured within the first year of life.		

BIBLIOGRAPHY

Peer-reviewed Papers

1. **Bland MD**, Beebe JA, Hardwick DD, Lang CE. (2008). Restricted active range of motion at the elbow, forearm, wrist, or fingers decreases hand function. *J Hand Ther*. 21(3):268-274.

- Lang CE, Bland MD, Connor LT, Fucetola R, Whitson M, Edmiaston J, Karr C, Sturmoski A, Baty J, Corbetta M. (2011). The brain recovery core: building a system of organized stroke rehabilitation and outcomes assessment across the continuum of care. *J Neurol Phys Ther*. 35(4):194-201.
- 3. **Bland MD**, Sturmoski A, Whitson M, Connor LT, Fucetola R, Huskey T, Corbetta M, Lang CE. (2012). Prediction of discharge walking ability from initial assessment in a stroke inpatient rehabilitation facility population. *Arch Phys Med Rehabil*. 93(8):1441-1447.
- 4. Lang CE, **Bland MD**, Bailey RR, Schaefer SY, Birkenmeier RL. (2013). Assessment of upper extremity impairment, function, and activity after stroke: foundations for clinical decision making. *J Hand Ther*. 26(2):104-114.
- 5. Aufman EL, **Bland MD**, Barco PP, Carr DB, Lang CE. (2013). Predictors of return to driving after stroke. *Am J Phys Med Rehabil.* 92(7):627-634.
- 6. **Bland MD**, Sturmoski A, Whitson M, Harris H, Connor LT, Fucetola R, Edmiaston J, Huskey T, Carter A, Kramper M, Corbetta M, Lang CE. (2013). Clinician adherence to a standardized assessment battery across settings and disciplines in a post-stroke rehabilitation population. *Arch Phys Med Rehabil*. 94(6):1048-1053.
- 7. Lang CE, **Bland MD**, Cheng N, Corbetta M, Lee JM. (2014). A case control study of the effectiveness of tissue plasminogen activator on 6 month patient-reported outcomes and healthcare utilization. *J Stroke Cerebrovasc Dis*. 23(10):2914-2919.
- 8. **Bland MD**, Whitson MW, Harris H, Edmiaston J, Connor LT, Fucetola R, Carter A, Corbetta M, Lang CE. (2015). A descriptive data analysis examining how standardized assessments are used to guide post-acute discharge recommendations for rehabilitation services after stroke. *Phys Ther*. 95(5):710-719.
- 9. Waddell KJ, Birkenmeier RL, **Bland MD**, Lang CE. (2016). An exploratory analysis of the selfreported goals of individuals with chronic upper-extremity paresis following stroke. *Disabil Rehabil*.38(9): 853-7.
- 10. Lohse KR, **Bland MD**, Lang CE (2016). Quantifying change during outpatient stroke rehabilitation: A retrospective regression analysis. *Arch Phys Med Rehabil*.97(9):1423-1430.
- Lang CE, Strube M, Bland MD, Waddell KJ, Cherry-Allen K, Nudo R, Dromerick A, Birkenmeier RL. (2016). Dose-response of task-specific upper limb training in people at least 6 months post stroke: A Phase II, single-blind, randomized, controlled trial. *Annals of Neurology*.80(3):342-354.
- 12. **Bland MD**, Birkenmeier, RL, Barco P, Lenard E, Lang CE, Lenze EJ. (2016). Enhanced medical rehabilitation: effectiveness of a clinical training model. *NeuroRehabilitation*.39(4):481-498.
- 13. Lang CE, Waddell KJ, Klaesner JW, **Bland MD**. (2017). A method for quantifying upper limb performance in daily life using accelerometers. *J Vis Exp*. Apr 21;(122).
- 14. Lenze EJ, Barco PP, **Bland MD**. (2018). Depression and functional impairment: a pernicious pairing in older adults. *Am J Geriatr Psychiatry*.Jan 26(1):73-74.
- 15. Sutter EN, Mattlage AE, Bland MD, Cherry-Allen KM, Harrison E, Surkar SM, Gidday JM, Chen L, Hershey T, Lee JM, Lang, CE. (2019). Remote limb ischemic conditioning and motor learning: evaluation of factors influencing response in older adults. *Transl Stroke Res.* Aug;10(4):362-371.
- Mattlage AE, Sutter EN, Bland MD, Surkar SM, Gidday JM, Lee JM, Hershey T, Chen L, Lang, CE. (2019). Dose of remote limb ischemic conditioning for enhancing learning in healthy young adults. *Exp Brain Res.* Jun;237(6):1493-1502.
- 17. Lenze EJ, Lenard E, **Bland MD**, Barco P, Miller JP, Yingling M, Lang CE, Morrow-Howell N, Baum C, Binder EF, Rodebaugh T. (2019). Effect of Enhanced Medical Rehabilitation on functional recovery in older adults receiving skilled nursing care after acute rehabilitation: A randomized clinical trial. *JAMA Netw Open*. July 3;2(7):e198199-e198199.

- 18. Surkar SM, **Bland MD**, Mattlage AE, Chen L, Gidday JM, Lee JM, Hershey T, Lang CE. (2020). Effects of remote limb ischemic conditioning on muscle strength in healthy young adults: A randomized controlled trial. *PLoS One*. 15(2):e0227263.
- 19. **Bland MD**, Barco P, Lang CE, Lenard E, Kallmi S, Pennock S, Lenze EJ. (2020). Activity level and intensity of older adults in skilled nursing rehabilitation measured via actigraphy. *J Geriatr Phys Ther.* Jan 30.
- 20. **Bland MD**, Stevens A, Nellis P, Mueggenburg K, Yau T, Chen. (2020). Interprofessional education and transitions of care: a case-based educational pilot. *J Interprof Care*. Jul 1:1-5.
- Holleran CL, Bland MD, Reisman DS, Ellis TD, Earhart GM, Lang CE. (2020). Day-to-day variability of walking performance measures in individuals poststroke and individuals with Parkinson disease. *J Neurol Phys Ther*. Oct;44(4): 241-247.
- 22. Lang CE, Barth J, Holleran C, Konrad J, **Bland MD**. (2020). Implementation of wearable sensing technology for movement: pushing forward into the routine physical rehabilitation care field. *Sensors (Basel)*. Oct:20(20):5744.
- 23. Ercal B, Rodebaugh T, **Bland M**, Barco P, Lenard E, Lang CE, Miller JM, Yingling M, Lenze EJ. (2021). Executive function moderates functional outcomes of engagement strategies during rehabilitation in older adults. *Am J Phys Med Rehabil*. Jul 1;100(7):635-642.
- 24. Lang CE, Waddell KJ, Barth J, Holleran CL, Strube MJ, **Bland MD**. (2021). Upper limb performance in daily life plateaus around three to six weeks post stroke. *Neurorehabil Neural Repair*. Oct;35(10):903-914.
- 25. Barth J, Lohse KR, Konrad JD, Bland MD, Lang CE. (2021) Sensor-based categorization of upper limb performance in daily life of persons with and without neurological upper limb deficits. *Frontiers in Rehabilitation Sciences, Special Issue on Technology*, Vol 2, doi=10.3389/fresc.2021.741393.
- 26. Barth J, Waddell KJ, **Bland MD**, Lang CE. (2021). Accuracy of an algorithm in predicting upper limb functional capacity in a United States population with first ever stroke. *Arch Phys Med Rehabil.* Jan;103(1):44-51.
- 27. Lang CE, Holleran CL, Strube MJ, Ellis TD, Newman CA, Fahey M, DeAngelis TR, Nordhal TJ, Reisman DS, Earhart GM, Lohse KR, Bland MD. (2022). Improvement in the capacity for activity vs. improvement in performance of activity in daily life during outpatient rehabilitation. J Neurol Phys Ther. Aug 4. doi: 10.1097/NPT.000000000000413.
- 28. Holleran CL, **Bland MD**, Lang CE. (submitted) Comprehensive assessment of the activity level of the ICF using both capacity and performance measures: A case report. *Arch Rehabil Res Clin Transl*.

Non peer-Reviewed Papers

- 1. Crowner B, **Bland MD**. (2016). Home Exercise Program. Compendium for Teaching Professional Level Physical Therapy Neurologic Content. *Academy of Neurologic Physical Therapy, American Physical Therapy Association.*
- 2. Crowner B, **Bland MD**. (2016). Intervention Assignment. Compendium for Teaching Professional Level Physical Therapy Neurologic Content. *Academy of Neurologic Physical Therapy, American Physical Therapy Association*.

Abstracts

- 1. Corso TD, Roy I, **Bland MD**, et al. (2003) In vivo gene transfection into rat brain cells: A comparison between viral, polyethyleneimine, and calcium phosphate nanoparticle methods. *American Chemical Society Abstracts*, 225th Meeting; Paper #603265.
- Abilmona F, Celeste L, Buckley T, Gambino AS, Grill T, Bland M, Corso TD. (2004) Using multi-enzyme kinetics to predict the concentrations of endogenous toxins. *American Chemical Society Abstracts*, 227th Meeting; Paper #728221.

- 3. **Bland MD**, Beebe JA, Hardwick DD, Lang CE. (2008) Restricted active range of motion at the elbow, forearm, wrist, or fingers decreases hand function. *Washington University School of Medicine Research Symposium and Poster Session*.
- 4. **Bland MD**, Beebe JA, Hardwick DD, Lang CE. (2008) Restricted active range of motion at the elbow, forearm, wrist, or fingers decreases hand function. *APTA Combined Sections Meeting*.
- 5. **Bland MD**. (2010) Weighing the options: use of aquatic interventions to improve on-land balance. *APTA Combined Sections Meeting*.
- 6. **Bland MD**, Sturmoski A, Whitson M, Connor LT, Fucetola R, Huskey T, Corbetta M, Lang CE. (2012). Prediction of discharge walking ability from initial inpatient assessment in a stroke rehabilitation population. *APTA Combined Sections Meeting*.
- 7. **Bland MD**, Sturmoski A, Whitson M, Harris H, Connor LT, Fucetola R, Edmaiston J, Huskey T, Carter A, Kramper M, Corbetta M, Lang CE. (2013). Clinician adherence to a standardized assessment battery across settings and disciplines in a post-stroke rehabilitation population. *APTA Combined Sections Meeting*.
- 8. **Bland MD**, Whitson M, Harris H, Connor LT, Fucetola R, Corbetta M, Lang CE. (2015). How are standardized assessments used to guide clinical recommendations for rehabilitation services post-stroke? *APTA Combined Sections Meeting*.
- 9. **Bland MD**, Lohse KR, Lang CE. (2016). Quantifying change during outpatient stroke rehabilitation: a retrospective regression analysis. *WCNR*.
- 10. **Bland MD**, Lohse KR, Lang CE. (2016). Predicting change during outpatient stroke rehabilitation: a retrospective regression analysis. *IV Step*.
- Bland MD, Rose DK, Pinto Zipp G, Byl N, Capo-Lugo CE, Anderson HD, Sulwer MR, Yoshida R. (2017) EDGE-ucation 2.0: Moving forward the value of physical therapy. *APTA Education Leadership Conference*.
- 12. Stevens A, **Bland MD**, Nellis P, Yau T, Mueggenburg K. (2018) Interprofessional collaboration to improve transitions of care: a case-based educational pilot experience. *12th Annual Multidisciplinary Research Conference*.
- 13. **Bland MD**, Barco P, Lang CE, Lenard E, Kallmi S, Pennock S, Lenze EJ. (2019) Four-limb actigraphy to measure real-world movement in skilled nursing rehabilitation patients. *APTA Combined Sections Meeting*.
- 14. **Bland MD**, Stevens A, Nellis P, Yau T, Mueggenburg K, Yau T, Chen J. (2019) Student perceived value of preparedness for practice after completing a transitions of care interprofessional education experience. *13th Annual Multidisciplinary Research Conference*.
- 15. Surkar S, **Bland MD**, Mattlage A, Chen L, Gidday J, Lee JM, Hershey T, Lang CE. (2020) Effects of remote limb ischemic conditioning on muscle strength in healthy young adults. *APTA Combined Sections Meeting*.
- 16. Barth J, Waddell K, **Bland MD**, Lang CE. (2020) Accuracy of the PREP2 algorithm for predicting three month upper limb functional capacity within a United States population of persons with stroke. *National Institutes of Health Rehabilitation Conference*.
- 17. Crumley M, Notestine T, Crowner B, Duncan R, Holleran C, **Bland MD**. (2021) Barriers to and percentage of vital sign assessment in an outpatient neurologic physical therapy setting. *APTA Combined Sections Meeting*.
- 18. Barth J, Waddell K, **Bland MD**, Lang CE. (2021) Accuracy of the PREP2 algorithm for predicting three month upper limb functional capacity within a United States population of persons with stroke. *NIH Rehabilitation Research Conference for the TL1-Translational Science Meeting*.
- 19. Barth J, Waddell K, **Bland MD**, Lang CE. (2021) Accuracy of the PREP2 algorithm in predicting upper limb functional capacity in a United States population with first ever stroke. *American Society of Neurorehabilitation*.

- 20. Lang CE, Waddell KJ, Barth J, Holleran CL, Strube MJ, **Bland MD**. (2021) Upper limb performance trajectories plateau before or with impairment and capacity trajectories post stroke. *American Society of Neurorehabilitation*.
- 21. Hanson JL, **Bland MD**, Ambler SB, Haile TG, McLaughlin EA, Spitznagle TM. (2022) Needs assessment for capacity-building and sustainability for the physical therapy training program at Ayder Referral Hospital in Mekelle, Ethiopia. *Regional Meeting of the Central Group on Educational Affairs of the Association of American Medical College*.
- 22. Barth J, Lohse KR, Konrad JD, **Bland MD**, Lang CE. (2022) Sensor-based categorization and prediction of upper limb performance in daily life. *Translational Science Annual Meeting*.
- 23. Lang CE, Holleran CL, Strube MJ, Ellis T, Newman CD, Fahey M, DeAngelis TR, Nordahl T, Reisman DS, Earhart GM, Lohse KR, **Bland MD**. (2022). Improvement in capacity for activity vs. improvement in performance of activity in daily life during outpatient neurorehabilitation. *American Society of Neurorehabilitation*.
- 24. Barth J, Lohse KR, Konrad JD, **Bland MD**, Lang CE. (2022). Sensor-based categorization of upper limb performance in daily life. *American Society of Neurorehabilitation*.

Books

1. Lang CE and Birkenmeier RL. Contributing Authors: **Bland MD** and Seelbach JM. Upper-Extremity Task-Specific Training After Stroke or Disability: A Manual for Occupational Therapy and Physical Therapy. Bethesda, MD: America Occupational Therapy Association, Inc; 2014, 158 pp, ISBN: 978-1-56900-349-7.

Reviews, Chapters, Editorials, and Invited Publications

- 1. **Bland MD.** 2013. Stroke Rehabilitation: Insights from Neuroscience and Imaging. Carey LM. New York, NY: Oxford University Press; 2012, hardcover, 258 pp, ISBN: 978-0-19-979788-2. *J Neurol Phys Ther.* 37: 141.
- Lang CE, Bland MD. Impaired motor control and neurologic rehabilitation in older adults. In: *Geriatric Physical Therapy* (2019), 4th edition. Edited by A Guccione, R Wong, D Avers; Elsevier.

Online Educational Courses

- 1. **Bland MD**, Lang CE. 2017. Real-time decision making for patient prognosis post-stroke: navigating the continuum of care. *Academy of Neurologic Physical Therapy*. <u>https://www.anptsynapsecenter.com/public/course-detail/?id=45</u>
- Barco P, Bland MD, Lenze EJ. 2019. Enhanced-Medical Rehabilitation: How to engage and motivate your clients. *The American Occupational Therapy Association, Inc.* <u>https://myaota.aota.org/shop_aota/product/OL5138</u>
- 3. Barco P, **Bland MD**, Lenze EJ. 2020. Enhanced-Medical Rehabilitation. *The Academy of Neurologic Physical Therapy*. <u>https://www.anptsynapsecenter.com/public/course-detail/?id=185</u>
- Siles A, Bland MD, Anderl E, Eikenberry M, McCarthy A, Olivier G, Rice T, Romney W, Zeleznik H. 2020. Core Outcome Measures: 10 Meter and 6 Minute Walk Tests. *The Academy of Neurologic Physical Therapy*. <u>https://www.anptsynapsecenter.com/public/course-detail/?id=163</u>
- Siles A, Bland MD, Anderl E, Eikenberry M, McCarthy A, Olivier G, Rice T, Romney W, Zeleznik H. 2020. Core Outcome Measures: Berg Balance Scale. *The Academy of Neurologic Physical Therapy*. <u>https://www.anptsynapsecenter.com/public/course-detail/?id=140</u>
- Siles A, Bland MD, Anderl E, Eikenberry M, McCarthy A, Olivier G, Rice T, Romney W, Zeleznik H. 2020. Core Outcome Measures: Five Times Sit to Stand and ABC Scale. *The Academy of Neurologic Physical Therapy*. https://www.anptsynapsecenter.com/public/course-detail/?id=139

- Siles A, Bland MD, Anderl E, Eikenberry M, McCarthy A, Olivier G, Rice T, Romney W, Zeleznik H. 2020. Core Outcome Measures: Functional Gait Assessment. *The Academy of Neurologic Physical Therapy*. <u>https://www.anptsynapsecenter.com/public/coursedetail/?id=186</u>
- Siles A, Bland MD, Anderl E, Eikenberry M, McCarthy A, Olivier G, Rice T, Romney W, Zeleznik H. 2020. Core Outcome Measures: Score Interpretation and Continuum Use. *The Academy of Neurologic Physical Therapy*. https://www.anptsynapsecenter.com/public/course-detail/?id=215
- 9. Awosika O, Charbonneau E, Bahouth M, Conahan E, Bland M, Terrill A. 2021. Post-Stroke Care in the Early Recovery Period. *American Heart Association*. <u>https://learn.heart.org/lms/activity?@curriculum.id=-</u> 1&@activity.id=7274911&@activity.bundleActivityId=-1