University of Delaware
UCAR Membership Renewal Review
Thomas Mote and Len Pietrafesa

The University of Delaware has been a UCAR member since 2007. Delaware is a land-, sea- and space-grant institution. UCAR activities largely fall in the College of Earth, Ocean and Environment (CEOS) on the Newark and Lewes campuses. The college is a focused unit seeking understanding of Earth’s natural systems and the interactions of humans with the environment. The college contains the departments of Geography and Geological Sciences and the School of Marine Science and Policy. CEOS offers a new B.S. major in Meteorology and Climatology, in addition to majors in Environmental Science, Marine Science and Geological Sciences. In CEOS and other colleges, the University of Delaware offers a number of doctoral programs in the atmospheric sciences and related fields, including Climatology, Water Resources, Marine Studies and Oceanography, Environmental Engineering, and Public Policy.

CEOS will begin offering a new B.S. in Meteorology and Climatology in Fall 2015. The new program meets both the National Weather Service and American Meteorological Society educational guidelines and is the only undergraduate meteorology degree available in Delaware. The Ph.D. program in Climatology is among a small number offered in the United States.

The university maintains a number of research and service centers related to UCAR activities. Among the many centers, a few that stand out are the Center for Applied Coastal Research, The Center for Energy and Environmental Policy, Center for Remote Sensing, The Delaware Environmental Observing System, OCEANIC - The Ocean Information Center, and the Office of the Delaware State Climatologist. DEOS, for example, provides real-time meteorological conditions from 50 locations for Delaware and the surrounding region, offering the densest mesonet in the United States.

According to the renewal materials, the University of Delaware has averaged approximately $20 million in annual research expenditures across the environmental sciences each year during the FY11 to FY13 period. Between 2012 and 2014, University of Delaware faculty have averaged more than 20 articles per year published in meteorology specific journals and more than 200 articles per year in the atmospheric and related sciences according to the Thomson Reuters Web of Science.

The University of Delaware has actively participated in UCAR activities. For example, five Delaware faculty members, in collaboration with NCAR scientists, received a National Science Foundation grant (2009) to conduct research on multi-scale modeling of turbulent clouds on petascale computers within the NCAR computing constellation. Additionally, scientists at NCAR, the University of Delaware, and the energy firm DNV GL have examined wind power energy potential (2014). University of Delaware faculty have been regular participants at UCAR annual member meetings and the Dean of CEOS, Nancy Targett, attends UCAR Annual Meetings.
Provost Domenico Grasso stated the university’s intention to “continue its commitment to advancing knowledge in the atmospheric sciences and related research areas.” The University of Delaware meets the primary requirements for membership in UCAR: a program of study and research, contributions to progress in the atmospheric sciences, and participation in UCAR activities. Therefore, the Membership Committee recommends that the UCAR membership of the University of Delaware should be continued without reservation as provided by the bylaws.