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

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

Academic Degrees:

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

Professional Record:

2015-present	Assistant Professor of Physical Medicine and Rehabilitation, University of			
	Michigan			
2012-2014	Research Assistant Professor, Physical Medicine and Rehabilitation,			
	University of Michigan			
2008-2011	Adjunct Instructor, A.T. Still University			
2006-2008	Residential Faculty, Mesa College			
2005-2006	Faculty Associate, Arizona State University			

Summary of Evaluation:

Teaching: Dr. Peterson's teaching activities include departmental and institutional research seminars or didactic lectures, as well as mentorship of trainees, including medical students, residents, Ph.D. students, and post-doctoral fellows. Teaching is focused on clinical, translational and population research design, interpretation, and dissemination and for the explicit purpose of refining methodological approaches, measurement, and analytical techniques. Dr. Peterson is heavily involved with overseeing UM Medical Student summer research projects, undergraduate students within the UM Undergraduate Research Opportunity Program (UROP), and has served on six Ph.D. dissertation committees. He has also worked to overhaul the resident research program in the Department of Physical Medicine and Rehabilitation. He has directed and coordinated the design and curriculum of a new CME opportunity for physicians and trainees with Dr. Heather Burrows of Pediatrics that pertains to healthy lifestyle adoption for both physicians and patients. Dr. Peterson serves as a research mentor to 18 Physical Medicine and Rehabilitation residents and has personally mentored two PM&R residents throughout their 3rd and 4th years, along with one Family Medicine resident from initiation to completion of his research obligation, with three published conference abstracts and three published manuscripts. Teaching evaluations are positive from undergraduate students, conference attendees, residents and faculty.

Research: Dr. Peterson has devoted his research to the study of muscle physiology, physical activity epidemiology, and exercise interventions for the treatment/prevention of obesity, frailty, disability and functional motor deficit. He is active in the UM Neuroscience Graduate Program, Global REACH, Institute for Health Policy and Innovation, Michigan Institutes for Data Science, and the Michigan Center of the Demography of Aging. He has three current federally funded projects to study health promotion and chronic disease prevention for adults with cerebral palsy. He has one R01 application in re-submission as a co-investigator, two R01 applications in preparation, one R21 application in review, and five additional foundation grant applications in review. Dr. Peterson's scholarly activities have resulted in 70 peer-reviewed papers and nine book chapters. He has also given numerous extramural presentations, both nationally and internationally, and has led numerous seminars. Additionally, he has published 48 scientific/conference abstracts. He has an impressive record of international collaboration, including collaborators from Canada, Mexico, South Africa, several European countries, Brazil and China.

Recent and Significant Publications:

Peterson MD and Mahmoudi E: Healthcare utilization associated with obesity and physical disabilities. *Am J Prev Med* 48:426-435, 2015.

Verschuren O, Peterson MD*, Balemans A, Hurvitz E: Exercise and physical activity recommendations for people with cerebral palsy. *Dev Med Child Neurol* 58:798-808, 2016.

Villamor E, Tedroff K, Peterson MD, Johansson S, Neovius M, Petersson G, Cnattingius S: Association between maternal body-mass index in early pregnancy and incidence of cerebral palsy. *JAMA* 317:925-936, 2017.

Cremer N, Hurvitz EA, Peterson MD: Multimorbidity in middle-aged adults with cerebral palsy. *Am J Med* In Press. DOI: 10.1016/j.amjmed.2016.11.044.

Peterson, MD, Duchowny K, Meng Q, Wang Y, Chen X, Zhao Y: Low normalized grip strength is a biomarker for cardiometabolic disease and physical disabilities among U.S. and Chinese adults. *J Gerontology A: Med Sci* In Press. DOI: 10.1093/gerona/glx031.

Service: Dr. Peterson's institutional service includes serving on internal grant review study sections including Michigan Institute for Clinical and Health Research, Practice Oriented Research Training Program grant competition, the University of Michigan Office of Research seed grant competition and the University of Michigan Orthopedic Internal grant competition. At the national level, he has served as a grant reviewer for the Peer Reviewed Orthopedic Research Program for the United States Department of Defense-Congressionally Directed Medical Research Programs grant competition and internationally for the Scottish Government Health and Social Care Directorates grant competition, the General Research Fund of the Research Grants Council of Hong Kong, and the PolicyWise for Children and Families grant competition in Calgary, Canada. He has also served on the Lifespan Committee of the American Academy of Developmental Medicine and Child Neurology. He continues to work on 20 peer review journal panels, holds memberships in four professional societies and has received a national award recognizing achievement in rehabilitation research.

External Reviewers:

Reviewer A: "He has established a very positive reputation in our area and shown tremendous influence in health- and medical-related applications of resistance training and muscular function....He has managed to significantly contribute to the areas of Exercise Physiology and Strength & Conditioning by focusing on the importance of musculoskeletal health for special populations, particularly those with cerebral palsy. In fact, his work in this area is seminal and demonstrates his growing impact."

Reviewer B: "Dr. Peterson has received several awards including election as 'fellow' of the American College of Sports Medicine in recognition for his research contributions, a best poster award in an international meeting in The Netherlands, and the Mac Keith Promising Career Award of the American Academy of Cerebral Palsy and Developmental Medicine. He has been invited to be a grant reviewer for several national and international entities..."

Reviewer C: "Dr. Peterson's work in the area of Cerebral Palsy has been excellent and he has an international reputation in this area. I would especially cite [the] 2015 JAMA paper and his more recent 2017 paper in press in the American Journal of Medicine. These papers published in high impact publications are important publications for those of us working in this area."

<u>Reviewer D</u>: "Dr. Peterson's history of extramural funding, publication record, and research accolades reflect several key traits: 1) he is ambitious and focused on expanding his research program, 2) his ideas are both significant and innovative, 3) he is a prolific writer, and 4) his reputation in the field is clearly growing."

Reviewer E: "Of note, he has been on a dissertation committee to a researcher in pediatric rehabilitation and CP who is making quite an impact on the field and that, in part, is due to Dr. Peterson's mentorship, I am sure."

<u>Reviewer F</u>: "Dr. Peterson is growing a national and international reputation, as evidenced by his prolific contribution to the literature, his numerous invited national and international scientific presentations, and his induction as a Fellow of the American College of Sports Medicine."

Summary of Recommendations

Dr. Peterson is an exceptional researcher, educator and scholar. He is highly regarded by his peers and has demonstrated excellent knowledge and aptitude as an educator and researcher. I enthusiastically recommend Mark Peterson, Ph.D. for promotion to associate 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

Waredel S. Runge

Dean, Medical School