January 5, 2021

ITEM 192-1503-R0121

<u>Authorization to Confer the Title of Professor Emeritus on Beverly Karplus Hartline – Montana Technological University</u>

THAT

Upon the occasion of the retirement of Dr. Beverly Karplus Hartline from Montana Technological University, the faculty wishes to express its appreciation for her many years of dedicated and valued service to the institution, the Graduate School, the College of Letters, Sciences, and Professional Studies, the School of Mines and Engineering, and Highlands College, and the state of Montana by recommending the rank of Professor Emeritus be conferred upon her by the Board of Regents of the Montana University System.

EXPLANATION

Dr. Beverly Karplus Hartline received her B.A. degree in chemistry and physics from Reed College in 1971 and her Ph.D. from the University of Washington in 1978. Her dissertation was on hydrothermal circulation in the ocean crust, prior to and anticipating the discovery of biologically rich seafloor hot springs. Prior to completing her Ph.D., Dr. Hartline spent one year as a visiting assistant professor of natural science at Hampshire College in Amherst, MA. After graduate school, Dr. Hartline spent two years with the American Association for the Advancement of Science in Washington DC as a writer for the Research News Section of the journal, Science. She then spent two-and-a-half years at the National Aeronautics and Space Administration's Goddard Space Flight Center doing research to develop remote sensing capabilities for hydrologic sciences—especially for monitoring snowpacks and measuring their water equivalent. She next moved to the Lawrence Berkeley Laboratory and contributed to strategic planning and the development and fundraising for the Center for Advanced Materials and the Advanced Light Source—a world leading synchrotron radiation source providing intense beams of light--mostly in the Vacuum Ultraviolet University spectral band for studying materials and chemical reactions. She was then recruited to the team that finalized the design and secured funding to build the \$0.5 billion world-class scientific user facility now operating in southeast Virginia as Jefferson Lab in the national-laboratory system of the U.S. Department of Energy. She was responsible for completing the project within cost, on schedule and assuring it achieved its scientific performance goals. She also initiated and led innovative outreach programs to engage local inner-city K-12 students and their teachers in hands-on science and engineering activities. When the project was completed and the facility was operating for research by users throughout the United States and around the world, Dr. Hartline moved back to Washington DC, to serve as Assistant Director for Physical Science and Engineering at the White House Office of Science and Technology Policy. Her career then led to scientific management roles at Los Alamos National Laboratory. She left New Mexico to become Deputy Laboratory Director at Argonne National Laboratory in Illinois. Dr. Hartline moved from there sequentially to Heritage University in Central Washington, Delaware State University in Dover, and the University of the District of Columbia, all minority-serving universities, where she contributed to student success, enrollment growth in the graduate school, and research expansion. For eleven years, she was a member the 12-person international Working Group on Women in Physics, helping to organize four international conferences on women in physics and serving as the editor for three of the conference proceedings volumes. She has been recognized nationally as a Fellow of the American Association for the Advancement of Science, the American Physical Society, and the Association for Women in Science, is frequently invited to review proposals for funding agencies, and has served on many professional society leadership groups and government advisory committees.

Since arriving at Montana Tech as Vice Chancellor for Research and Dean of the Graduate School with non-tenurable rank of Professor, Dr. Hartline has applied her skills, knowledge, and the networks gained in her previous roles to help grow Montana Tech's national visibility and reputation, as well as its research funding and graduate programs. Dr. Hartline's contributions at Montana Tech have focused on supporting faculty--so that they can expand graduate enrollment in their departments, increase research activity in collaboration with students, foster student success and completion, and grow external grant funding.

In particular, some highlights of her accomplishments include increasing overall graduate enrollment by 44% since 2011; increasing the number of grants submitted by 50% (relative to 2013 numbers) while doubling the amount of grant funds requested and tripling the amount of grant funds received; launching Montana Tech's first two doctoral programs; and working with Tech's Center for Advanced Mineral Processing and the Army Research Lab to develop a cooperative research relationship that has brought in \sim \$20 million since 2015 for materials and advanced manufacturing research, supporting over a dozen faculty, at least 30 graduate students, and many undergraduate researchers in half a dozen departments. She worked tirelessly to develop, improve and present many professional-development workshops for Faculty, Staff, and Students: Principal Investigators (PI), writing winning proposals, Responsible Conduct of Research (RCR), grant management, weekend thesis/dissertation workshop for grad students, and annual NSF National Graduate Research Fellowship workshop for seniors and grad students. She also assisted many students and faculty one-on-one with strengthening the competitiveness of proposals and finding funding sources. She has significantly raised Montana Tech's international visibility and reputation by presenting invited talks about collaborating with Montana Tech at four universities in China, one university in Guinea, two universities in Cameroon, two universities in Nigeria, and one university in India, and helped establish new international agreements with these campuses. She has built a strong set of programs and infrastructure that will propel Montana Tech into the new millennium and leaves a lasting legacy that will serve the campus community far into the future.

Dr. Hartline's tenure at Montana Tech can be characterized by exceptional contribution to faculty research, research infrastructure, graduate programs, undergraduate research, student success, and overall service to the University and to the State for which she is to be commended. For these and numerous other contributions, the Department of Geological Engineering is pleased to nominate Dr. Beverly Karplus Hartline for the rank of Professor Emeritus at Montana Technological University.

ATTACHMENTS

No Attachments