

PROMOTION RECOMMENDATION  
THE UNIVERSITY OF MICHIGAN  
MEDICAL SCHOOL  
DEPARTMENT OF PHYSICAL MEDICINE AND REHABILITATION

Mark D. Peterson, Ph.D., M.S., associate professor of physical medicine and rehabilitation, with tenure, Department of Physical Medicine and Rehabilitation, Medical School, is recommended for promotion to professor of physical medicine and rehabilitation, with tenure, Department of Physical Medicine and Rehabilitation, Medical School.

Academic Degrees:

M.S.	2013	University of Michigan, Ann Arbor, MI
Ph.D.	2008	Arizona State University, Mesa, AZ
M.S.	2004	Arizona State University, Tempe, AZ
B.S.	2000	University of Michigan, Ann Arbor, MI

Professional Record:

2018-present	Associate Professor of Physical Medicine and Rehabilitation, with tenure, University of Michigan
2015- 2018	Assistant Professor of Physical Medicine and Rehabilitation, University of Michigan
2012-2014	Research Assistant Professor of Physical Medicine and Rehabilitation, University of Michigan
2008-2011	Adjunct Instructor, A.T. Still University

Summary of Evaluation:

Teaching: Dr. Peterson is a devoted teacher and mentor on clinical, translational and population research design, interpretation, and dissemination and for the explicit purpose of refining methodological approaches, measurement, and analytical techniques. His teaching activities include departmental and institutional research seminars and didactic lectures, as well as mentorship of trainees, including medical students, undergraduate students, residents, and post-doctoral fellows. Dr. Peterson is heavily involved with overseeing University of Michigan medical student summer research projects, undergraduate students within the University of Michigan Undergraduate Research Opportunity Program (UROP), mentorship in the Michigan Institute for Clinical and Health Research (MICHR)-Practice Oriented Research Training Program (PORT). Dr. Peterson has been the co-director of the Resident Research Program in the department since 2015. In this role, he provides research mentorship to Physical Medicine and Rehabilitation (PMR) residents on their research projects and presentations. He has served on nine dissertation committees, five national and four international. Dr. Peterson is a sought-after speaker. During his time in rank as an associate professor, he has given numerous invited extramural presentations, visiting lectures, scientific seminars, symposia chair positions, and international keynote lectures.

Research: Dr. Peterson has devoted his research to the study muscle physiology and physical activity in people with and without disabilities. This includes muscle aging, cerebral palsy, and metabolic aspects, with an ultimate goal of developing effective exercise intervention for the

treatment and prevention of frailty, obesity, and functional motor deficits. He completed the Center for Health and Research Transformation (CHRT) Health Policy Fellowship, as well as the University of Michigan Global Health Research Certificate Program, which provided the opportunity to gain improved understanding of the policy-making process, as well as ways to increase the impact of his health services research on a global scale for persons with and without disabilities. Dr. Peterson has been successful in obtaining funding from the NIH, the Graig H. Neilsen Foundation, the Cerebral Palsy Foundation, as well as additional foundation/private funding sources. Dr. Peterson has authored 178 peer reviewed publications, 10 book chapters, and 70 scientific conference abstracts. Dr. Peterson has an impressive record of international collaboration, including collaborators from Canada, Mexico, South Africa, Brazil, China, and several European countries. In 2020, Dr. Peterson was awarded the J. William Fulbright Scholar award to Sweden: “Pain, Quality of Life, and Noncommunicable Disease Risk among Adults with Cerebral Palsy in Sweden.” Dr. Peterson was named the Charles E. Lytle, Jr. Research Professor in 2020. Additionally, he is an active faculty associate/member in the University of Michigan Neuroscience Graduate Program (NGS), Global REACH, Institute for Health Policy and Innovation (IHPI), Michigan Institute for Data Science (MIDAS), Center for Global Health Equity, and the Michigan Center of the Demography of Aging (MiCDA).

#### Recent and Significant Publications:

- Peterson MD, Meade M, Lin P, Kamdar N, Rodriguez G, Krause J, Mahmoudi E, “Psychological morbidity following spinal cord injury and among those without spinal cord injury: the impact of chronic centralized and neuropathic pain,” *Spinal Cord* 60(2): 163–169, 2022. PMID: 35058578.
- Peterson MD, Haapala HJ, Kamdar N, Lin P, Hurvitz EA, “Pain phenotypes among adults living with cerebral palsy and spina bifida,” *Pain* 162(10): 2532-2538, 2021. PMID: 34534178.
- Whitney DG, Peterson MD, “US National and State-Level Prevalence of Mental Health Disorders and Disparities of Mental Health Care Use in Children,” *JAMA Peds* 173(4): 389- 391, 2019. PMC6450272.
- Smith KJ, Peterson MD, O’Connell N, Victor C, Liverani S, Anokye N, Ryan JM, “Risk of Depression and Anxiety in Adults with Cerebral Palsy,” *JAMA Neurol* 76(3): 294-300, 2019. PMID: 30592485.
- Whitney DG, Hurvitz EA, Devlin MJ, Caird MS, French ZP, Ellenberg EC, Peterson MD, “Age Trajectories of Musculoskeletal Morbidities in Adults with Cerebral Palsy,” *Bone* 114: 285-291, 2018. PMID: 29981509.

Service: Dr. Peterson has an extensive service record. Institutionally, he has served as an ad hoc internal grant reviewer for the University of Michigan Cancer Control and Population Sciences, and a member of the Michigan Metabolomics and Obesity Center (MMOC): University of Michigan Nutrition Obesity Research Center (MNORC). Nationally, he is on the Scientific Advisory Council of the Cerebral Palsy Foundation and served on the Lifespan Committee of the American Academy of Developmental Medicine and Child Neurology (AACPD). Internationally, he is a co-lead of the task force on Physical Activity for Persons with Disabilities for the International Society for Physical and Rehabilitation Medicine (ISPRM) and was a member of the Scientific Committee for the International Alliance of Academies of Childhood Disability (IAACD) and Australian Academy of Cerebral Palsy and Development Medicine (AusACPD). Dr. Peterson was an associate editor for the *Journal of Strength and Conditioning Research*

(JSCR), and a guest editor for a special issue of *Frontiers in Neurology: Adults with Childhood Onset Disabilities: A Lifespan approach*. His service to the field of rehabilitation, exercise science, and public health is further reflected in his continued ad-hoc review service for 20 top-tier journals. He is a member of six professional societies and is consistently invited to deliver keynote lectures at prominent international scientific meetings.

External Reviewers:

Reviewer A: “Dr. Peterson has been an active member of organizations and committee work, locally, statewide, nationally and internationally. In particular, I know of his work at the AACPD life span committee and his work on behalf of the CPF and CPRRN. He often gives seminars and webinars to increase the awareness of disorders. He is open and able to work with many at various levels and settings, such as the novice to the international peers.”

Reviewer B: “My impression of the quality, quantity, focus and scholarly impact of A/Prof Peterson’s work is that his team are one of the leading groups driving the research agenda and generating critically needed new knowledge, for adults with CP, internationally... I highlight his focus on the medical needs of adults with CP – a vastly under-researched area. Because of this sustained lack of focus by health care professionals and researchers, the health and longevity of adults with CP is seriously impacted...His overall productivity in research is strong: 165 publications with Scopus citation H index of 38, in the relatively small field of disability.”

Reviewer C: “Dr. Peterson has clearly become an international expert in physical and mental health outcomes among children and adults with disease-induced disabilities namely cerebral palsy (CP) and multiple sclerosis (MS). He is clearly the ‘go to’ person for research on musculoskeletal morbidities and physical activity in these disease conditions. He also contributes to the fields of spinal cord injury, chronic pain, lifestyle behaviors and risk of dementia in patients with CP.”

Reviewer D: “Dr. Peterson has distinguished himself as THE foremost authority on the physiologic effects of aging for adults with CP and other disabilities, particularly at the level of the muscle. His many research studies have described that adults with CP are vulnerable to a host of co-morbidities, often leading to what has been termed ‘premature aging’ and early death. He has shown that the maintenance of muscle strength, even among people with disabilities, is critical for health and longevity. This is a major contribution to our field, and to the well-being of adults with cerebral palsy.”

Reviewer E: “Mark’s scholarly output is very impressive. He has published almost 180 peer-reviewed papers and book chapters, held numerous grants as either PI or Co training of a host of graduate students and post--investigator, has worked closely with the doctoral fellows and appears comfortable to promote their career development in terms of lead authorships on papers emerging from shared work. I always note this behavior because it speaks to a mentor’s efforts to support junior colleagues but is not always apparent in people’s CVs (or their behavior).”

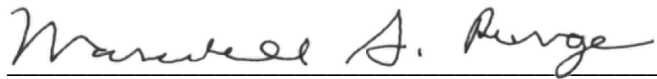
Reviewer F: “Mark is known internationally as an expert in physiology, aging, exercise science, and health in adults with disabilities. He is sought after for his expertise and excellent speaking skills. The attendees consistently rate Mark as an exceptional lecturer and is considered a thought

leader throughout our field...I feel his character is impeccable, with the highest ethical and moral standards that come through clearly in all his interactions.”

Reviewer G: “He lists 175 scientific publications and remarkably, 100 of those were published in the past 5 years. These include many first author papers but also many papers with trainees as first authors and many papers with collaborative teams. In fact, the collaborative nature of his work, both with trainees and faculty collaborators, highlights the impact of his work on workforce development for research and clinical care related to disability and health, in both children and adults...he has developed a national international reputation in his field. Compared to others working in the field, I would certainly consider him to be top tier, which for me is top 5% of the field.”

Summary of Recommendation:

Dr. Peterson is an exceptional researcher, educator, and scholar who will serve the university with distinction. He is highly regarded by his peers and has demonstrated excellent knowledge and aptitude as an educator and researcher. I am pleased to recommend Mark D. Peterson, Ph.D., M.S. for promotion to professor of physical medicine and rehabilitation, with tenure, Department of Physical Medicine and Rehabilitation, Medical School.



Marschall S. Runge, M.D., Ph.D.  
Executive Vice President for Medical Affairs  
Dean, Medical School

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