

PROMOTION RECOMMENDATION
THE UNIVERSITY OF MICHIGAN
MEDICAL SCHOOL
DEPARTMENT OF NEUROSURGERY
DEPARTMENT OF RADIOLOGY
DEPARTMENT OF OTOLARYNGOLOGY-HEAD AND NECK SURGERY

Aditya S. Pandey, M.D., associate professor of neurosurgery, with tenure, Department of Neurosurgery, associate professor of radiology, without tenure, Department of Radiology, and associate professor of otolaryngology-head and neck surgery, without tenure, Department of Otolaryngology-Head and Neck Surgery, Medical School, is recommended for promotion to professor of neurosurgery, with tenure, Department of Neurosurgery, professor of radiology, without tenure, Department of Radiology, and professor of otolaryngology- head and neck surgery, without tenure, Department of Otolaryngology- head and neck surgery, Medical School.

Academic Degrees:

M.D.	2001	Case Western Reserve University Medical School
B.S.	1997	Washington University

Professional Record:

2017-present	Associate Professor of Otolaryngology, University of Michigan
2015-present	Associate Professor of Neurosurgery, University of Michigan
2015-present	Associate Professor of Radiology, University of Michigan
2012-2015	Assistant Professor of Radiology, University of Michigan
2008-2015	Assistant Professor of Neurosurgery, University of Michigan
2007-2008	Instructor of Neurosurgery, Thomas Jefferson University Hospital

Summary of Evaluation:

Teaching: Dr. Pandey's work showcases a strong interest in providing educational opportunities across the continuum of care in which he practices. He educates not only residents, but has been known to educate nursing staff and billing coders with respect to the complexities of interventional neurosurgery. He serves as the associate program director for the Neurosurgery Residency Training Program, and is the director for the Neurosurgery Endovascular Fellowship, a CAST approved fellowship in interventional neurosurgery at the University of Michigan. Dr. Pandey has mentored twelve advanced post-graduate fellows, two clinical fellows, four junior faculty, two graduate students, and multiple residents. He has been the leader of multiple seminars throughout the country, including workshops by the American Association of Neurologic Surgeons, the Congress of Neurologic Surgeons, and the Michigan Association of Neurologic Surgeons. He has led the Cerebrovascular Update Instructional Series at the Michigan State Medical Society and at Metro Health. Dr. Pandey's resident evaluations describe him as one of the most readily available and approachable attendings, and an amazing human being. He was honored with Teacher of the Year award by the department in 2018.

Research: Dr. Pandey's research focuses primarily on cerebrovascular neurosurgery, and events surrounding stroke. He has published more than 150 peer-reviewed articles, many reflect the breadth and depth of his experience in a variety of research areas, but focus primarily on cerebrovascular research. He also focuses on clinical outcomes to understand factors leading to functional outcomes in patients with brain injury, and specifically in those who have had subarachnoid hemorrhage. His work focuses on understanding the role of iron in brain injury, particularly in subarachnoid hemorrhage patients. Working within large databases, Dr. Pandey has been able to assess trends in the treatment of cerebrovascular disease, and help identify risk factors for poor outcome. He has been the site principal investigator for multiple clinical trials, including MISTIE III, AMERICA registry, HEAT trial, FEAT, ASTROH, iVAST, and SEGA. He also initiated his own clinical trial, SPAR, to evaluate the role of antiepileptics in the prevention of seizures post aneurysm clipping patients. Dr. Pandey has received a grant from Medtronic Navigation to investigate techniques for the treatment of hemorrhagic stroke. He is the principal investigator of a Michigan Translational Research and Commercialization grant looking at vortex catheter technology.

Dr. Pandey is the principal investigator of a National Institute of Neurological Disorders and Stroke (NINDS) grant that explores novel ultrasonic approaches in the treatment of hemorrhagic stroke. He is a co-principal investigator, with Dr. Neeraj Chaudhary, of a grant also funded through the NINDS, focusing on the phenomenon of ultra-early erythrololysis on intracranial hemorrhage in humans on MRI. He is the site director for a clinical trial on the interatrial treatment of vasospasm. Dr. Pandey's most recent work is a newly funded clinical trial looking at a collaborative effort between Peking University in China and Michigan Medicine, to study the role of deferoxamine in managing subarachnoid hemorrhage patients. This protocol alone can be a game changer for patients with subarachnoid hemorrhage, and is an example of how he takes basic science principles and brings them to the bedside.

Recent and Significant Publications:

Gerhardson T, Sukovich JR, Chaudhary N, Chenevert TL, Ives K, Hall TL, Camelo-Piragua S, Xu Z, Pandey AS: Histotripsy Clot Liquefaction in a Porcine Intracerebral Hemorrhage Model. *Neurosurgery* Mar 29, 2019.

Linzey JR, Burke JF, Sabbagh MA, Sullivan S, Thompson BG, Muraszko KM, Pandey AS: The Effect of Surgical Start Time on Complications Associated With Neurological Surgeries. *Neurosurgery* Sep 1, 2018.

Wilkinson DA, Burke JF, Nadel JL, Maher CO, Chaudhary N, Gemmete JJ, Heung M, Thompson BG, Pandey AS: A Large Database Analysis of Rates of Aneurysm Screening, Elective Treatment, and Subarachnoid Hemorrhage in Patients With Polycystic Kidney Disease. *Neurosurgery* Nov 26, 2018.

Pandey AS, Meurer WJ, Chaudhary N, Gemmete JJ, Thompson BG, Morgenstern LB, Burke JF Intra-arterial Stroke Treatment prior to the Stent-Retriever Era: High Mortality and Lack of Volume-Outcome Association. *J Stroke Cerebrovasc Dis* 10: 2553-8, 2016.

Li P, Chaudhary N, Gemmete JJ, Thompson BG, Hua Y, Xi G, Pandey AS. Intraventricular Injection of Noncellular Cerebrospinal Fluid from Subarachnoid Hemorrhage Patient into Rat

Ventricles Leads to Ventricular Enlargement and Periventricular Injury. *Acta Neurochir Suppl.* 121:331-334, 2016.

Service: Dr. Pandey is one of the most clinically productive neurosurgeons in the university, performing over 450 cases a year. He is highly valued for his surgical skills, as well as his depth of understanding of neurovascular issues, such that he can treat patients both surgically and endovascularly. He serves as the surgical director of the stroke program, and was instrumental in helping the University of Michigan achieve the designation of a comprehensive stroke program.

Dr. Pandey has been very active in our outreach efforts to Metro Health and Munson, and serves as the neurosurgery lead in Strategic Planning and Business Development. Additionally, Dr. Pandey is a member of the Interventional Radiology Value Analysis Team, the Infection Prevention Committee, the Neurosurgery Work Stroke Arrival Process Committee, the Stroke Peer-Review Process Committee, the CSC Executive Committee, and the Brain Injury Group. He is internationally renowned having worked with the All-India Institute, and most recently submitted a grant to Peking University with the Crosby laboratory to begin a clinical trial looking at the use of deferoxamine and iron in the role of brain injury. This work has been funded through joint efforts of Peking University and Michigan Medicine.

External Reviewers:

Reviewer A: “Dr. Pandey has achieved international recognition for his work in the field of cerebrovascular neurosurgery...He has published widely and presented his scholarly work at national symposia, where he has been a frequent invited speaker...He has also earned a reputation for excellence as a teacher and mentor.”

Reviewer B: “His scholarship has advanced the field of cerebrovascular/endovascular neurosurgery over time. His work on the endovascular treatment of aneurysms endovascular treatment of acute ischemic stroke, carotid stenting, mechanisms of tissue healing following coil embolization and novel ultrasonic treatment of intracerebral hemorrhage are recognized as seminal contributions to our field of vascular neurosurgery. Dr. Pandey would be ranked in the top 5-10% of his peers at this stage in his career...I believe that Dr. Pandey would achieve the equivalent rank at...at this time. He has national and international stature, extramural funding and has excelled with a productive research program and as an educator.”

Reviewer C: “My impressions of the quality, quantity, focus and scholarly impact of Dr. Pandey’s works are that they are outstanding...Dr. Pandey’s standing in our field compared to peers is outstanding...Dr. Pandey would likely be promoted to Professor with Tenure at our institution.”

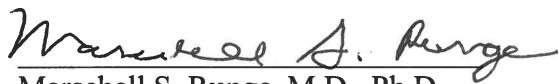
Reviewer D: “Aditya has been an innovator as he has led efforts to transform the care of hemorrhagic and ischemic cerebrovascular diseases. He and his team are leading the way for a minimally invasive thrombectomy device which may be use for ischemic stroke as well as pulmonary emboli, DVTs, and cerebral venous thrombosis... I have had many occasions to interact with the best and brightest in our profession, and to offer evaluations and recommendations for neurosurgeons at various points along a career trajectory. I can affirm without reservation that Aditya Pandey is one of the most deserving and accomplished neurosurgeons I have encountered in my career thus far...”

Reviewer E: “On a personal level, I found him to be pleasant, collegial, and humbled. He is very smart, motivated, knowledgeable, thoughtful, and committed to the field...Dr. Pandey is a well-rounded clinician-scientist and educator. He is known in the field and has already made important contributions. He is a deserving candidate for promotion to the rank of Professor.”

Reviewer F: “Dr. Pandey has a very distinguished academic track record dating back to 2008... He has published over 150 peer-reviewed papers, many of which are in high impact journals. He is also a sought after speaker on both the clinical topics related to cerebrovascular disease as well as his area of research focus. In addition, Dr. Pandey is an accomplished open and endovascular surgeon who has an outstanding, not only local, but regional and national reputation...He truly is one of the few vascular neurosurgeons performing NIH level rigorous science.”

Summary of Recommendations:

Dr. Pandey is an outstanding researcher with excellent funding. He has strong clinical interests, performing over 450 cases per year and a well-respected educator for a broad array of learners. I am pleased, therefore, to recommend, Aditya S. Pandey, M.D. for promotion to professor of neurosurgery, with tenure, Department of Neurosurgery, professor of radiology, without tenure, Department of Radiology, and professor of otolaryngology-head and neck surgery, without tenure, Department of Otolaryngology-Head and Neck Surgery, Medical School.



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

May 2020