PROMOTION RECOMMENDATION THE UNIVERSITY OF MICHIGAN MEDICAL SCHOOL DEPARTMENT OF ANESTHESIOLOGY

<u>Chad M. Brummett, M.D.</u>, associate professor of anesthesiology, with tenure, Department of Anesthesiology, Medical School, is recommended for promotion to professor of anesthesiology, with tenure, Department of Anesthesiology, Medical School.

Academic Degrees:

M.D. 2002 Indiana University School of Medicine

B.A. 1998 Indiana University

Professional Record:

2016 – presentAssociate Professor of Anesthesiology, University of Michigan2010 – 2016Assistant Professor of Anesthesiology, University of Michigan2010 – 2016Clinical Lecturer of Anesthesiology, University of Michigan

Summary of Evaluation:

Teaching: Dr. Brummett's education role includes teaching interns, residents, and post-doctoral and clinical fellows in the Back and Pain Center in the Department of Anesthesiology. He has served as the primary mentor for multiple anesthesiology residents and pain medicine fellows many of whom continue to pursue academic careers. He has given lectures to multiple clinical departments in the medical school and multiple graduate programs in other schools and colleges at the University of Michigan. Dr. Brummett has been the primary organizer for the *Opioids: Policy to Practice* summit between the University of Michigan and Harvard University sponsored by President Schlissel and President Bacow. He was the primary mentor for a PharmD candidate and serves on the mentoring committee for National Institutes of Health K-funded junior faculty at the University of Michigan, and other universities. Two of his former post-doctoral fellows are currently on an NIH K23 training award, and a Michigan Institute for Clinical Health Research Post-doctoral Translational Scholar Program.

Research: Dr. Brummett has demonstrated excellence in translational and clinical pain and opioid research. He is internationally recognized as a scholar in the fields of pain, especially for his work in acute and chronic post-surgical pain, and opioid prescribing, use, misuse and abuse. He has published more than 140 peer-reviewed articles, in top-tier journals including JAMA, JAMA Surgery, the Annals of Surgery. He has been invited to present his research on 131 occasions regionally, nationally and internationally. Dr. Brummett has been well funded by National Institutes of Health, the Department of Health and Human Services, and foundation grants. He has collaborated to create the Michigan Opioid Prescribing Engagement Network (Michigan OPEN) and reduced surgical prescribing for general, gynecologic and vascular surgery and total knee/hip arthroplasty by more than 50% while maintaining high patient satisfaction.

Recent and Significant Publications:

Harbaugh CM, Nalliah RP, Hu HM, Englesbe MJ, Waljee JF, Brummett CM: Persistent opioid use after wisdom tooth extraction *JAMA* 320(5): 504-506, 2018.

Larach DB, Waljee JF, Hu HM, Lee JS, Nalliah R, Englesbe MJ, Brummett CM: Patterns of initial opioid prescribing to opioid-naive patients *Ann Surg* Epub Ahead of Print: July, 2018.

Brummett CM, Waljee JF, Goesling J, Moser S, Lin P, Englesbe MJ, Bohnert ASB, Kheterpal S, Nallamothu BK: New persistent opioid use after minor and major surgical procedures in us adults *JAMA Surg* 152(6): e170504, 2017.

Cron DC, Englesbe MJ, Bolton CJ, Joseph MT, Carrier KL, Moser SE, Waljee JF, Hilliard PE, Kheterpal S, Brummett CM: Preoperative opioid use is independently associated with increased costs and worse outcomes after major abdominal surgery *Ann Surg* 265(4): 695-701, 2017.

Goesling J, Moser SE, Zaidi B, Hassett AL, Hilliard P, Hallstrom B, Clauw DJ, Brummett CM: Trends and predictors of opioid use following total knee and total hip arthroplasty *Pain* 157(6): 1259-65, 2016.

Service: Dr. Brummett is an anesthesiologist and pain physician who has recognized expertise in chronic pain patients, post-surgical pain, complex regional pain syndrome (CRPS), and acute and chronic opioid use. He has held a number of administrative roles in the Department of Anesthesiology, including as the director of Pain Research, director of Clinical Anesthesia Research, chair of the Anesthesia Clinical Research Committee, and associate chair for faculty affairs. As the former associate chair for faculty affairs and a research leader in the department, he created and continues to oversee launch and mentoring committees for junior instructional track faculty in the department. He was among the founding members of the institutional biorepository and has been a part of the many committees in support of this work, including the new Precision Health Initiative. Dr. Brummett is a member of the Michigan Medicine Clinical Trials Support Committee for Behavior, Function and Pain. He serves on multiple institutional committees and committees for the American Society of Regional Anesthesia and Pain Medicine. He has been appointed as an executive editor for Regional Anesthesia and Pain Management. Dr. Brummett wrote the first perioperative protocol for the management of patients who are refractory to high doses of opioids after surgery, which was approved by hospital administration and the pharmacy and therapeutics committee, and has continued to update these protocols due to changes in buprenorphine prescribing and changes in perioperative pain management options. He has presented this protocol at national meetings, including the American Society of Regional Anesthesia and Pain Medicine (ASRA).

Dr. Brummett started the first opioid drive with the Ann Arbor Police Department. Through the structure and statewide reach of Michigan OPEN, the opioid drives have now spread throughout the state of Michigan, with the last drive including 62 cities. The team created an event guide and standard operating procedures through which they teach sites to conduct drives, and he has secured funding from MICHR to help fund cities that could not otherwise hold these important events. In the last three drives the take back events have collected approximately 6,500 pounds of pills and more than 126,000 opioids and countless other controlled substances. For his efforts in leading these events, he was honored with the University of Michigan Dean's Award for Community Service in 2018.

External Reviewers:

Reviewer A: "In my opinion, Dr. Brummett is supremely qualified for this promotion by virtue of his excellence and achievements as a clinical-translational researcher, educator, clinician, and leader with a national and international reputation, and also a pioneer in clinical practice change around safer opioid stewardship."

Reviewer B: "Chad is on a steep trajectory having completed a pain fellowship only 7 years ago... As his CV attests, he is internationally recognized as a leader in this field with an incredibly [sic] number of funded and submitted research grants demonstrating multiple, widespread collaborations and publication in the highest impact journals."

Reviewer C: "Dr. Brummett's academic productivity is outstanding...while the volume alone is outstanding, the quality of the publications is equally impressive...I would put Dr. Brummett among the top 5% of his peer group...Beyond his impressive publication history, he has a remarkable funding history...Based upon, academic productivity and impact, Dr. Brummett would definitely be eligible to be promoted to a tenured professorship at our institution."

Reviewer D: "Dr. Brummett is an extraordinary clinical-scientist who is easily in the top 5% of clinical investigators in anesthesiology worldwide...Dr. Brummett is leading some of the most visible and effective programs in the nation in addition to carrying out his extremely well-funded and broadranging research efforts...His research team is one of the most well-funded research groups in anesthesiology in the United States, with an incredible array of ongoing studies and new grant applications."

Reviewer E: "Dr. Brummett has had a meteoric rise in his career and this is based on the quality of his work on numerous fronts... In particular, his research and educational efforts have had a dramatic impact... I would consider Dr. Brummett to be one of the top [junior] career pain physicians, clinicians and researchers in the world."

Reviewer F: "The National Institutes of Health (NIH) and Michigan Department of Health and Human Services (MDHHS) among other organizations, also recognize the impact of his examinations on the issue [opioids misuse] and invested millions of dollars into his work...In addition, his International reach has expended immensely with presentations in Europe, Asia and Australia just this past year..."

Reviewer G: "It is really pleasing to witness the development of Dr. Brummett's research area and focus, which is on a fantastic trajectory in terms of both quality and quantity...I was particularly impressed by the number of grants submitted and pending. What is particularly pleasing is seeing how the research is shifting more towards the heftier and wider impact journals, which reflects the reach [of] his work."

Summary of Recommendation:

Dr. Brummett has been highly successful and is rapidly become a national and international expert in pain management and safe opioid use which has become a critical national topic and emergency. He has a tremendous publication and funding record, many high profile exposures as a speaker, and is a recipient of important national awards. I am pleased, therefore, to recommend Chad M. Brummett, M.D. for promotion to professor of anesthesiology, with tenure, Department of Anesthesiology, Medical School.

Marshall S. Runge, M.D., Ph.D.

Executive Vice President of Medical Affairs

andeal S. Runge

Dean, Medical School