

Clayton Christian Commissioner of Higher Education Montana University System 2500 Broadway Street P.O. Box 203201 Helena, MT 59620-3201

Dear Commissioner Christian:

This letter outlines the remarkable contributions of Dr. Mark Jutila who has brought international recognition to Montana State University as a scholar and educator in support of his nomination to be named a Montana University System Board of Regents Professor. One would be pressed to identify a professor more dedicated to the growth and success of Montana State University than Dr. Jutila. Although Dr. Jutila is most recognized for his outstanding contributions to science, one would be sorely remiss to ignore his impact on undergraduate, professional, and graduate education at Montana State University.

Much of Dr. Jutila's passion for Montana State University (MSU) stems from his Montana roots. Dr. Jutila, who is a Bozeman native, began his professional career receiving a B.S. in Microbiology from MSU. He then went on to receive his M.S. and Ph.D. from Washington State University followed by a postdoctoral fellowship at Stanford University. Following his postdoctoral work he was recruited back to MSU in 1989 to the department of Veterinary Molecular Biology (Immunology and Infectious Diseases, currently Microbiology and Immunology). Dr. Jutila's leadership skills were recognized early and even before he was tenured he became acting department head. Once tenured he continued in the department head leadership position for over 5 years. During his tenure as department head of VMB, the department focused on research and recruitment of research active faculty was a priority. Dr. Jutila was instrumental in generating the funds to create the Jutila Research Laboratory a high-containment biosafety level 3 laboratory (BSL3) named after his father, Dr. John Jutila. Creation of this laboratory opened up research opportunities that had never been possible in the MUS system. Research opportunities in the BSL3 were strong selling points for the awarded Center for Biomedical Research Excellence (Center of Zoonotic and Infectious Diseases) that fostered the recruitment of even more outstanding faculty to the department of Immunology and Infectious Diseases. Dr. Jutila stepped down as department head only to return in recent years to lead the successful merger of Immunology and Infectious Diseases with Microbiology. His leadership in Microbiology and Immunology is easily tractable by looking at the logarithmic growth in student numbers and in grants and contracts from this department.

Office of the President

211 Montana Hall P.O. Box 172420 Bozeman, MT 59717-2420 www.montana.edu

Tel (406) 994-2341 Fax (406) 994-1893

On an individual level Dr. Jutila's contributions to research are exceptional. His work has focused on innate immunity with projects ranging from fundamental processes of how cells are recruited to sites of infection and understanding immune responses to intracellular bacteria, to investigating how natural compounds could be used to augment innate immunity to fight infectious diseases. Dr. Jutila has been principle investigator (PI) on multiple NIH, USDA, and ACS grants as well as leading multi-investigator grants from the NIH, DOD and USDA. Grants received by Dr. Jutila total ~\$25 million. Many of these grants were instrumental in building facilities and buying instruments and equipment to keep not only his research but also his colleagues' research competitive by keeping the resources cutting-edge. Dr. Jutila has published over 125 peerreviewed articles. His work has been cited over 9000 times in other peerreviewed journals. Scientists use the h-index as a metric to measure both the productivity and citation impact of a scientist. For perspective, an h-index of 45 or greater is consistent with members of the United States National Academy of Scientists. Dr. Jutila's h-index is 47, underpinning the impact of his footprint on immunological research.

Dr. Jutila has also received multiple awards at the university, national and international level recognizing his contributions to science. These include MSU's Wiley Award for Meritorious Research, Alumni Association/Chamber of Commerce Award for Excellence, Cox Award for Creative Scholarship and Teaching, Alumni Achievement Award and the Provost Distinguished Lecturer. His research has also been recognized by receiving the Science in Medicine Lecture for the University of Washington's School of Medicine, the Distinguished Alumnus Award for Washington State University and having given ~ 75 invited lectures nationally and internationally. Currently he is section editor of the *Journal of Leukocyte Biology* and completed a five-year tenure as section editor of *Journal of Immunology*. He is an ad-hoc reviewer for numerous scientific journals and has also served as a study section member and ad-hoc member on several NIH and USDA panels. These activities highlight his significant impact in the field of immunology and demonstrate that his accomplishments are strongly recognized by his scientific peers.

Although Dr. Jutila's name is most often associated with his research accomplishments, his contribution to education at MSU is also outstanding. Even while directing large research programs and having significant administrative duties Dr. Jutila has always been active in the classroom -- and at all levels -- from undergraduate, to graduate and professional programs. At the undergraduate level, Dr. Jutila was instrumental in starting a new degree program that trained students for technical careers in research laboratories. The Biotechnology degree focused on hands-on training of students to make students 'shovel-ready' for careers in research laboratories. The structure of the 400 level courses was all activity-based and used the flipped-classroom approach far earlier than the current trend. In this curriculum Dr. Jutila has taught "Hybridomas" and "Flow

Cytometry" for over 15 years. He has also hosted over 60 undergraduate interns many who went on to obtain advanced degrees. Additionally, Dr. Jutila has successfully mentored 8 Ph.D. students and 8 postdoctoral fellows. Many of these individuals have obtained tenure-track faculty positions, or positions in industry. His Advanced Immunology course for graduate students has been taught every other year since the early 90s.

Dr. Jutila has also significantly contributed to the Washington, Wyoming, Alaska, Idaho, Montana (WWAMI) cooperative medical education program having been course director for Immunology for 14 years and he holds an Affiliate Professor appointment at the University of Washington in the department of Immunology. Dr. Jutila led the charge to create another cooperative professional program at MSU but this time in veterinary medicine with Washington State University as the partner. The cooperative veterinary medicine program encompasses Washington, Idaho, Montana and Utah (WIMU) and Montana will graduate the inaugural class in Spring 2018. Without Dr. Jutila's vision and leadership this partnership would not have occurred. Moreover, his expertise in Veterinary Immunology was essential to the development of the WIMU Immunology course taught at MSU.

Finally, one would be remiss not to mention the time and dedication Dr. Jutila has given to mentoring junior faculty. Even as department head, Dr. Jutila has always operated with an open-door policy. He recognizes that to build strong departments you must invest in the next generation and gladly sacrifices his own time to help build the careers of promising faculty. Dr. Jutila has been a strong advocate for diversity and equality. Under his leadership, he made a concerted effort to ensure more women were recruited, retained and promoted. As a result of his efforts Microbiology and Immunology is a vibrant department that excels in research and teaching.

To close, Dr. Jutila is a preeminent scholar who has achieved excellence in all aspects of his academic appointment. He embodies the characteristics of a great leader and has been a loyal and dedicated MSU employee. It is, therefore, without reservation that I recommend him to be named a Montana University System Board of Regents Professor.

Sincerely,

Waded Cruzado

President