November 16-17, 2017

## ITEM 177-1009-R1117

Request for authorization to confer the title of Professor Emeritus of Ecosystem and Conservation Sciences on Steven W. Running – University of Montana-Missoula

## **THAT**

Upon the occasion of the retirement of Professor Steven W. Running from the faculty of the University of Montana, the faculty wishes to express its appreciation for his 38 years of dedicated and valued service by requesting that the rank of Professor Emeritus be conferred upon him by the Board of Regents of Higher Education.

## **EXPLANATION**

Dr. Steven W. Running earned his Ph.D. in 1979 from Colorado State University in Forest Ecophysiology, and joined the UM faculty that same year. Hired as an assistant professor in what was then the School of Forestry, Dr. Running would ultimately become a central figure within the Department of Ecosystem and Conservation Sciences (DECS) in the WA Franke College of Forestry and Conservation. Steve was promoted to associate professor in 1983, to full professor in 1988, and ultimately to Regents Professor in 2007. Throughout his entire tenure, Dr. Running remained one of the most productive scientists at UM, and retired as perhaps the most productive scientist in the entire Montana University System. He was initially hired as a tree biologist, but his career quickly took on new dimensions with the establishment of NASA's Mission to Planet Earth, a program approved by Congress in the early 1980s to increase understanding of global ecology. As a graduate student, Steve put himself on the leading edge of earth science by using emerging computer technology to scale important biological processes to the globe. At the early NASA planning meetings, Dr. Running presented an idea that would literally transform the field, and his career: to use data on plant growth measured from satellites to run global models on plant primary production. This novel and powerful idea launched Dr. Running's incredible career, helped put UM on the map as a nexus of ecological research, earned Steve a position on NASA's Earth Observing System Science Team (he remains a member to this day), and earned him an E.O. Wilson Biodiversity Technology Pioneer Award in 2009, one of the most prestigious prizes in Ecology. Then, in 2011, as a member of the Intergovernmental Panel on Climate Change (IPCC), Dr. Running shared the Nobel Peace Prize with other IPCC authors, becoming Montana's first and only Nobel Laureate.

As a faculty member, Dr. Running's productivity was off the charts. During his career, he published hundreds of peer-reviewed scientific papers, earning him a place on Reuters' "Highly Cited Researcher" list. More than 300 of his publications have been cited at least ten times, and 11 of his papers have been cited more than 1000 times each! All told, Dr. Running's publications have been cited more than 65,000 times, more than double the number of the next highest individual at UM. His h-index is 120, meaning that 120 of his papers have each been cited at least 120 times. These data speak not only to the sheer volume of Steve's work, but also to its incredible impact on the field. However, perhaps what is most impressive is that Steve's research trajectory ticked upward during every year of his career. While faculty productivity often declines late career, Steve's has only increased, with more than half of his total citations coming in the past five years. The very high level of productivity Steve has maintained through the years also speaks to his ability to successfully recruit and mentor graduate students. During his career, Steve served as primary advisor to more than 25 graduate students (mostly Ph.D. students), and several big players in the field of global ecology and biogeochemistry are former Running students. For example, one of Steve's former Ph.D. advisees is the lead scientist and deputy director of the Climate Change Science Institute at

Oak Ridge National Laboratory, and Steve's first student, Dr. Rama Nemani, is now a senior earth scientist and director of NASA's Ecological Forecasting Laboratory, and was recently recognized as a distinguished UM alumnus in October, 2017 for his own pioneering work in satellite-driven ecological forecasting technology. Professor Running's successful approach to mentoring and personal commitment to his students and their lives post-graduation has been extraordinary, and both his direct and indirect impacts in the field of earth science are felt both in the U.S. and abroad.

While Dr. Running's research program and involvement in graduate education have had broad impacts on the field, he has also shown tremendous vision and commitment to undergraduate education. Early in his career, he taught courses in dendrology, tree physiology, and forest dynamics. More recently, however, Dr. Running spearheaded the development of UM's Climate Change Studies (CCS) Minor, a degree program designed to help students address the growing causes and consequences of global climate change. This popular and growing degree program, one of the first of its kind in the U.S., addresses both the science and social dimensions of climate change. As a result of Dr. Running's vision, and passion for science, education, and the future of our world, the CCS degree program will continue to educate and empower students to address one of the most important challenges of the 21st century, and Steve deserves much of the credit for the success of this program.

Professor Running has made myriad significant and far-reaching contributions to his profession via his enormous volume of service, both in the U.S. and abroad. Since its inception in 1989, Steve has remained a member of the NASA Earth Observing System MODIS Science Team, reflecting his continued valued perspective in this area. Among many other appointments, Dr. Running has served on the National Research Council Committee on Ecological Impacts of Climate Change and the Climate Research Committee for the National Academy of Sciences, co-chaired the Terrestrial Carbon Science Research Program at the U.S. Department of Energy, vice-chair of the International Geosphere-Biosphere Program, and was Science Advisory Board member for the National Center for Ecological Analysis and Synthesis. Dr. Running also was a lead IPCC author from 2004 – 2007, for which he won a share of the Nobel Peace Prize. And while it may be hard to believe, these specific examples represent only a very small subset of the many, many appointments Steve has held over his long career. Steve is also viewed across the state and nation – and internationally – as a fearsome advocate for action on climate change, and is very well known for his public talks on the subject. As an emeritus professor, we have no doubt that Steve will continue to elevate UM through his ongoing service contributions.

Finally, there is perhaps no greater honor for a scientist than to be recognized by his/her peers for their outstanding contributions, and Steve has literally won dozens of awards in appreciation of his. He was recognized as a distinguished alumnus by Oregon State University in 2006, was selected as a UM Presidential Scholar in 2008, an Honorary Professor in the Environment Institute and Dept. of Geography at University College, London in 2009, he received the Montana Environmental Information Center Conservationist of the Year Award in 2012, and he has been a Fellow of the American Geophysical Union since 2006. Thus, based on his accomplishments in teaching, research and service, and a career dedicated to our students and the pursuit of knowledge, the Department of Ecosystem and Conservation Sciences is pleased to nominate Professor Running for emeritus status.

## **ATTACHMENTS**

No attachments