Approved by the Regents May 15, 2014

PROMOTION RECOMMENDATION UNIVERSITY OF MICHIGAN MEDICAL SCHOOL DEPARTMENT OF NEUROLOGY

<u>Devin L. Brown, M.D.</u>, associate professor of neurology, with tenure, Department of Neurology, Medical School, is recommended for promotion to professor of neurology, with tenure, Department of Neurology, Medical School.

Academic Degrees:

M.S.	2005	University of Michigan
M.D.	1997	University of Pittsburgh
B.S.	1992	Brown University

Professional Record:

2009-present	Associate Professor of Neurology, University of Michigan
2003-2009	Assistant Professor of Neurology, University of Michigan
2001-2003	Clinical Instructor of Neurology, University of Virginia

Summary of Evaluation:

Teaching: Dr. Brown performs several key educational roles. She teaches general neurology to medical students and neurology residents, and vascular neurology to fellows. She has also mentored undergraduates, graduate students, residents, fellows, junior faculty, and physical therapists in clinical research. Dr. Brown has consistently received very high scores from medical students and neurology residents. Similarly, her medical student evaluations have consistently been above the Department of Neurology mean, which itself is quite high. A sample comment included "I am at the end of third year and Dr. Brown is hands down the best attending I worked with." Dr. Brown directs the vascular neurology fellowship where she oversees the recruitment of fellows, implementation of the curriculum, and adherence to ACGME standards. She has led the fellowship through a very successful ACGME site visit as well as internal reviews. She is a dedicated mentor to the fellows and received the highest rating ("excellent") by every fellow for at least 17 of 18 categories rated. A sample comment included "Excellent teacher and mentor, I am so proud to be one of her trainees." Every one of the fellows from this program has gone into academics. Dr. Brown created, and has updated yearly, a stroke handbook for use by neurology residents and vascular neurology fellows that contains useful material for acute stroke management as well as a practical review of stroke treatment and prevention primary literature. This is an incredible resource for the house officers who routinely carry this manual with them.

Research: Dr. Brown is currently the principal investigator of three NIH R01s. Dr. Brown has produced high quality research that is innovative. Her productivity is evidenced by her over 90 peer-reviewed publications in high quality journals. She has developed two main areas of focus and expertise. (1) Sleep and stroke: Dr. Brown holds an NIH R01 to study the epidemiology of

sleep apnea after stroke and its relationship with important stroke outcomes, and a second NIH R01 to investigate health disparities related to sleep apnea after stroke within Hispanics, including environmental, lifestyle, and genetic factors that explain ethnic differences in sleep apnea. She also completed a pilot randomized placebo-controlled trial of continuous positive airway pressure (CPAP) for stroke recovery, which was the first sham CPAP-controlled trial in stroke patients. This study established the appropriateness of sham CPAP as a placebo for future trials of sleep apnea after stroke, and identified important factors that need to be addressed before a large definitive trial of CPAP should be conducted in stroke patients with sleep apnea. Furthermore, she showed for the first time, that positional therapy for sleep apnea has a modest effect on sleep apnea severity in hospitalized stroke patients, in a pilot randomized, controlled trial. She also identified a new ischemic stroke risk factor: rotating night shift work, based on work she led within the Nurses' Health Study. She is nationally and internationally-recognized for her expertise in the area of sleep and stroke, as evidenced by NIH funding, national and international presentations, international grant reviews, and many publications. (2) Stroke-related health disparities research: Dr. Brown holds a third NIH R01 to conduct a primary stroke prevention trial in Mexican Americans and European Americans in Corpus Christi, Texas. This study is the first motivational enhancement intervention trial to target stroke risk behaviors in Mexican Americans and has many novel features. Dr. Brown has been prolific in the area of health disparities. Her national reputation in the area of stroke health disparities is evidenced by her NIH funding, numerous publications, invited presentations, and role on a steering committee for an NIH-funded study (U24MD006961) that seeks to enhance enrollment of minorities in clinical trials.

Recent and Significant Publications:

Brown DL, Feskanich D, Sánchez BN, Rexrode KM, Schernhammer ES, Lisabeth LD: Rotating night shift work and the risk of ischemic stroke. *American Journal of Epidemiology* 169:1370-1377, 2009.

Svatikova A, Chervin RD, Wing JJ, Sanchez BN, Migda EM, Brown DL. Positional Therapy in Ischemic Stroke Patients with Obstructive Sleep Apnea. *Sleep Medicine* 12:262-266, 2011.

Burke JF, Brown DL, Lisabeth LD, Sanchez BN, Morgenstern LB: Enrollment of women and minorities in NINDS trials. *Neurology* 76:354-360, 2011.

Brown DL, Conley KM, Resnicow K, Murphy J, Sánchez BN, Cowdery JE, Sais E, Lisabeth DL, Skolarus LE, Zahuranec DB, Williams GC, Morgenstern LB: Stroke Health and Risk Education (SHARE): Design, methods, and theoretical basis. *Contemporary Clinical Trials* 33:721-729, 2012.

Skolarus L, Lisabeth LD, Morgenstern LB, Burgin W, Brown DL: Sleep apnea risk among Mexican American and non-Hispanic white stroke survivors. *Stroke* 2012; 43: 1143-1145, 2012.

<u>Service</u>: Dr. Brown has committed countless hours to service both internally and externally. She is the associate director of the Stroke Program and the director of the Vascular Neurology Fellowship program and performs time consuming administrative tasks related to these roles.

She is also a member of the NICU Quality Assurance Committee, the Neurology Department's Education Committee, Faculty Recruitment Committee, Executive Advisory Committee, the interdisciplinary Stroke Quality Steering Committee and Stroke Arrival Process Lean Team. Furthermore, she served on the CVC's Clinical Operations Committee for three years. Externally, she serves on the editorial board of two prestigious journals, Neurology and Stroke. She has served on an American Heart Association grant review panel, which she now co-chairs. Dr. Brown also serves on the International Stroke Conference's Abstract Grading Subcommittee and a task force of the American Neurological Association. Clinically, Dr. Brown serves as the attending on the Neurology Inpatient or Consultation Service (UMHS) for one month per year. She also operates a private Cerebrovascular Disorders clinic one half day per week. She staffs a resident and fellow Cerebrovascular Disorders clinic (CVC) one half day per month. She is an active member of the Stroke Response Team (formerly "Brain Injury Group"), taking call, including overnight and weekends, to care for emergent stroke cases (ED, UMHS). She, along with the other members of the Stroke Team, donates her time and effort for this crucial clinical activity. She also attends daily Stroke Unit rounds approximately one week per month to provide informal consultation on stroke inpatients.

External Reviewers:

Reviewer A: "Her research is consistently published in top-notch neurological and epidemiologic journals. She has numerous publications that have made a significant impact in the field....it is apparent that Dr. Brown has attained the national and international professional reputation consistent with this academic rank."

Reviewer B: "Dr. Brown has been involved with several important national meetings, serving as an abstract grader for the International Stroke Conference of the AHA and a technology committee of the AAN. She has been invited many times to present at major conferences supported by these and other organizations. Dr. Brown has been a member of an AHA grant review section for clinical brain-human studies for the past 3 years and was the co-chair this year. Her track record for grant awards is excellent and she currently is either the PI or a Co-Investigator on 6 NIH-sponsored grants."

Reviewer C: "Dr. Brown is viewed as a national and international leader in the area of disparity research and has considerable NIH and other funding in her area of expertise at a time when, as you know, it is challenging to successfully receive such grants. The field of stroke disparity research is in its infancy, and Dr. Brown's research proposals and active research work have been novel."

Reviewer D: "...she has pursued areas that advance her field; she is clearly recognized as a thought leader, and justifiably so."

Reviewer E: "In clinical stroke research, there are very few people with even a single R01, and she is leading several—truly a remarkable achievement....There is clearly a crescendo evident in her publication record and several projects currently underway will have major impact on practice. Furthermore, she is already widely recognized as an international leader in stroke clinical research."

Reviewer F: "...Dr. Brown is an internationally recognized clinician and epidemiologist. Her peer reviewed publications are of high quality and impact in the field. She has demonstrated evidence of independence and success in research and has continued ongoing contributions to the teaching mission, organizational service, and clinical care at your University."

Reviewer G: "Regarding professional stature, Dr. Brown is currently associate director of your Department's nationally-eminent Stroke Division, Director of your Stroke Fellowship Program which has trained several promising individuals who hold junior faculty positions around the country, and has attained prestigious fellowship member status in both the American Heart Association and the American Neurological Association. She has routinely delivered invited presentations in extramural settings, some of which involve a national or international audience....Dr. Brown has achieved great success in her academic career thus far, and I expect to continue to see, hear, and read about her trailblazing research endeavors in the years to come."

Summary of Recommendation:

Dr. Brown is an internationally recognized physician-scientist with an exemplary record of high quality and innovative research, teaching, and service. She amply deserves promotion, and it is with great pleasure that I recommend Devin L. Brown, M.D. for promotion to professor of neurology, with tenure, Department of Neurology, Medical School.

James O. Woolliscroft, M.

Dean

Lyle C. Roll Professor of Medicine

May 2014