

Approved by the
Regents
May 21, 2015

PROMOTION RECOMMENDATION
THE UNIVERSITY OF MICHIGAN
MEDICAL SCHOOL
DEPARTMENT OF NEUROSURGERY
DEPARTMENT OF RADIOLOGY

Aditya S. Pandey, M.D., assistant professor of neurosurgery, Department of Neurosurgery, and assistant professor of radiology, Department of Radiology, Medical School, is recommended for promotion to associate professor of neurosurgery, with tenure, Department of Neurosurgery, and associate professor of radiology, without tenure, Department of Radiology, Medical School.

Academic Degrees:

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| M.D. | 2001 | Case Western Reserve University |
| B.S. | 1997 | Washington University, St. Louis, MO |

Professional Record:

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| 2008-present | Assistant Professor of Neurosurgery, University of Michigan |
| 2012-present | Assistant Professor of Radiology, University of Michigan |
| 2007-2008 | Instructor, Department of Neurosurgery, Thomas Jefferson University Hospital, Philadelphia, PA |

Summary of Evaluation:

Teaching: Dr. Pandey is uniformly viewed as one of the strongest teachers within our institution. He receives glowing evaluations from residents. His ability to convey very complex neurosurgical procedures to residents has been excellent. He also has been able to inspire a series of residents to assess the clinical outcomes of a relatively new area of neurosurgery, endovascular treatment of lesions within the brain and spinal cord. His ability to provide hands on teaching on a regular basis to students has been widely admired. It is also clear that Dr. Pandey has been an excellent lecturer in organized neurosurgery, having been asked to give a series of lectures to outside institutions. He has been a visiting professor locally at Michigan State University and has also been a speaker at the Cerebrovascular Complications Meeting as part of the aneurismal growth and rupture during coiling embolization meeting. He has been a lecturer at multiple national neurosurgical organizations including the American Association of Neurological Surgeons (AANS) and the Congress of Neurological Surgeons. Because of his expertise in endovascular techniques, he is often asked to provide an analysis of early user assessment of various endovascular techniques. He regularly provides seminars to the Congress of Neurological Surgeons as well as the American Association of Neurological Surgeons and most importantly the Cerebrovascular Section of the AANS. He is recognized as a leader in the area of stroke intervention both here and nationally. He regularly instructs medical students as part of their rotation on the neurosurgery service. He spends the majority of his time in education of the residents in neurosurgery on microsurgical techniques and physiological understanding of stroke and intracranial hemorrhage. His experience with graduate students has been somewhat more limited, working primarily in the laboratories of Dr. Xing Fan who

established various stroke models for testing hypothesis with respect to intracerebral clot and hemorrhage. He has been instrumental in helping develop the Comprehensive Stroke Program working hand in hand with Neurology. The recognition of the stroke program as a comprehensive leader in the management of stroke is in no small part attributable to Dr. Pandey's efforts. In addition, he is leading an international effort with the All Indian Institute of Medical Sciences (AIIMS) working to develop an exchange program which will allow individuals from India to come to the United States, and individuals from our neurosurgical residency program will go and spend some time working on global health initiatives through AIIMS.

Research: Dr. Pandey's research focuses on cerebrovascular disorders, particularly the use of endovascular microsurgical techniques. He has been particularly interested in neurocognitive outcomes following elective aneurysm treatment as well as clinical outcomes after a variety of cerebrovascular disorders including; aneurysms, AVMs, and Arterial Fistula of the spinal cord. He has helped develop bioactive coils for the treatment of cerebral aneurysms. He currently has a grant from Covidien to look at clinical outcomes in cerebrovascular neurosurgery. He has funding through the New Generation Hydrogen Endovascular Aneurysm Treatment Trial run by MicroVention Terumo, a consortium that works with Northwestern University, to examine cerebrovascular disease. Finally, he has received an agreement for the development of a clinical research coordinator within the Department of Neurosurgery, specifically to examine outcomes. He developed the Michigan Endovascular Research Group. He has been a principal investigator on multiple clinical trials including MISTIII, America registry, HEAT trial and FEAT trial. He helped initiate the SPAR trail. Dr. Pandey also has several submitted grants including an important one making use of ultrasound in examining the optic nerve in severely injured animals to see if there can be any correlation ICP and pressure recordings from just outside the brain. He has had NIH grants, most recently in August 2012. He has 71 peer reviewed publications, most of them having been done since his arrival at the University of Michigan. All of them reflect his interest in cerebrovascular physiology and most importantly endovascular techniques with respect to neurosurgical issues.

Recent and Significant Publications:

Zhang C, Chaudhary N, Gemmete JJ, Thompson BG, Xi G, Pandey AS: Reactive tissue proliferation and damage of elastic lamina caused by hydrogel coated coils in experimental rat aneurysms. *J Neurointerv Surg.* 2014 6:480-486, 2014.

Pandey AS, San Antonio JD, Addya S, Surrey S, Fortina P, Van Bockstaele EJ, Veznedaroglu E: Mechanisms of endothelial cell attachment, proliferation, and differentiation on 4 types of platinum-based endovascular coils. *World Neurosurgery* 2013 Aug 30. pii: S1878-8750(13)01050-4. doi: 10.1016/j.wneu.2013.08.029. [Epub ahead of print]

Tawk RG, Pandey A, Levy E, Liebman K, Rosenwasser R, Hopkins LN, Veznedaroglu E: Coiling of ruptured aneurysms followed by evacuation of hematoma. *World Neurosurg* 74:626-631, 2010.

Pandey AS, Koebbe CJ, Liebman K, Rosenwasser RH, Veznedaroglu E.: Low incidence of symptomatic strokes after carotid stenting without embolization protection devices for extracranial carotid stenosis: a single-institution retrospective review. *Neurosurgery* 63:867-872, 2008.

Pandey AS, Koebbe C, Rosenwasser RH, Veznedaroglu E: Endovascular coil embolization of ruptured and unruptured posterior circulation aneurysms: review of a 10-year experience. *Neurosurgery* 60:626-636; 2007.

Service: Dr. Pandey currently serves as a member of important national and international neurosurgical societies including the American Association of Neurological Surgeons, Congress of Neurologic Surgeons, Society of Neuro Interventional Surgery, and the AANS Joint Section of Cerebral Vascular Surgery. Within his department, he is an associate program director, a reviewer for the Education Committee, as well as an important member of the Clinical Assessment Committee for the Neurosurgical Residency Program. He mentors multiple residents within the program and is viewed as one of the "go to" individuals when complex patients arrive at our institution. He is viewed by the community of neurosurgeons as a strong ally and is regularly called upon to provide expert care at a moment's notice, particularly for cerebrovascular events. Dr. Pandey has been a mainstay of the cerebrovascular program. He, along with Dr. Greg Thompson, has consistently carried a cell phone so that he can be reached 24/7 for outside consultations with other neurosurgeons, neurologists, neuroradiologists, and ER physicians regarding patients with acute cerebrovascular issues such as stroke, intracranial hemorrhage, aneurysms, and AVMs. He, along with Dr. Thompson, has built a very strong cerebrovascular practice which works not only to assess endovascular techniques but also to allow standard open techniques towards very complex problems. In this sense he provides "one stop" shopping for a wide variety of patients.

External Reviewers:

Reviewer A: "...Dr. Pandey has made numerous academic contributions to the field of endovascular neurosurgery, particularly focusing on the management of cerebral aneurysms and other arteriovenous malformations....Dr. Pandey, as well, is significantly involved in both the leadership of the neurosurgical societies, particularly the executive committee of the Joint Section on Cerebrovascular Surgery, in which he has served over the last five years."

Reviewer B: "Dr. Pandey has an impressive list of peer reviewed publications and other contributions focusing on the realm of cerebrovascular surgery, both endovascular and microsurgical....Dr. Pandey has an emerging national/international reputation appropriate for this promotion. He would be promoted at my institution."

Reviewer C: "Dr. Pandey's scholarship has advanced the field of cerebrovascular/endovascular neurosurgery over time. His work on the endovascular treatment of aneurysms, carotid stenting and mechanisms of tissue healing following coil embolization are recognized as seminal contributions to our field of vascular neurosurgery....He has achieved a strong national reputation and is recognized as a leader in his field."

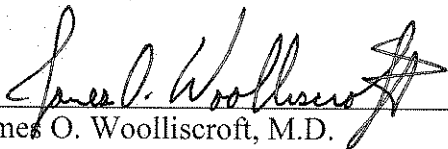
Reviewer D: “Dr. Pandey’s scholarly and professional niche is in the advancement of the endovascular treatment of cerebrovascular diseases and conditions. I would consider him in the top 10% of peers in the field.”

Reviewer E: “He has been instrumental in building a comprehensive stroke program at the University of Michigan and serve[s] as the Surgical Director of the Comprehensive Stroke Center (CSC). In addition, he has influenced clinical care by participating on a multitude of academic and clinical committees: SSVSCC (surgical services), Stroke Arrival Process, Stroke Peer Review Process, Brain Injury Group, Clinical Operations Committee, and Ambulatory Care Unit Committee. In this process he has helped in developing the largest cerebrovascular practice in the State of Michigan.”

Reviewer F: “Aditya is an outstanding clinician with a tremendous regional and national reputation for his clinical expertise. He has published over 70 manuscripts, the vast majority of which are related to vascular disease and in particular, his expertise in the endovascular realm. This is an outstanding level of accomplishment for someone at his stage of his career.”

Summary of Recommendation:

Dr. Pandey works seamlessly with a variety of individuals, particularly partners in the Department of Radiology, with whom he has established a strong cerebrovascular service. His research interest coincides well with his clinical interest and he has been extremely productive despite a grueling clinical practice. He has been instrumental as one of the two leaders for our Comprehensive Stroke Program, receiving recognition as a comprehensive stroke destination program. I am pleased to recommend Aditya S. Pandey, M.D. for promotion to associate professor of neurosurgery, with tenure, Department of Neurosurgery, and associate professor of radiology, without tenure, Department of Radiology, Medical School.



James O. Woolliscroft, M.D.

Dean

Lyle C. Roll Professor of Medicine

May 2015