

PROMOTION RECOMMENDATION  
THE UNIVERSITY OF MICHIGAN  
MEDICAL SCHOOL  
DEPARTMENT OF SURGERY

David L. Brown, M.D., associate professor of surgery, with tenure, Department of Surgery, Medical School, is recommended for promotion to professor of surgery, with tenure, Department of Surgery, Medical School.

Academic Degrees:

M.D.	1993	Vanderbilt University
B.A.	1989	Wittenberg University

Professional Record:

2008-present	Associate Professor of Surgery, University of Michigan
2005-2008	Assistant Professor of Surgery, University of Michigan
2001-2005	Clinical Assistant Professor of Surgery, University of Michigan
2000-2001	Senior Lecturer, University of Melbourne, Melbourne, Australia

Summary of Evaluation:

Teaching: Dr. Brown has played a central and instrumental role in medical student, resident, and fellow education for the Section of Plastic Surgery at the University of Michigan and nationwide. His book, The Michigan Manual of Plastic Surgery (2<sup>nd</sup> Ed.), has contributions from all of the residents in the Section of Plastic Surgery and from other specialties in the Medical Center including orthopedics, ENT, dermatology and anesthesia. This work was both educational as well as promotional, positioning the plastic surgery residency program as one of the leaders in education around the world. The text continues to be the premier training manual for medical students and junior residents across the United States and in many foreign countries. Dr. Brown has been awarded the Residents' Teaching Award numerous times as well as the TAMS award from Medical Students. In evaluations from residents, he has consistently received superior ratings. Dr. Brown has been an integral part of curriculum development and delivery for the Plastic Surgery Residency Training Program. He has served on the Plastic Surgery Residency Steering Committee since its inception over 10 years ago. Dr. Brown teaches third and fourth year medical students, residents and fellows in a variety of settings including the OR, clinic, weekly lecture series, journal club, grand rounds and in dissection labs. He has hosted many undergraduate students, first and second year medical students, residents and faculty members from our institution and others around the world to shadow him in the clinical and laboratory settings for periods ranging from several days to two years. Dr. Brown has presented lectures and conducted dissection classes in other related disciplines such as Oral and Maxillofacial Surgery, Dermatology, ENT and nursing. In addition to his teaching at Michigan, he has been invited to lecture nationally and internationally on a variety of topics in plastic surgery. He has helped to guide several national educational efforts, including curriculum development for a new web-based Plastic Surgery Network, and program design for multiple national and international clinical and scientific meetings.

Research: Dr. Brown's research laboratory interests are in the area of tissue engineering, with a focus on the development of blood vessels, skeletal and heart muscle and kidney replacement tissues. In addition, he has an interest in clinical outcomes investigations. Dr. Brown has a total of 58 peer-reviewed publications, with 28 since his last promotion. He has received grant funding as a principal investigator from the NIH, and as a co-investigator from the NIH and Department of Defense. Dr. Brown has served on national study sections for the NIH, American Society of Plastic Surgeons, Plastic Surgery Foundation, American Association of Plastic Surgeons and the American Society of Peripheral Nerve. He has been a member of the curriculum development committee of the Plastic Surgery Educational Network, serving to design and build educational materials for this initiative.

Dr. Brown has served as a clinical and basic science research mentor for numerous plastic surgery residents, post-doctoral fellows and students. His research mentorship has enabled residents and fellows to publish a variety of manuscripts in peer-reviewed journals and to present papers at numerous national and international meetings. Under his tutelage, trainees have won awards for their research at meetings of the American Society of Plastic Surgeons, Association of Plastic Surgeons, American Society of Peripheral Nerve, Plastic Surgery Senior Residents' Conference, and the Surgical Forum of the American College of Surgeons. He has been invited as a visiting professor and for invited presentations at national and international meetings on over 20 occasions.

Recent and Significant Publications:

Birla RK, Dhawan V, Dow D, Huang YC, Brown D: Cardiac cells implanted into a cylindrical, vascularized chamber in vivo: Pressure generation and morphology. *Biotech Letters* 31:191-201, 2009.

Melvin ME, Fissell WH, Roy S, Brown DL: Silicon induces minimal thrombo-inflammatory response during 28-day intravascular implant testing. *ASAIO Journal* 56:344-348, 2010.

Roy S, Goldman K, Marchant R, Zydney A, Brown D, Fleischman A, Conlisk A, Desai T, Duffy S, Humes H, Fissell W: Implanted renal replacement for end-stage renal disease. *Panminerva Med* 53:155-166, 2011.

Kozlow JH, Patel SP, Jejurikar S, Pannucci CJ, Cederna PS, Brown DL: Complications following sternal reconstruction: A 16-year experience. *Journal of Surgical Research* 194:154-60, 2015.

Lytle IF, Kozlow JH, Zhang WX, Buffington DA, Humes HD, Brown DL: Negating tissue contracture improves volume maintenance and longevity of in-vivo engineered tissues. *Plastic and Reconstructive Surgery* 136:453e-460e, 2015.

Service: Dr. Brown is a member of many national, regional and institutional committees. He has worked tirelessly with national associations in plastic surgery including the American Society of Plastic Surgeons, American Society of Peripheral Nerve, and the Plastic Surgery Research Council, including in executive leadership positions. He served the Michigan Academy of Plastic Surgeons in all leadership capacities, including president. He has served in most of the executive

positions in the American Society of Peripheral Nerve, including the current vice president, and is in line for the presidency. Dr. Brown is a journal reviewer for several high profile journals of plastic surgery, microsurgery and surgical oncology.

At the University of Michigan Health System (UMHS), he has served as the medical director for the Dominos Farm's Plastic Surgery/Multidisciplinary Ambulatory Care Unit (ACU) since 2008, managing a budget of over \$4 million, a staff of over 60, and more than 30,000 patient visits annually. Under his guidance, the ACU has received several awards and achieved patient satisfaction scores in excess of institutional targets. He has implemented Lean in Daily Work, and integrated occupational therapy, physical medicine and general surgery teams into the ACU operations. Dr. Brown has served as the semi-permanent secretary/treasurer for the Dingman Alumni Society of the U of M Plastic Surgery Residency Program, helping to solidify important relationships with our surgical training program alumni. He was a clinical lead for the Ambulatory Care Information Systems Committee, the group that investigated and recommended the current MiChart electronic medical record adoption. In addition, he has served for many years on ITSAC (the Information and Technology Strategic Advisory Committee), and represents the entire Department of Surgery to the Medical Center as the Compliance Officer.

Professional Work: Dr. Brown is recognized as an outstanding technical surgeon and has made numerous clinical contributions in the areas of facial reconstruction, wound care and cancer reconstruction. He recently initiated new clinical subspecialty programs in peripheral nerve surgery and super microsurgery to address conditions of diabetic peripheral neuropathy, extremity pain and post-mastectomy lymphedema. The UMHS will be the first hospital in the state to provide this type of care to patients. He has participated in medical outreach missions in Cartagena, Columbia and Lviv, Ukraine. In addition to performing reconstruction for pediatric congenital and burn deformities, he has taken residents from UMHS along to introduce them to the benefits of international service, and has lectured and taught surgical procedures to local surgeons in these underserved areas.

#### External Reviewers:

Reviewer A: "David certainly stands in top 15% of his peers in regards to contributions to our specialty. He has excelled in all areas of service, including committees, research reviewer, journal reviewer and society leadership...He is the ideal faculty member contributing at multiple levels in all areas. Michigan is extremely lucky to have him."

Reviewer B: "It is clear that David has a great knowledge of peripheral nerve pathology. His input during our discussions, and also in a broader context during the meeting is always valuable."

Reviewer C: "Teaching has always been a passion of Dr. Brown. He is admired by the medical students and residents within plastic surgery. He devotes a significant amount of time to teaching lectures and teaching in the clinics and operating theatre. I have had many opportunities to interact with the residents in plastic surgery at the University of Michigan. The residents' comments are always of the highest regard for Dr. Brown. Indeed, other residents have offered the same feelings and comments about Dr. Brown through his visiting professorships across the country and Asia. Dr. Brown is an outstanding teacher."

Reviewer D: “Dr. Brown works at arguably one of the most respected Plastic Surgery programs in the country on account of the quality of the division’s research and amount of grant support. Despite this, he has been able to make a considerable name for himself. He co-authored The Michigan Manual of Plastic Surgery which is regularly used by students and residents across numerous disciplines. It is considered a well-written and well-organized overview of the vast field of plastic and reconstructive surgery.”

Reviewer E: “His research, funded by the NIH and the Plastic Surgery Foundation and the Department of Defense, among others, has been focused in the tissue engineering area. He has done some seminal work in the development of a device that would function like an implantable kidney and also has done some significant work in artificial heart development.”

Summary of Recommendation:

Dr. Brown is well respected by his colleagues and is known to be an excellent physician. Dr. Brown is a dedicated clinician, an excellent educator and a true scholar. I am pleased to recommend David L. Brown, M.D. for promotion to professor of surgery, with tenure, Department of Surgery, Medical School.



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Marschall S. Runge, M.D.  
Executive Vice President for Medical Affairs  
Dean, Medical School

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