PROMOTION RECOMMENDATION UNIVERSITY OF MICHIGAN MEDICAL SCHOOL DEPARTMENT OF NEUROSURGERY

<u>Paul Park, M.D.</u>, assistant professor of neurosurgery, Department of Neurosurgery, Medical School, is recommended for promotion to associate professor of neurosurgery, with tenure, Department of Neurosurgery, Medical School.

Academic Degrees:

M.D. 1998 University of Michigan

B.S., M.A. 1994 University of California, Los Angeles

Professional Record:

2006–present Assistant Professor of Neurosurgery, University of Michigan Lecturer, Department of Neurosurgery, University of Michigan

Summary of Evaluation:

Teaching: Dr. Park is viewed as one of the extraordinary, hands-on teachers within the Department of Neurosurgery. He received the Julian T. Hoff Faculty Teaching Award which is voted upon by residents in neurosurgery. He is sought after by residents due to his amazing ability to provide an in depth learning conversation in the operating room while allowing the residents the maximum amount of independence that is safe in the care of the patient. Perhaps one of the highest compliments that can be paid to a faculty member is to have residents arguing over who will have the opportunity to scrub with you and Dr. Park has this occur on a daily basis. Among all neurosurgery faculty, he is viewed as one of the top hands-on teachers in the operating room. Dr. Park has been a mentor with respect to spine research for students and has been particularly helpful in working with fellows within the Department of Neurosurgery who are focused on spine research. He has also worked with a series of medical students and has produced publications with each of these students which suggest again the strength of his mentoring ability. He has been on the dissertation committee of a Ph.D. student within the College of Engineering and has also mentored undergraduate students.

Research: Dr. Park maintains an active clinical practice. In fact, he is the busiest clinician within the Department of Neurosurgery. He also maintains a strong alliance and research portfolio. At present he is involved in two NIH grants. He is a co-investigator on a Dupuy spine grant in which he is the institutional lead on a multi-center prospective randomized controlled trial comparing cervical arthroplasty to anterior cervical discectomy and fusion for the treatment of cervical degenerative disk disease. He is a co-investigator with Dr. Andrew Haig in the Department of Physical Medicine and Rehabilitation looking at paraspinal denervation in low

back pain. He is also a co-investigator with Dr. Chia-Ying Lin on a NIH R01 looking at Simvastatin to retard degenerative disk disease. He also has had grants from the University of Michigan Clinical Innovation Fund as well as from Blackstone Medical looking at studies evaluating a novel allogeneic cancellous bone matrix in patients undergoing anterior cervical discectomy. Dr. Park has been very productive writing some 50 peer reviewed publications. He has seven publications just within the 2011 year and 13 publications from 2010. He is recognized as an expert in the area of complex spinal surgery, particularly the use of minimally invasive techniques. Perhaps Dr. Park's strongest attribute is that not only does he discuss these procedures, but also their outcomes in an unbiased and intellectual fashion. He is recognized for this throughout the spine world.

Recent and Significant Publications:

Park P, Wang AC, Sangala JR, Kim SM, Hervey-Jumper S, Than KD, Farokhrani A, La Marca F: Impact of multi-modality intraoperative monitoring during correction of symptomatic cervical or cervicothoracic kyphosis. *J Neurosurg Spine* 14:99-105, 2011.

Wang L, Park P, Zhang H, La Marca F, Claeson A, Valdivia J, Lin CY: BMP-2 inhibits the tumorigenicity of cancer stem cells in human osteosarcoma OS99-1 cell line. *Cancer Biol Ther* 11:457-463, 2011.

Sack JA, Etame AB, Shah GV, La Marca F, Park P: Management and outcomes of patients undergoing surgery for traumatic cervical fracture associated with an asymptomatic vertebral artery injury. *J Spinal Disord Tech* 22:86-90, 2009.

Park P, Upadhyaya CD, Foley KT: The impact of minimally invasive spinal surgery on perioperative complications in the overweight or obese patient. *Neurosurgery* 62:693-699, 2008.

Park P, Foley KT: Minimally invasive transforaminal lumbar interbody fusion with reduction of spondylolisthesis: Technique and outcomes after a minimum of 2 years' follow-up. *Neurosurg Focus* 25:E16, 2008.

Service: Dr. Park's service extends into several areas. Because of his outstanding teaching skills he is viewed as one of the consummate clinical scholars. He is also the most clinically productive of all the faculty within the department. Within organized neurosurgery, Dr. Park is a member of all of the national organizations and a founding member of an important new society, the Society for Minimally Invasive Spine Surgery, which has an ever increasing membership. He is also an ad hoc reviewer for all of the major journals within neurosurgery and is on the data safety monitoring board for a phase 1 trial examining human spinal cord derived neural stem cell transplantation for the treatment of ALS. He has served as a moderator on a variety of panels within the neurosurgical committee and is always called upon to provide teaching courses both nationally and internationally. He is viewed as one of the experts in minimally invasive spine surgery and for a variety of complex disorders of the cervical, thoracic and lumbar spine. He is fellowship trained in this area and has brought this to the University of Michigan where he has flourished as one of the mainstays for treatment of complex spinal disease. We as an institution

are recognized because of his expertise in this area. His expertise is reflected not only because he is asked to teach this on a national and international basis, but also by the fact that he is the most frequently referred to surgeon when it comes to spinal disorders for many of our faculty, residents and administrative individuals within the greater University of Michigan community. He maintains a very high volume clinical practice but still manages to maintain a strong research practice which is evidenced not only by his funding but also by his numerous publications.

External Reviewers:

<u>Reviewer A</u>: "His work is a very integral part of the foundation of minimally invasive spine care in this country and around the world. His publications have helped validate the role and value of minimally invasive approaches."

Reviewer B: "Dr. Park has established himself as an up and coming leader in the field of Neurosurgery....He is one of the few clinically active spine surgeons who is also able to conduct basic science research."

Reviewer C: "It is clear from his body of work thus far that he has made substantial contributions to the field of spinal surgery, especially in a very dynamic area of minimally invasive surgery. His expertise in this area is far beyond his years in practice....His contributions have been significant as has his scientific investigation and innovation....His considerable contributions to the field, presentations at meetings, publications, and advancement of the science and practice of our specialty is a scholarly manner would clearly support his promotion at this institution."

<u>Reviewer D</u>: "It should be noted that several of Dr. Park's publications are highly referenced, landmark articles in the field of spinal surgery....He is a credit to your institution, and he is someone who would be a great fit in any academic neurosurgery department."

<u>Reviewer E</u>: "Dr. Park has a national reputation for excellent in the delivery of health care for patients suffering from spinal diseases. He is considered a bright star in this area and many have great expectations for him."

Reviewer F: "Paul has clearly distinguished himself on the national and international stage....Perhaps his strongest suit is his teaching abilities. I have heard numerous unsolicited commentaries from University of Michigan medical students, residents, and fellows relating how Paul exemplifies the true teaching qualities of a professor....He is a model for many of us who often find ourselves too busy pursuing our own research interests or clinical duties to spend the effort to train the next generation of doctors."

Summary of Recommendation:

In summary, Dr. Park has outstanding clinical skills and is the consummate teacher. He has a strong and purposeful research portfolio with demonstrated ability to publish at a high level as well as to obtain outside funding through collaborations with basic scientists within the Department of Neurosurgery as well as within the School of Engineering. He is most worthy of promotion to associate professor, with tenure, in the Department of Neurosurgery. I am pleased, therefore, to recommend Paul Park, M.D. for promotion to associate professor of neurosurgery, with tenure, Department of Neurosurgery, Medical School.

James O. Woolliscroft, M.

Dean

Lyle C. Roll Professor of Medicine

May 2012