

PROMOTION RECOMMENDATION
THE UNIVERSITY OF MICHIGAN
MEDICAL SCHOOL
DEPARTMENT OF NEUROSURGERY
DEPARTMENT OF ORTHOPAEDIC SURGERY

Paul Park, M.D., associate professor of neurosurgery, with tenure, Department of Neurosurgery, and associate professor of orthopaedic surgery, without tenure, Department of Orthopaedic Surgery, Medical School, is recommended for promotion to professor of neurosurgery, with tenure, Department of Neurosurgery, and professor of orthopaedic surgery, without tenure, Department of Orthopaedic Surgery, Medical School.

Academic Degrees:

M.D.	1998	University of Michigan
B.S.	1994	University of California, Los Angeles
M.A.	1994	University of California, Los Angeles

Professional Record:

2012-present	Associate Professor of Neurosurgery, University of Michigan
2013-present	Associate Professor of Orthopaedic Surgery, University of Michigan
2006-2012	Assistant Professor of Neurosurgery, University of Michigan
2005-2006	Lecturer, Department of Neurosurgery, University of Michigan

Summary of Evaluation:

Teaching: Dr. Park is one of the outstanding teachers within the Department of Neurosurgery. Voted by the residents to receive the Julian T. Hoff Teaching Award in 2010, he has been routinely considered one of the faculty for whom the residents learn the complex decision making and surgical skills necessary to handle all forms of spinal pathology. Dr. Park educates medical students in the clinic as well as in the operating room. He also has a variety of students who have worked with him in various research projects. He is very much a “hands on” teacher providing medical students with opportunities in the operating room to understand the complexities of neuro-anatomy. His most important teaching comes from resident education for neurosurgery residents in which he spends many hours providing them with didactic lectures as well as operating room and in clinic teaching. He is extremely accessible to such residents and is viewed by them as an outstanding teacher who provides them with sufficient autonomy to develop their own skills but is always available and helpful when any difficulties arise. In addition to neurosurgical residents, he also educates physical medicine spine intervention fellows. He provides lectures as well as participating in their hands-on education with respect to interventional techniques. He also teaches surgical courses and provides lectures, CME and non-CME, to other departments, regional hospitals, and national meetings on spine surgery with an emphasis on minimally invasive techniques, spinal deformity, and new innovations pertaining to spine surgery. He has hosted orthopaedic surgeons from a variety of institutions, including China, and has been a mentor on

fellowships for orthopaedic surgery residents as well as neurosurgeons from around the world. The impact of his teaching within the department cannot be overstated and the depth of his knowledge is recognized nationally and internationally by his numerous invitations to host and teach at a variety of spine seminars and courses.

Research: Dr. Park's research focuses primarily on clinical research but also has had some basic science component to it as well. He has been particularly interested in outcomes of minimally invasive spine surgery with respect to cancer, trauma, and deformity. He has been the co-investigator on a series of industry funded clinical trials as well as a NIH sponsored trial on spinal stenosis. He has obtained grants from a variety of institutions including NIH, Blue Cross Blue Shield, and local grants through the University of Michigan. His grants have been able to examine all forms of spinal pathology and have led to recommendations regarding health policy as well as specific clinical and surgical care. His current grants include a Stem Cells Inc. grant looking at stem cells in cervical spinal cord injury, a Pfizer grant looking at a placebo controlled study to evaluate the safety and efficacy of staphylococcus aureus 4-antigen vaccine in adults undergoing elective posterior instrumentation. He also has a grant from Odontoid Process Orthofix, Inc. looking at the safety and efficacy of pulsed electromagnetic fields as an adjunct to enhance union in conservatively treated type II fractures of the odontoid process. Lastly, he has evaluated the neurocognitive impairment and serum biomarkers of mild traumatic brain injury having received an American Association of Neurology grant for this. He has multiple other submitted grants and has a long history of funded research within the Department of Neurosurgery. He is also involved at this time in a project looking at cervical spinal cord injury. He has partnered with Dr. Chia-Ying on a number of research projects pertaining to the spine and has worked extensively on osteosarcoma as well as renal cell carcinoma, which commonly metastasizes to the spine and other tumors seen by neurosurgeons.

Dr. Park has some 120 peer review publications, some 25 non peer reviewed publications, and 13 book chapters along with being editor of one book on spinal reconstruction. The majority of funding for his projects have come through by a series of collaborations both with industry as well as insurers and research agencies. It attests to the importance of his research for the general population and importance of understanding spinal pathology and spine surgery outcomes with respect to their significance as a national health priority.

Recent and Significant Publications:

Lau D, Song Y, Guan Z, La Marca F, Park P: Radiologic outcomes of static versus expandable titanium cages after corpectomy: a retrospective cohort analysis of subsidence. *Neurosurgery* 72:529-539, 2013.

Terman SW, Yee TJ, Lau D, Khan A, La Marca F, Park P: Minimally invasive versus open transforaminal lumbar interbody fusion: comparison of clinical outcomes among obese patients. *J Neurosurg Spine* 20:644-652, 2014.

Park P, Wang MY, Lafage V, Nguyen S, Ziewacz J, Okonkwo DO, Uribe JS, Eastlack RK, Anand N, Haque R, Fessler RG, Kanter AS, Deviren V, La Marca F, Smith JS, Shaffrey CI, Mundis GM, Mummaneni PV, ISSG: Comparison of two minimally invasive surgery (MIS) strategies to treat adult spinal deformity (ASD). *J Neurosurg Spine* 22:374-380, 2015.

Park P: Three-Dimensional CT-based spinal navigation in minimally invasive lateral lumbar interbody fusion: Feasibility, technique, and initial results. *Neurosurgery* Mar 23, 2015.

Goodman RM, Powell CC, Park P: The Impact of commercial health plan prior authorization programs on the utilization of services for low back pain. *Spine* 41:810-15, 2016.

Service: Dr. Park is one of the busiest surgeons within the department performing over 300 cases a year. He is the “go to” surgeon for all levels of patients and is frequently called upon to help with major donors, etc. His surgical skills are legendary, not only within the University of Michigan, but throughout the spine community. He is considered one of the most thoughtful and engaged surgeons with a conservative but highly successful approach to spine care. His minimally invasive spine program has taught residents state of the art techniques and has provided insights on how these techniques may be expanded across the spectrum of spinal pathology. Dr. Park is recognized for being one of a handful of neurosurgeons that maintains a superior skill set with respect to spinal pathology. He has been involved with multiple national and international spine societies and has routinely been asked to provide lectures on a wide variety of spinal issues to these organizations. He is a sought after visiting professor and individuals come from around the world to observe his surgical skills and techniques. Within the Department of Neurosurgery, Dr. Park serves as the leader of the spine program. He has organized multiple meetings for both CME and non-CME credit. His operative skills place him in the top 1% of our Department and his research talents are particularly strong considering the depth and level of his commitment to clinical practice.

External Reviewers:

Reviewer A: “He has been involved in leadership and instruction for spinal neurosurgery at the national level for many years. He is widely regarded as a thoughtful, clinician scientist who consistently adds to our knowledge base with his publications and lectures. Without question his publication portfolio is outstanding, and I would very much love to have Dr. Park on my faculty here if he becomes disenchanted with your program there at Ann Arbor.”

Reviewer B: “...he is known to be a technically gifted surgeon in the area of Minimally Invasive Spinal Surgery. He is also a well-known educator lecturing at numerous national meetings, overall I am impressed by Paul’s quality of academic work and his scholarly impact on our field.”

Reviewer C: “Dr. Park is considered one of the leaders in [the] spine field. He illustrates his understanding and desire to research spine care in that he has over 110 peer-reviewed publications.”

Reviewer D: “Simply put, Dr. Park is one of the most outstanding leaders in neurosurgery and spinal surgery. His leadership is exemplified not just in the number of peer review publications

and presentations, but also his presence on committees as well as guidelines groups and broad-based consortia (example, International Spine Study Group)... He is clearly in the vanguard of this group and is considered one of the handful of spinal surgeons who are leading this field forward in a substantial and dramatic fashion.”

Reviewer E: “From my perspective, he has an outstanding reputation amongst spinal surgeons. Dr. Park has performed many editorial duties as well as reviewed papers for meetings and also actively taught courses at national meetings... Dr. Park has provided service on a national level serving on a number of important committees in the Congress of Neurological Surgeons, the Section of Disorders of the Spine and Peripheral Nerves, the ISASS, and NASS. He has been an ad-hoc reviewer for a number of journals and is on editorial advisory boards of several other prominent spine journals. He is currently on the Executive Committee of the Joint Section on Disorders of the Spine and Peripheral Nerves.”

Summary of Recommendation:

Dr. Park is a strong leader within his local community. He provides outstanding neurosurgical care to one of the largest populations of patients seen by neurosurgeons. He works collaboratively across a variety of departments including rehab medicine and orthopaedics, to help accomplish the development and creation of a solid spine program with an excellent reputation. He has recently taken on the role of director of the Spine Program. He has demonstrated continued superlative clinical research, and he has also garnered the respect from individuals around the world who come to not only observe him but to participate in courses he has organized. I am pleased to recommend Paul Park, M.D. for promotion to professor of neurosurgery, with tenure, Department of Neurosurgery, and professor of orthopaedic surgery, without tenure, Department of Orthopaedic Surgery, Medical School.



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

May 2017

February 1, 2017

Paul N. Courant, Ph.D.
Interim Provost and Executive Vice President for Academic Affairs
3074 Fleming, Box 1340

Subject: Paul Park, M.D., Associate Professor, Empl. ID: 02449244; Neurosurgery (100%), Orthopaedic Surgery (0%) Date of Hire: 7/1/2005

Dear Dr. Courant:

I would like to recommend Paul Park, M.D., for promotion to Professor, with tenure, in the Department of Neurosurgery, and to Professor, without tenure, in the Department of Orthopaedic Surgery. Dr. Park received his M.D. degree in 1998 from the University of Michigan. He completed an internship in surgery from 1998-1999, and a residency in neurosurgery from 1999-2005 at the University of Michigan. Dr. Park concurrently completed a fellowship in complex spine surgery from 2003-2004 at the Cleveland Clinic Spine Institute, and a fellowship in minimally invasive spine surgery at the University of Tennessee in 2005. Dr. Park was appointed Lecturer in Neurosurgery at the University of Michigan in 2005. In 2006, he was appointed Assistant Professor, and in 2012, was promoted to Associate Professor, with tenure. Dr. Park was jointly appointed Associate Professor, without tenure, in Orthopaedic Surgery in 2013. This is his fifth year in rank.

Dr. Park's *instructional* activities include mentoring, didactic, and clinical teaching of undergraduate and medical students, residents and fellows. He has taught numerous spinal surgery courses for residents for the American Association of Neurological Surgeons (AANS). Dr. Park teaches medical students and residents during rounds, in the clinic and in the operating room. He also educates Physical Medicine spine interventional fellows in the clinic. Dr. Park has mentored one graduate student, seven medical students, and 12 fellows. Teaching evaluations for residents are superior with excellent comments. Evaluations from the AANS courses were very good.

Dr. Park's *research* activities focus on the outcomes of minimally invasive spine surgery, and other aspects of spine surgery, including cancer, trauma, and deformity. He is principal investigator of three clinical studies, one industry grant, and an American Association of Neurology grant. He has published 122 peer-reviewed articles and one

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book. Dr. Park has been invited to present his research on 79 occasions regionally and nationally.

Dr. Park's *organizational* service includes his role as Director of Spine Surgery. He is a member of the Evidence-Based Guideline Development Committee for the North American Spine Society, and the Interdepartmental Acute Spinal Injury Program for the University of Michigan. He serves as an editorial advisory board member for *The Open Spine Journal*, and *The Spine Journal*. Dr. Park is an editorial board member for *Case Reports in Orthopedics*, and the *World Journal of Orthopedics*. He is an Associate Editor for *PLoS One*, and *Operative Neurosurgery*. Dr. Park is a reviewer for seven journals. He is a member of the Coding and Reimbursement Task Force for the Advancement of Spine Surgery and on the Education Committee for the Scoliosis Research Society. Dr. Park serves on two committees for the American Association of Neurological Surgeons/Congress of Neurological Surgeons and two committees for the North American Spine Society. In 2013, he received the Award for Reviewer Excellence, and in 2015 the Award for Associate Editor Excellence from *Neurosurgery Journal*.

Dr. Park is an internationally renowned spine surgeon and neurosurgeon, whose research, service, and teaching all draw upon his clinical expertise. The Advisory Committee for Appointments, Promotions and Tenure (ACAPT) voted unanimously to approve the promotion recommendations, 7-0-0. The Executive Committee voted to confirm the promotion recommendations 7-0-1. The abstention is due to departmental affiliation.

Sincerely,



Marschall S. Runge, M.D., Ph.D.

Executive Vice President for

Medical Affairs and

Dean, Medical School