

PROMOTION RECOMMENDATION
UNIVERSITY OF MICHIGAN
MEDICAL SCHOOL
DEPARTMENT OF NEUROLOGY

Kevin A. Kerber, M.D., assistant professor of neurology, Department of Neurology, Medical School, is recommended for promotion to associate professor of neurology, with tenure, Department of Neurology, Medical School.

Academic Degrees:

M.S.	2008	University of Michigan
M.D.	2000	University of South Carolina
B.S.	1996	Xavier University

Professional Record:

2007-present	Assistant Professor of Neurology, University of Michigan
2005-2007	Clinical Lecturer, Department of Neurology, University of Michigan
2004-2005	Clinical Instructor of Neurology, University of California, Los Angeles

Summary of Evaluation:

Teaching: Dr. Kerber teaches general neurology to medical students and neurology residents. On an annual basis, he gives residents a talk on the emergency evaluation and management of the dizziness patient as part of the Emergency Lecture Series. In addition, he gives a series of talks during the year regarding a more comprehensive approach to dizziness presentations. Dr. Kerber also teaches residents who rotate with him as an elective. During this time, he leads didactic discussions and provides residents with relevant medical literature and video-taped findings to review. Evaluations of Dr. Kerber's teaching by medical students and neurology residents are consistently strong. Narrative comments included: "I appreciated all the teaching during the rotation!" "Very hands-on, very knowledgeable, actively involved us in decision-making, always took advantage of teaching opportunities." "One of the best attendings I've had so far this year." "It's clear he makes teaching a priority." In addition to this formal teaching, Dr. Kerber frequently does ad hoc teaching when asked to see an acute dizzy patient in the Emergency Department. He always takes the time to teach students and residents in these situations, which is greatly appreciated by all involved. Dr. Kerber also actively teaches in the Department of Otolaryngology's Vestibular Disorders Conference. Dr. Kerber is frequently invited to teach in other departments at UMHS including the Departments of Internal Medicine, Emergency Medicine, and Family Practice. Externally, Dr. Kerber is frequently invited to give continuing medical education talks. He has been invited speaker at the annual meeting of the American Academy of Neurology (2010, 2011, 2012), International Stroke Conference (2012), Munson Medical Center, and the University of Utah. In July of 2012, he was invited to teach physicians in India on the topic of dizziness and vertigo. Dr. Kerber is an invited author of

educational book chapters in popular texts such as Cecil's Essentials of Medicine, Conn's Current Therapy, and Neurology in Clinical Practice. He has also co-authored a comprehensive text book on the vestibular system titled, Clinical Neurophysiology of the Vestibular System, 4th edition. He was invited guest editor of the neuro-otology issue of *Continuum*, a popular CME periodical produced by the American Academy of Neurology.

Research: Dr. Kerber's research goal is to use health services research to optimize the evaluation and management of dizziness in routine care in a way that also contributes to a sustainable health care system. This research is a unique niche because experts in dizziness are rare and most of these experts are conducting basic science or physiology based research on the vestibular system. Dizziness is one of the most common reasons patients present for a medical evaluation. Dr. Kerber's papers have been among the first to report the clinical epidemiology regarding dizziness and vestibular disorders. These studies were a critical step in defining the impact of dizziness on healthcare systems and targeting areas for further research. As examples, Dr. Kerber's work has identified increasing trends in the proportion of patients presenting to EDs (Emergency Departments) for dizziness symptoms and concerning trends in the use of head computerized tomography (CT) scans. These papers, which used publically available and nationally representative datasets, also identified important gaps in research, which provided the basis for his NIH K23 award. The K23 project is a prospective population-based surveillance study of dizziness in the ED. Important published manuscripts from this grant have revealed the influence of non-clinical factors on processes of care and identified certain bedside assessments as targets for educational interventions. Other important analyses are being performed including determining the cumulative risk of stroke in the follow-up period among this ED dizziness population. An abstract analyzing predictors of head CT utilization was recently accepted for oral presentation at the 2012 American Neurological Association's Annual Meeting. The logistical operation of the K23 project has provided significant challenges that Dr. Kerber has managed well. These have included obtaining and maintaining IRB approval at three sites (including two in Texas), developing and maintaining surveillance methods during times of change in hospital computer systems, and transitions in research assistants in Texas. From this K23 project, Dr. Kerber has also built important collaborative relationships with community physicians in Corpus Christi, two of whom have co-authored a manuscript.

The clinical epidemiologic findings regarding dizziness and neuro-imaging utilization were used as preliminary results in the application for Dr. Kerber's AHRQ R18 grant. This is a landmark research study that aims to develop clinical decision support for the use of neuro-imaging in these high risk for stroke presentations. Recruitment for this study has been excellent, and the analysis of the data is planned for early 2013. The findings will fill a substantial void in the knowledge necessary for informed decisions about the use of neuro-imaging studies in acute dizziness presentations. In a 2008 international survey, ED providers ranked the topic of neuro-imaging in dizziness presentations as the #1 topic for decision support development. Dr. Kerber has also submitted an NIH R01 grant that received a 33rd percentile score on his first submission as an Early Stage and New Investigator. This new project aims to develop and implement a multi-faceted web-based intervention to increase the use of the test and treatment for benign paroxysmal positional vertigo (BPPV). An analysis of data from the K23 project, currently under review as a manuscript, served as key preliminary research for the R01 application based on discovering substantial underutilization of the evidence-based processes relevant to BPPV.

The R01 project is a collaborative effort of UM investigators with expertise in neurology, otolaryngology, emergency medicine, mixed methods designs, behavioral science, clinical epidemiology, and web-based interventions. It also includes close collaborations with community physicians. This grant was revised and resubmitted for the November 5, 2012 deadline. Dr. Kerber has also submitted an R18 grant to the Agency for Healthcare Research and Quality (AHRQ) for the September 25, 2012 deadline. This project aims to develop and test the efficacy of web-based interventions that enable patients to self-diagnose and self-treat BPPV. The impetus for this project was Dr. Kerber's recent publication in the high impact journal, *Neurology*, regarding the available and widely viewed instructions on BPPV treatment on YouTube.

Dr. Kerber has also been a key contributor to investigations involving "team science." He has made contributions to the Brain Attack Surveillance In Corpus Christi (BASIC) Project (PIs, Lewis Morgenstern and Lynda Lisabeth), and is co-investigator on R01 grant submission to NIH pending initial review (PI, David Newman-Toker, MD, Johns Hopkins University). Dr. Kerber has made important contributions to the work of junior faculty health services researchers in the Department of Neurology demonstrated by his co-authorship on seven recent publications including one as senior author. To promote health services research within the Department, Dr. Kerber has organized monthly health services research meetings with junior faculty investigators.

Recent and Significant Publications:

Kerber KA, Meurer WJ, West BT, Fendrick AM: Dizziness in the emergency department: 1995-2004. *Academic Emergency Medicine* 15:744-750, 2008.

Kerber KA, Schweigler L, West BT, Fendrick AM, Morgenstern LB: Value of CT scans in ED dizziness visits: Analysis from a nationally-representative sample. *American Journal of Emergency Medicine* 28:1030-1036, 2010.

Kerber KA, Hofer TP, Meurer WJ, Fendrick AM, Morgenstern LB: Emergency department documentation templates: variability in template selection and association with physical examination and test ordering in dizziness presentations. *BMC Health Services Research* 11:65-70, 2011.

Kerber KA, Morgenstern LB, Meurer WJ, McLaughlin T, Hall PA, Forman J, Fendrick AM, Newman-Toker DE: Nystagmus assessments documented by emergency physicians in acute dizziness presentations: A target for decision support? *Academic Emergency Medicine* 18:619-626, 2011.

Kerber KA, Burke JF, Skolarus LE, Callaghan BC, Fife TD, Baloh RW, Fendrick AM: A prescription for the Epley Maneuver: www.youtube.com? *Neurology* 79:376-380, 2012.

Service: Dr. Kerber has contributed to the department by providing service as the supervisor of the neurology library, member of the Brain Death Determination Committee, and member of a committee for a neuroscience clinical research initiative. Externally, he frequently performs peer

review service for a number of journals, including the highly ranked journal, *Neurology*. He was specifically asked to represent the American Academy of Neurology as a reviewer on a guideline manuscript developed by the American Academy of Otolaryngology Head and Neck Surgery. Dr. Kerber has also contributed to the neurology profession by participating in the “Neurology on the Hill” program, an event organized by the American Academy of Neurology to advocate on Capitol Hill for neurologic disorders and the neurology profession. Dr. Kerber also provides service to his profession by serving as an advisor representing the American Academy of Neurology for the Relative Value Unit Committee (“RUC”) of the American Medical Association. Dr. Kerber is the director of the Department of Neurology Dizziness Clinic and co-director of the Balance Disorders Clinical and Research Program.

External Reviewers:

Reviewer A: “Dr. Kerber’s research focuses on health services and clinical epidemiology, and his productivity has been exceptional....His current research, funded by the National Institutes of Health (NIH) and the Agency for Healthcare Research and Quality (AHRQ), offers the opportunity to optimize cost-effective care for dizziness and to develop a clinical decision process for identifying stroke in patients with acute dizziness.”

Reviewer B: “Kevin is an excellent educator who instills knowledge in an entertaining and comfortable manner, as reflected by outstanding audience evaluations.”

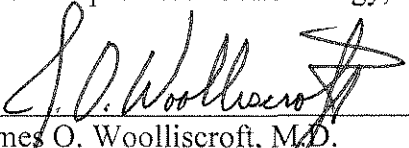
Reviewer C: “Dr. Kerber’s scholarship has impacted the field of dizziness at the emergency room level....As an academic neurologist myself responsible for teaching residents in various disciplines, I regularly use material from Dr. Kerber’s publications.”

Reviewer D: “Dr. Kerber has achieved early success in his chosen field of study and has clearly established himself as an emerging leader in health services research within neurology.”

Reviewer E: “Kevin’s scholarly activity places him in the top tier in the small/niche field of Neuro-Otology....I think it is likely that he will continue to succeed in his research efforts, and I would place him among the top ten academic neuro-otologists in the country...”

Summary of Recommendation:

Dr. Kerber is recognized nationally and internationally for his clinical and educational contributions for his clinical and educational contributions to the diagnosis and treatment of vestibular disorders. I am pleased to recommend Kevin A. Kerber, M.D. for promotion to associate professor of neurology, with tenure, Department of Neurology, Medical School.



James O. Woolliscroft, M.D.
Dean
Lyle C. Roll Professor of Medicine

May 2013