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

Anna Kratz, 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:

Ph.D.	2009	Arizona State University
M.A.	2005	Arizona State University
B.A.	2001	University of Wisconsin-Milwaukee

#### Professional Record:

2011- present Assistant Professor of Physical Medicine and Rehabilitation,

University of Michigan

#### Summary of Evaluation:

<u>Teaching</u>: Dr. Kratz has built an outstanding reputation as mentor and instructor who is frequently sought out to contribute to a wide range of teaching activities at the UM. She has mentored 13 trainees (graduate/undergraduate students, residents, fellows) and seven faculty members in health research at UM and other Michigan universities (e.g. Wayne State University, Michigan State University). Her mentees have won numerous awards; for instance, Alecia Daunter, M.D., who Dr. Kratz mentored in conducting original research on the long-term effects of selective dorsal rhizotomy in people with cerebral palsy, received two awards for scientific abstracts on this line of research and recently published as first-author (with Dr. Kratz as co-author) these findings in a top tier journal. She annually serves as a K-award workshop mentor through the Michigan Institute for Clinical and Health Research (MICHR). She has given over 30 lectures and seminars at Michigan. Many of these lectures have focused on research methods and statistics, including lectures on multilevel modeling, real-time data collection, and sample size and power analyses. In her role as a faculty member (2012-present) of the Practice Oriented Research Training program (PORT), which is part of the MICHR educational mission, she mentored many PORT teams one-on-one and taught four out of the 13 didactic sessions that are part of the program. She is especially well-known for her accessible and practical delivery of the PORT didactic on statistics, which received high reviews from attendees. Her talent for teaching statistics to statistical novices led her to develop a set of statistics seminars that are delivered twice a year through the Office of Faculty Affairs and Faculty Development (titled: Statistics from 32,000 feet [Parachute Included]: A Gentle Introduction to Data Analyses) and annually through the MICHR Summer Research Immersion Program (titled: Pragmatic Biostatistics), as well as for additional groups, such as medical school staff (hosted by MICHR) and individual departments and research centers (e.g. the Cancer Center).

Research: Dr. Kratz has achieved national recognition as an expert in chronic symptoms across clinical conditions, and in the use of ambulatory data collection methods. This includes an extremely successful research portfolio that includes funding from the NIH, DoD, PCORI, the National MS

Society, and the Craig H. Neilsen Foundation. She has built an independent research program that focuses on understanding the experience and underlying mechanisms of common symptoms – such as pain and fatigue – in chronic conditions, evaluating and developing measures to assess symptoms and functional outcomes, and developing interventional strategies to improve symptom management and health-related quality of life for people with chronic conditions. Her work has been conducted across a number of conditions, including fibromyalgia, spinal cord injury, and multiple sclerosis; indeed, some of her work has focused on comparing chronic symptoms and functional outcomes across conditions. This work is synergistic with both the University of Michigan Medical School and the NIH's goals to improve patient health related quality of life.

Dr. Kratz has been incredibly successful at securing external grant funding, both as a principal investigator (PI), site PI, and co-investigator (co-I). During her time at UM, her research has been supported by 21 grants, including 10 grants where she was or is currently the PI (seven external, three internal) and 11 grants on which she served or serves as a co-I or site PI. She recently received a nearly \$3.5 million PCORI award as a co-PI, along with collaborator Dr. Tiffany Braley (Neurology). The aim of this comparative effectiveness clinical trial is to compare three interventions-modafinil alone. cognitive behavioral therapy alone, or combination therapy – in the treatment of fatigue in multiple sclerosis. She is currently the PI on two NIH-funded studies. Funded by a K01 grant, she is conducting research to examine the characteristics and mechanisms of cognitive dysfunction in fibromyalgia ("fibrofog") by phenotyping subjective and objective cognitive problems and examining the contribution of neurobiological mechanisms and sleep in the experience of cognitive dysfunction. Funded by an R21, she is leading a team of researchers to develop a conceptual model of mental and physical fatigability across clinical conditions (fibromyalgia and multiple sclerosis) and "normally aging" individuals. A major deliverable for this project is an item pool of self-report items that can be further developed into a patient-reported outcome measure of fatigability that could be used across populations. She was recently awarded two grants that extend her work into intervention research. One grant, from the Department of Defense (DoD), will allow her to develop and pilot-test a webbased self-management program for chronic symptoms in multiple sclerosis. Another interventional grant, funded by the National MS Society, will allow her to develop and pilot test a telephone-based physical activity intervention to treat fatigue in multiple sclerosis.

Her research productivity extends beyond securing grant funds to her very active dissemination activities. To date, Dr. Kratz has 45 published or in press peer-reviewed publications (21 first-author) and two first-author papers submitted for publication. She also has presented 42 posters and delivered nine oral presentations of her research at scientific meetings. Dr. Kratz's work has garnered national recognition and honors. She has been invited to give eight national-level talks and one international presentation. Some of these invitations have been particularly honorable, such as being invited to present her pain research at the 10th Annual NIH Pain Consortium Symposium, Bethesda, MD (2015). Largely due to her tremendous success in achieving external grant funding, she was awarded the Rosenthal Early Career Research Award in 2015 by Division 22 of the American Psychological Association; this award is given to one researcher every year for "significant contributions to the science of rehabilitation psychology in the first ten years since post-doctoral degree."

#### Recent and Significant Publications:

Kratz AL, Hirsh, AT, Ehde DM, Jensen MP, Molton I: Acceptance of pain in neurological disorders: Associations with functioning and psychosocial well-being. *Rehabilitation Psychology* 58:1-9, 2013.

Murphy SL, Kratz AL: Activity pacing in daily life: A within-day analysis. Pain 155:2630-2637, 2014.

Kratz AL, Schilling S, Goesling J, Williams DA: The PROMIS Fatigue<sub>FM</sub> Profile: A self-report measure of fatigue for use in fibromyalgia. *Quality of Life Research* 25:1803-1813, 2016.

Kratz AL, Ehde DM, Bombardier CH, Kalpakjian CZ, Hanks RA: P ain acceptance decouples the momentary associations between pain, pain interference, and physical activity in the daily lives of people with chronic pain and spinal cord injury. *Journal of Pain* 18:319-331, 2017.

Braley TJ\*, Kratz AL\*, Kaplish N, Chervin RD: Sleep and cognitive function in multiple sclerosis. *Sleep* 39:1525-1533, 2016. \*co-first authors

Service: Dr. Kratz has demonstrated commitment to service and leadership through her roles on a number of institutional and national committees. She plays influential leadership roles on national committees, including serving as the scientific poster chair for the annual meeting of Division 22 (Rehabilitation Psychology) of the American Psychological Association in 2014. In 2016, she accepted the invitation to serve a three-year term as a member of the Scientific Program Committee for the American Pain Society. Her reputation as an excellent, knowledgeable, and service-oriented researcher is evident in her invitations to serve on the editorial board for the Journal of Pain and her appointment as an associate editor for the journal Rehabilitation Psychology. She serves as an ad hoc reviewer for an additional 14 journals and as a reviewer for the Department of Defense Congressionally Directed Medical Research Program, Orthopaedic Research Program. In terms of institutional leadership, she is a contributing member, representing clinical and psychosocial interests on the interdisciplinary Advisory Board for the Advanced Research Computing – Technology Services. As an affiliated faculty member of the MICHR, which houses the Clinical and Translational Science Award at the University of Michigan, Dr. Kratz served on the educational committee from 2012 to 2014 and continues to serve the educational committee through her role in the PORT program. In sum, her national reputation as a leader in clinical health research has led to a number of opportunities to serve the broader research endeavor on a national level.

### External Reviewers:

Reviewer A: "Since 2011 (when she was appointed assistant professor), Dr. Kratz has demonstrated research productivity, with 35 high quality peer-reviewed publications (first author on 13 or these) and she has consistently sought external funding to pursue her research program. She has obtained external funding in highly competitive processes including as Principal Investigator of a Dept. of the Army/DOD grant to develop an online self-management program for people with MS and NIH and foundation grants aimed at developing models to better understand MS symptomatology..."

Reviewer B: "...more important than the quantity of Dr. Kratz's work, is the quality and impact of her research. Her work in developing improved approaches for assessment of symptoms such as pain, fatigue and cognitive function is of tremendous significance...The quality and importance of her work in this area is evidenced by the extramural funding she has attracted to support this research...Dr. Kratz is rising to national prominence in the field of Rehabilitation Psychology, and she is a clear national leader in novel methods for assessing patient reported outcomes. She is a highly productive and well-funded scientist, whose work shows a rare blending of scientific and statistical sophistication combined with practical utility and translational impact."

Reviewer C: "Dr. Kratz's curriculum vitae documents 41 original, peer-reviewed articles, including 15 for which she is the first author. Some of her work has been published in some of the highest impact

journals in her fields of inquiry, including *Pain, Journal of Pain, Health Psychology, Rehabilitation Psychology, Annals of Behavioral Medicine* and *Journal of Consulting and Clinical Psychology.* This observation is important to emphasize since I can think of few psychologists who have been so successful in publishing in this impressive array of reasonably high impact journals so early in their careers....I have great confidence that she will continue to emerge as one of the leading scientists and scholars in our field and I expect that you will be pleased by her sustained contributions as a member of your academic community."

Reviewer D: "Overall, it is abundantly clear to me that Dr. Kratz is a rising academic star nationally and internationally, and she is optimally positioned to become one of the leading scholars on the symptom experience of patients with a range of clinical problems...I have an extraordinarily positive view of Dr. Kratz's scholarship and her service record, and I predict a great future for her-one that is meritorious of your highly selective institution."

Reviewer E: "I would rank Dr. Kratz's as being in the top 10% of individuals at her level of professional development, and in her chosen field of study. This is evidenced by her publication and presentation record, and by her success with federal funding....Dr. Kratz has shown impressive service contributions in the form of Editorial Board membership, manuscript reviewer, and study section membership, especially for someone at the Assistant Professor level."

## Summary of Recommendation:

Dr. Kratz is a very productive researcher who has demonstrated a stellar track record of obtaining external grant funding from a wide variety of funding sources. She has made tremendous contributions to the medical and psychology fields on the topics of the experience, underlying mechanisms, and treatment modalities for chronic symptoms, such as pain and fatigue, across clinical diagnoses. She is an excellent and sought after research mentor and teacher and has developed a national reputation as an effective leader in service roles. I am pleased to offer my strongest possible recommendation for the promotion of Anna Kratz, Ph.D. 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