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

Peter J. Scott, Ph.D., associate professor of radiology, with tenure, Department of Radiology, and associate professor of pharmacology, without tenure, Department of Pharmacology, Medical School, is recommended for promotion to professor of radiology, with tenure, Department of Radiology, and professor of pharmacology, without tenure, Department of Pharmacology, Medical School.

Academic Degrees:

Ph.D.	2005	University of Durham, Durham, United Kingdom
B.Sc.	2001	Loughborough University, Loughborough, Leicestershire, United Kingdom

Professional Record:

2020-present	Associate Professor of Radiology (with tenure), University of Michigan
2020-present	Associate Professor of Pharmacology, University of Michigan
2017-2020	Research Associate Professor of Radiology, University of Michigan
2011-2017	Research Assistant Professor of Radiology, University of Michigan
2009-2011	Research Investigator of Radiology, University of Michigan

Summary of Evaluation:

<u>Teaching</u>: Dr. Scott is a very active instructor, providing lab-based instruction, classroom teaching, and mentoring undergraduate students, graduate students, post-doctoral fellows, junior faculty, and staff. In addition to students from the University of Michigan, he has mentored graduate students from China, Australia, Germany, and the United Kingdom. He has hosted several visiting scholars. Dr. Scott also provides didactic talks, guest lectures, and formal class instruction, and is a coach in Michigan Medicine's Mentored Research Academy (R01 Boot Camp).

<u>Research</u>: Dr. Scott's research focus is on Radiopharmaceutical Sciences. He manages the Positron Emission Tomography (PET) radiotracer production program as the director of PET Radiochemistry in the Department of Radiology. His funding continues to be exemplary and he has received federal funding from the National Institutes of Health, and private/foundation funding from Radionetics Oncology, the Farmer Family Foundation, and Bristol Myers Squibb. He has published a total of 155 peer-reviewed articles, in top-tier journals including the *Journal of Neural Transmission, Chem*, and *Nuclear Medicine and Biology*. He has published eight books and an additional 36 book chapters. He has 14 patents awarded. He has given a total of 58 extramural invited presentations and 20 seminars, indicating his expertise is well sought after and speaking to his national and international reputation. In 2019, he was awarded a Fellowship from the Royal Society of Chemistry and received the Distinguished Investigator Award from the Academy for Radiology and Biomedical Imaging Research. In 2021, he received two additional awards, a fellowship from the Society of Nuclear Medicine and Molecular Imaging and the EANM Springer Prize Best Paper for 2021 for "Cyclotron-based production of 68Ga, [68Ga] GaCl3, and [68Ga]Ga-PSMA-11 from a liquid target."

Five Recent Significant Publications:

- Rodnick ME, Sollert C, Stark D, Clark M, Katsifis A, Hockley BG, Parr DC, Frigell J, Henderson BD, Bruton L, Preshlock S, Abghari-Gerst M, Piert MR, Fulham MJ, Eberl S, Gagnon K, Scott PJH, "SA Synthesis of Ga-radiopharmaceuticals using both generatorderived and cyclotron-produced Ga as 68 68 exemplified by [Ga]Ga-PSMA-11 for prostate cancer PET imaging," *Nat Protoc* 17(4): 980-1003, 2022. 68 PM35246649.
- Abghari-Gerst M, Armstrong WR, Nguyen K, Calais J, Czernin J, Lin D, Jariwala N, Rodnick M, Hope TA, Hearn J, Montgomery JS, Alva A, Reichert ZR, Spratt DE, Johnson TD, Scott PJH, Piert M, "A Comprehensive Assessment of Ga-PSMA-11 PET in Biochemically Recurrent Prostate Cancer: Results 68 from a Prospective Multicenter Study on 2,005 Patients," *J Nucl Med* 63(4): 567-572, 2022. PM34326126 /PMC8973291.
- Wright JS, Sharninghausen LS, Preshlock S, Brooks AF, Sanford MS, Scott PJH, "Sequential Ir/Cu-Mediated meta-Selective C-H Radiofluorination of (Hetero)Arenes," J. Am. Chem. Soc. 2021; 143: 6915-6921. PMID: 33914521.
- Kaur T, Brooks AF, Lapsys A, Desmond TJ, Stauff J, Arteaga J, Winton WP, Scott PJH, "Synthesis and SA Evaluation of a Fluorine-18 Radioligand for Imaging Huntingtin Aggregates by Positron Emission Tomographic Imaging," *Front Neurosci* 15: 766176, 2021. PM34924935/PMC8675899.
- Webb EW, Scott PJH, "Potential Applications of Artificial Intelligence and Machine Learning in SA Radiochemistry and Radiochemical Engineering," *PET Clin* 16(4): 525-532, 2021. PM34537128.

<u>Service</u>: Dr. Scott has an outstanding service record nationally and internationally. He has served on numerous dissertation committees at the University of Michigan. He provides journal reviews for many top-tier journals including *Nuclear Medicine and Biology*, the *Journal of Nuclear Medicine*, and the *European Journal of Organic Chemistry*. He is an editor, section editor, senior editor, on the editorial advisory board, a guest associate editor, and a review editor for six publications including *Molecules*, *Nuclear Medicine and Biology*, and *Radiopharmacy and Radiochemistry*, *Frontiers in Nuclear Medicine*. Dr. Scott has served on several ad hoc National Institutes of Health study sections as well as numerous international and foundation grant review panels. He is the division director for the Nuclear Medicine division within the Department of Radiology, and the director of PET Radiochemistry at the University of Michigan.

External Reviewers:

<u>Reviewer A</u>: "Dr. Scott has an outstanding record in professional service and has achieved national and international recognition. He has received numerous prestigious honors to include the Royal Society of Chemistry top 10% of highly cited authors...as one of the top 100 read chemistry papers for Scientific Reports in Nature, Royal Society of Chemistry Fellow and The Academy for Radiology & Biomedical Imaging Research Distinguished Investigator Award. He has served in leadership positions in national societies, chaired grant study sections, external advisory boards and serves on editorial boards. He also successfully mentored numerous PhD trainees as potential next generation imaging scientists."

<u>Reviewer B</u>: "Dr. Scott breathed new life into the University of Michigan radiochemistry and CNS radiotracer development research field. His passion for the field and his ability to work with others in new and creative ways has placed Dr. Scott at the top of the 'new generation' of scientists that are developing new tools for imaging the brain...Prof. Scott is taking the innovative basic science many steps beyond where most radiochemists would and is adapting the new technologies into practical applications that can support human radiotracer development and use in human neuroimaging. It is

through the radiotracer development efforts that Prof. Scott will have the greatest impact."

<u>Reviewer C</u>: "Dr. Scott is presently the Co-Principal Investigator (co-PI) of three NIH grants: an R01 grant; an R21 grant; and a K99 training grant. The R01 and R21 research grants involve studies aimed at developing and improving efficient 18F-radiofluorination methods and developing metabolically trapped monoamine oxidase (MAO) radiotracers. He is also the coPI of a pharmaceutical company grant funded by BMS. In addition, Dr. Scott is currently a co-investigator on three NIH grants (R01, P30, and U01) as well as two foundation grants involving a variety of research imaging applications. These current grant-related activities point to the sustained growth and maturity of a senior-level radiopharmaceutical scientist in a variety of PET imaging areas."

<u>Reviewer D</u>: "I frequently reference his work and am updated on the progress of his investigational work by others in my field or in adjacent fields of study. More recently, I am starting to hear of others who have worked under him who are now at other institutions - also making an impact on the field."

<u>Reviewer E</u>: "Nearly all of his work is collaborative, which is a reflection that much of his work...is in service of answering biological or clinical questions by creating new imaging capabilities. Doing so inherently requires collaboration with biological and clinical investigators at the forefronts of their respective fields, and this collaborative nature of his work should be commended for its ability to push forward difficult scientific challenges...contributes extensively to the university in a teaching and mentoring capacity, and on a wide range of important institutional and departmental committees. The radiochemistry facilities he oversees also provide an incredibly valuable and unique resource to investigators...also actively engaged in the broader community, serving on editorial boards of a number of leading radiochemistry, chemistry, and imaging journals, and serving senior roles in several international societies in the field...as well as serving as a reviewer on NIH study sections."

Summary of Recommendation:

Dr. Scott is an exceptional researcher who is providing expertise in PET radiochemistry technology to faculty and students alike. He is a well-known international expert in his field and an incredible researcher and administrative leader in our department and the University of Michigan. I enthusiastically support the promotion of Peter J. Scott, Ph.D. to professor of radiology, with tenure, Department of Radiology, and professor of pharmacology, without tenure, Department of Pharmacology, Medical School.

andel A. Runge

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

May 2023