PROMOTION RECOMMENDATION UNIVERSITY OF MICHIGAN MEDICAL SCHOOL DEPARTMENT OF RADIOLOGY

Morand Piert, M.D., associate professor of radiology, with tenure, Department of Radiology, Medical School, is recommended for promotion to professor of radiology, with tenure, Department of Radiology, Medical School.

Academic Degrees:

M.D.

1984

University of Cologne, Koeln, Germany

Professional Record:

2004-present	Associate Professor of Radiology, University of Michigan
2002–2004	Private Lecturer and Senior Researcher in Nuclear Medicine,
	University of Munchen, Munchen, Germany
1999–2002	Clinical Instructor and Senior Research Scientist in Surgery,
	Technical University of Munchen, Munchen, Germany
1996–1999	Senior Clinical Instructor in General Surgery, University of
	Tubingen, Tubingen, Baden-Wurttemberg, Germany
1992–1993	Visiting Lecturer, Department of Radiology, University of
	Michigan
1989–1996	Clinical Instructor in General Surgery, University of Tubingen,
	Tubingen, Baden-Wurttemberg, Germany
1987–1989	Clinical Instructor in Plastic and Reconstructive Surgery, Rheinisch-
	Westfalische Technische Hochschule, Aachen, Germany

Summary of Evaluation:

Teaching: Dr. Piert participates in all aspects of the Department of Radiology teaching program. He teaches medical students and radiology residents on rotation in nuclear medicine and teaches fellows in the Division of Nuclear Medicine. He also teaches in the many interdisciplinary conferences in which radiographic images are presented. An active investigator, Dr. Piert also teaches graduate students and post-doctoral fellows in his laboratory. Specific comments about his teaching are positive and include, "Great at teaching. Teaches a lot," "Passionate educator, particularly in areas of research, provides meticulous approach to nuclear medicine," and "My favorite Nucs attending - he is always available in the reading room and makes teaching a priority. Great sense of humor." An aspect of teaching that is seldom assessed is the durability of the educational exercise. Letters from former trainees give us another prospective on the quality of Dr. Piert's teaching. One former mentee, who spent two years as a fellow in Nuclear Medicine writes, "As a trainee, I saw Dr. Piert as a role model demonstrating highly professional clinical skills and emphasizing evidence based practice in Nuclear Medicine. Dr. Piert presented cases for the multidisciplinary tumor board in a very educational and professional manner. He was known to deliver interesting and well-organized clinical lectures, which often contained relevant and up-to-date research data." Another, who spent two years in Nuclear Medicine as a fellow writes, "Dr. Piert has been a true mentor over my two years of training. He has provided

me with valuable advice and guidance during my clinical training and academic career. He was the initiator, driver and the brains behind our research project exploring the use of novel hybrid SPECT-CT leucocyte imaging, which was published in *Clinical Nuclear Medicine* in 2011."

Research: A member of the Division of Nuclear Medicine, Dr. Piert focuses his investigations on oncologic imaging with radionuclides. He is the principal investigator of a large grant from the Department of Defense using parametric PET MR fusion imaging to differentiate aggressive from indolent primary prostate cancers. He is the site PI on a NIH grant using functional imaging and molecular markers to individualize adaptive radiation dose escalation in patients with non-small cell lung cancer. He also serves as the site PI for an American College of Radiology project comparing Fluorine 18 PET/CT with technetium 99m MDP scanning for detecting bone metastases. The quality of his research is demonstrated not only by his external funding but also the quality of his scientific publications. In 2008, Dr. Piert won the Springer Prize for best basic science paper at the European Association of Nuclear Medicine Congress. This prize honors the best published basic science paper in the nuclear medicine literature in the previous year. In 2011, he received the award for best scientific poster at the Midwestern Vascular Surgical Society Annual Meeting, and the Young Investigator Award at the Geisinger Abdominal Aortic Aneurysm Epidemiology, Genetics, and Pathophysiology Symposium.

Recent and Significant Publications:

Piert M, Park H, Khan A, Siddiqui J, Hussain H, Chenevert T, Wood D, Johnson T, Shah RB, Meyer C: Detection of aggressive primary prostate cancer with ¹¹C-choline PET/CT using multimodality fusion techniques. *J Nucl Med* 50:1585-1593, 2009.

Park H, Meyer CR, Wood D, Khan A, Shah R, Hussain H, Siddiqui J, Seo J, Chenevert T, Piert M: Validation of automatic target volume definition as demonstrated for ¹¹C-choline PET/CT of human prostate cancer using multi-modality fusion techniques. *Acad Radiol* 17: 614-623, 2010.

Garcia-Parra R, Wood D, Shah RB, Siddiqui J, Hussain H, Park H, Desmond T, Meyer C, Piert M: Investigation on tumor hypoxia in resectable primary prostate cancer as demonstrated by ¹⁸F-FAZA PET/CT utilizing multimodality fusion techniques. *Eur J Nucl Med Mol Imaging* 38: 1816-1823, 2011.

Park H, Wood D, Hussain H, Meyer CR, Shah RB, Johnson TD, Chenevert T, Piert M: Introducing parametric fusion PET/MRI of primary prostate cancer. *J Nucl Med* 53:546-551, 2012.

Meyer C, Ma B, Kunju LP, Davenport M, Piert M: Challenges in accurate registration of 3-D medical imaging and histopathology in primary prostate cancer. *Eur J Nucl Med Mol Imaging* Published online: 16 March 2013.

<u>Service</u>: Dr. Piert provides service to the Department of Radiology, University of Michigan, and to his professional societies on both a national and international level. In the Department of Radiology, Dr. Piert heads the nuclear medicine oncology program. He also serves on the PET Operations Committee and was the nuclear medicine representative for the implementation of the picture achieve and communication system (PACS). Until last year, he served as a member of the Service Excellence Committee and is now a member of the Information Technology

Committee. On a national level, Dr. Piert serves the Society of Nuclear Medicine as an elected member of the board of directors for the central chapter and as an advisory board member for the use of radon 223 for the treatment of metastatic prostate cancer.

External Reviewers:

Reviewer A: "Dr. Piert's research shows a long standing track record of innovative new ideas, which includes highly sophisticated clinical and pre-clinical models....The type of research Dr. Piert is conducting requires a multi-disciplinary study team and Dr. Piert has shown great leadership skills as principle [sic] investigator to perform this type of research. He is nationally and internationally very renowned for his research and well recognized as an excellent teacher and lecturer."

Reviewer B: "Dr. Piert is perceived as a global expert in the field of Nuclear Medicine. He is well known for his scientific contributions and publications, by his capacity to communicate and to transfer knowledge, and by his ability to develop international collaborations."

Reviewer C: "...Dr. Piert's publications, funding record, teaching, editorial responsibilities and service contributions indicate a high level of academic achievement and a mature level of scholarship commensurate with the rank of Professor. He has a national and international reputation as an expert on nuclear medicine and molecular imaging, especially in areas related to cancer imaging and prostate cancer."

Reviewer D: "In the last decade, his research is focused on oncology, particularly the imaging of prostate cancer using radiolabeled choline...His recent scholarly achievements...are outstanding....I would rank Dr. Piert as a leading academic radiologist of international stature."

Reviewer E: "Dr. Piert is clearly one of the leading global experts in molecular imaging of prostate cancer...and because of his clinical background and experience in laboratory research he is able to carry ideas from basic research to clinical medicine."

Reviewer F: "Dr. Piert has a solid record of publication and he is working on important areas of tumor imaging. He has received substantial grant support as a co-investigator and project leader. Furthermore, there is presently a crying need for more academic radiologists with strong backgrounds in research."

Reviewer G: "Morand has had a successful career at the University of Michigan. I assure you that his promotion is appropriate and well deserved. His success reflects his own dedication toward using rigorous scientific techniques and radiotracers for basic and clinical investigations of tumors. I expect that were he to be offered a position at a peer institution of the University of Michigan, he would be considered for recruitment only at the professor level."

Reviewer H: "Dr. Piert's scholarship has made significant impact in the field of molecular imaging of prostate cancer....His publications have described a novel approach that permits spatial registration of image findings with histopathology and immunohistochemistry. This has led to important advances, such as a better understanding [of] potential margin errors between radiation targets based on PET thresholds and that of histology, as well as a discrepancy between hypoxic imaging findings and immunohistochemical markers."

Summary of Recommendation:

Dr. Piert is an outstanding clinical nuclear medicine physician who has become the go-to person in radiology for oncologic issues. As an extension of his research, he is leading the effort to apply new techniques, often using new radiotracers to common oncologic problems. His work has been especially valuable in assessing patients with prostate cancer. Dr. Piert provides service to the field of nuclear medicine on a national and international level. I enthusiastically recommend Morand Piert, M.D. for promotion to professor of radiology, with tenure, Department of Radiology, Medical School.

James O. Woolliscroft, M.D.

Dean

Lyle C. Roll Professor of Medicine

May 2014