PROMOTION RECOMMENDATION The University of Michigan School of Kinesiology

Riann Palmieri-Smith, associate professor of kinesiology, with tenure, School of Kinesiology, is recommended for promotion to professor of kinesiology, with tenure, School of Kinesiology [also associate professor of orthopaedic surgery, without tenure, Medical School].

Academic Degrees:		
Ph.D.	2004	University of Virginia
M.S.	2000	Indiana State University
B.S.	1999	California University of Pennsylvania
Professional Record:		
2010 – present		Associate Professor, School of Kinesiology, University of Michigan
2010 – present		Associate Professor, Department of Orthopaedic Surgery, Medical School,
		University of Michigan
2004 - 2010		Assistant Professor, Athletic Training, School of Kinesiology, University of
		Michigan
2004		Assistant Professor, Department of Human Services, Curry School of
		Education, University of Virginia

Summary of Evaluation:

<u>Teaching</u>: Professor Palmieri-Smith has consistently taught three of the core courses in the athletic training program (AT 115, Prevention and Care of Athletic Injuries; AT 210, Clinical Evaluation of Upper Extremity Athletic Injuries; AT 375, Pathophysiology of Diseases for the Allied Health Professions). Also, she has taught MVS 219 (Scientific Writing). In each of these courses, she has focused on developing critical thinking skills in students. Overall, Professor Palmieri-Smith has received strong teaching evaluations by students, with mean ratings of 4.5 (out of 5) as a teacher and 4.3 (out of 5) for her courses.

Outside of classroom teaching, she has successfully mentored many Ph.D. students and postdoctoral scholars who are progressing well and the graduates are all now in faculty positions. She has mentored a Ph.D. student for a highly competitive pre-doctoral fellowship from the NIH (NIH F31 award) under her sponsorship. She has also served on numerous doctoral and master's student committees, and sponsored dozens of undergraduate research experiences.

Under Professor Palmieri-Smith's leadership the athletic training curriculum has been completely revised, updated, and converted from a B.S. to M.S. degree program. This transition occurred in response to new accreditation and licensure requirements. Highlights of the new curriculum include more emphasis on interprofessional education with other health sciences, as well as immersive clinical experiences.

<u>Research:</u> Professor Palmieri-Smith has established an impressive track record of NIH funding (K08 (pre-tenure), R21, R01, and F31 (faculty sponsor)). Professor Palmieri-Smith was the first athletic trainer to ever receive a K award from NIH and one of only a few to have received an NIH R01 grant. Achieving federal funding at this level is rare in the field of athletic training. These funds position her for long-term success as an independent investigator and serve as a strong external

endorsement of her role as a researcher, the quality of her past and current research and her likelihood for future success.

Professor Palmieri-Smith's research is interdisciplinary, and as such, the publications have multiple authors. The first and last author positions are considered the most prestigious. While the first author is often considered the lead, it is also common to have trainees as first author and the senior supervising author as the last author. Middle authorship is typically for the collaborators. A strong interdisciplinary scientist will have a mix of authorship positions indicating their ability to lead, mentor and collaborate with others.

Recent and Significant Publications:

- Thomas, A.C., Hubbard-Turner, T., Wikstrom, E.A., Palmieri-Smith, R.M. (2017), "Epidemiology of Posttraumatic Osteoarthritis," *Journal of Athletic Training*, 52, 491-496.
- Thomas, A.C., Wojtys, E.M., Brandon, C., Palmieri-Smith, R.M. (2016), "Muscle Atrophy Contributes to Quadriceps Weakness after ACL Reconstruction," *Journal of Science and Medicine in Sport*, 19:7-11.
- Palmieri-Smith, R.M. and Lepley, L.K. (2015), "Quadriceps Strength Asymmetry Following ACL Reconstruction Alters Knee Joint Biomechanics and Functional Performance at Time of Return to Activity," *The American Journal of Sports Medicine*, 43:1662-9.
- Thomas, A.C., Wojtys, E.M., Palmieri-Smith, R.M. (2013), "Lower Extremity Muscle Strength Following ACL Injury and Reconstruction," *Journal of Athletic Training*, 48:610-20.
- Palmieri-Smith, R.M., Thomas, A.C., Karvonen-Gutierrez, C., Sowers, M.F. (2010), "Isometric Quadriceps Strength in Women with Mild, Moderate, and Severe Knee Osteoarthritis," *American Journal of Physical Medicine & Rehabilitation*, 89:541-8.

<u>Service</u>: Professor Palmieri-Smith has made major service contributions to the program, school and university that well exceed our requirements. She has served as a program chair for the athletic training program since 2004 and continues to serve in this role. She has been a member of the UM Health and Behavioral Sciences IRB (2010-present), including serving as the vice chair since 2017. She has been elected twice to the School of Kinesiology executive committee, which is a testament to the respect her colleagues have for her across the entire school. In addition, she has served on several other school committees, including the graduate committee and numerous faculty search committees.

Her service outside of the university includes being a reviewer for several funding agencies (i.e., NIH-NIAMS, DOD, NATA); membership on the National Football League (NFL) Musculoskeletal Research Committee (knee focus); previous service as the vice chair of Grants for the NATA Foundation; service as a founding associate editor (*Sports Health*) and on journal editorial boards (*Journal of Applied Biomechanics, Journal of Athletic Training*); and reviewing manuscripts for numerous high-quality journals.

External Reviewers:

Reviewer A: "An examination of Google Scholar indicates that Dr. Palmieri-Smith has had 12 articles that have been cited more than 100 times, which is very impressive. Many of these highly cited publications are in top tier journals, such as Clinics in Sports Medicine, American Journal Sports Medicine, Arthritis Care and Research, British Journal of Sports Medicine, and the Journal of Orthopedic Research.... It is my opinion that Dr. Palmieri-Smith has had and will continue to have a phenomenally productive academic and research career that brings recognition and pride to your

department. I believe her track record far exceeds others in the field of Athletic Training at a similar stage of development, and that she would be competitive for full professor in an Athletic Training program at any institution in the country."

Reviewer B: "Palmieri-Smith is a highly regarded scholar in the sports medicine and athletic training communities. She was among a select group of [junior] investigators seeking to better understand the management and longer-term sequelae to knee injuries and the neuromuscular consequences of degenerative changes in the knee. Her perspective as a clinician-scholar is reflected in the translation of her research into the improved care provided young patients after traumatic knee injuries.... Dr. Palmieri-Smith's research, service, teaching and publication record over the past 15 years reflects her ability to lead and collaborate in large research initiatives, teach those who will go into clinical practice, and mentor clinician-scholars who will further knowledge in sports medicine. Dr. Palmieri-Smith has skills in clinical research vital to the advancement of sports medicine."

Reviewer C: "Dr. Palmieri-Smith has developed a reputation as a very good clinical researcher, consultant, and educator in the field of athletic training. In reviewing Riann's curriculum vita and hearing her lecture at conferences on several occasions, it is obvious that she is making significant contributions to the body of knowledge on lower extremity injury prevention.... Dr. Palmieri-Smith's research studies appear to be of high quality, and I was impressed with the progression she described in her research narrative to continue answering the next relevant question based on her earlier findings. The application of some of her findings is not yet obvious, so I was pleased to read in her research narrative that she is beginning to examine additional interventions which may prove beneficial."

Reviewer D: "I find Dr. Palmieri-Smith's research to be consistently innovative, scientifically robust, and grounded in sound physiology. There is no doubt that Dr. Palmieri-Smith has built a clinically important, progressive, and sustained research program and that she is one of the leading scholars in her discipline."

Reviewer E: "Dr. Palmieri-Smith's work has filled foundational research gaps that have provided enhanced understanding of the impact of a 'simple' ACL tear, to enable the development of treatments that are aimed at mitigating the consequences of this injury. This line of research is critical. The downstream consequences on knee joint health lead to reduced physical activity that is associated with long-term health consequences of morbidity and mortality. The direct impact of Dr. Palmieri-Smith's research is clear. Her research has enabled the development of new strategies to reduce the long-term consequences associated with an ACL injury. This line of research is highly impactful, and can also translate to other musculoskeletal injuries to provide important contributions for long-term health. I have identified no weakness or areas that need improvement in Dr. Palmieri-Smith's scholarship.... Dr. Palmieri-Smith is in the top 15% of the field aimed at elucidating ACL recovery. This ranking is based on her impact on the field, scholarly contributions."

Reviewer F: "I believe she is best known for her work during this time period where she has been able to provide a deeper understanding of the neural mechanisms underlying quadriceps muscle dysfunction and weakness following ACL reconstruction. Her findings have led to evidence based therapeutic interventions to combat quadriceps muscle weakness that have great potential to improve long term outcomes and quality of life in those who suffer ACL injury. To Dr. Palmieri-Smith's credit, she and her research team have extensively published and presented from the findings of this work. She is also well known for her more recent work exploring post-traumatic osteoarthritis by understanding how gait mechanics contribute to cartilage health through the use of novel measures, such as cartilage metabolism and MRI techniques. It is clear that she has developed and maintained a focused and progressive line of research that has significantly impacted clinical practice and fostering future research."

Reviewer G: "Dr. Palmieri-Smith has a national reputation for her focused research agenda on the disability resulting from injury to the anterior cruciate ligament, and specifically 1) mechanisms and consequences of simulated neurological muscle inhibition; 2) mechanisms and consequences of muscle weakness after ACL reconstruction; and 3) establishing interventions to combat muscle weakness after ACL reconstruction. She has successfully sought and been awarded external funding from the National Institutes of Health in support of her work, including as principal investigator on an NIH R01 and co-principal investigator on an NIH R21 award. She has presented and published her research at the top scholarly meetings and scientific journals in her field. The successes she has had with her research program show great promise for continued success."

Reviewer H: "Dr. Palmieri-Smith ranks among the foremost researchers in anterior cruciate ligament rehabilitation in the world. Her contribution to our understanding of the problems patients have regaining the function of their quadriceps muscles after ACL injury are seminal... Riann is the very model of a modern clinician-scientist. She represents the best of athletic training, practice, and research and her distinction in practice and her enduring work in knee rehabilitation research have enriched the status of her profession. Dr. Palmieri-Smith is a credit to your University, our sports medicine research community and our profession. I support her promotion to Professor most enthusiastically. She would certainly be promoted at our University."

<u>Summary of Recommendation</u>: Professor Palmieri-Smith is a highly valued member of our school and her aggregate achievements in research, teaching, and service have resulted in enthusiastic support at all levels in our school as well as from external reviewers, for her promotion. Her highly collaborative interdisciplinary approaches over several areas of athletic training is a strong skill set for Kinesiology. It is with the support of the School of Kinesiology Executive Committee that I recommend Riann Palmieri-Smith for promotion to professor of kinesiology, with tenure, School of Kinesiology.

Lori Ploutz-Snyder Dean, School of Kinesiology

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