UCAR Membership Committee Review of the  
State University of New York at Albany

State University of New York (SUNY) Albany has been a member of UCAR since 1970. The Atmospheric Science Program at the State University of New York (SUNY) Albany comprises the Department of Atmospheric and Environmental Sciences (DAES) and the Atmospheric Sciences Research Center (ASRC). SUNY Albany has been an active and engaged member of UCAR for decades.

Program of Studies and Research

The DAES and the ASRC constitute the largest program of atmospheric science and meteorology in New York State. The DAES offers a BS degree in Earth and Atmospheric Science that meets or exceeds all basic requirements of the AMS, a B.S. in Interdisciplinary Studies, and M.S. and Ph.D. degrees in Atmospheric Science. In the past six years the program has awarded 31 B.A. degrees in Broadcast Meteorology and Earth and Atmospheric Science, and an additional 175 B.S. degrees in interdisciplinary studies. At the same time the program has awarded 20 Ph.D. degrees in Atmospheric Science. The DAES has 16 full-time state-supported faculty members (Bosart, Corbosiero, Dai, Idone, Keesee, Keyser, Lang, Liu, Minder, Rose, Roundy, Tang, Thorncroft, Torn, Vuille and Zhou, seven tenured). The number of state-supported faculty positions has increased from 13 full-time faculty positions in 2006 and will reach 18 in 2015. The ASRC currently has 12 full-time state supported research faculty (Ferguson, Fitzjarrald, Freedman, Harrison, Joseph, Miller, Min, Perez, Schwab, Walcek, Wang, Yu, 10 tenured). In addition to the state-supported ASRC research faculty listed above, there are approximately 25 scientific staff including postdoctoral scholars, visiting scientists, and technical support specialists supported by ASRC research grants.

Progress in Atmospheric Sciences

DAES and ASRC faculty research specialties include mesoscale meteorology, synoptic-dynamic meteorology, tropical meteorology, atmospheric electricity, geophysical fluid dynamics, atmospheric chemistry, aerosol physics, solar radiation, radiative transfer, air pollution/air quality, boundary-layer meteorology, micrometeorology, remote sensing, climate change/climate modeling, and hydrometeorology. For the past five years, DAES and ASRC faculty have averaged approximately $4.8 million per year in external funding from NASA, NOAA, NSF, ONR, EPA, and DOE among others. Faculty members have published approximately 340 peer-reviewed journal articles during the same period. In addition to the externally-funded research activities, The University at Albany maintains two major research measurement field sites in upstate New York that are managed by ASRC in support of air quality research programs.

Participation in UCAR Activities

Since the last membership renewal, DAES and ASRC faculty members have participated in UCAR research activities and served on committees or volunteered in UCAR
programs and outreach activities. UCAR Member Representatives have attended the annual Member's Meeting on a regular basis. Dr. Everette Joseph, Director of the ASRC, presently serves on the Board of Trustees of UCAR. Dr. Daniel Keyser serves on the Membership Committee. Distinguished Professor Dr. Lance Bosart has held an NCAR affiliate scientist appointment since 1998. His numerous contributions to the UCAR mission include his membership on the UCAR Advisory Committee for NCEP (2011-2014), and his role of co-convener in the NCAR-ASP 2012 "Weather-Climate Intersection" Colloquium. Dr. Christopher Thornicroft acted on the organizing committee for and participated in the NCAR Integrated Science Program (ISP) Summer Colloquium "African Weather and Climate" in 2011.

DAES and ASRC faculty members are engaged in numerous research projects involving close collaboration with NCAR scientists. For example, the development of Advanced Hurricane simulations with WRF is an ongoing DAES research activity involving collaboration between Dr. Kristin Corbosiero and Dr. Ryan Tom with members of NCAR MMM. Dr. Kristin Corbosiero will begin a three-year term serving as a member of the Development Testbed Center (DTC) Science Advisory Board.

The Department has engaged in an exchange of research and teaching expertise between the faculty and NCAR staff. Dr. Morris Weisman has been an integral part of the graduate education program in DAES during his years of visiting appointment, with very high course enrollments. Two state-supported research support staff, David Knight and Kevin Tyle, are actively involved in UCAR UNIDATA committees: Kevin Tyle is currently chair of the Users Committee and also serves on the UNIDATA Strategic Advisory Committee. In 2012, David Knight received the Russell L. DeSouza Award in recognition of his outstanding service to the UNIDATA program.

**Summary and Recommendation**

Clearly SUNY Albany exceeds the criteria for UCAR membership renewal. The DAES and ASRC constitute an outstanding and excellent program in the atmospheric sciences and will certainly continue to participate actively and significantly in UCAR governance and programs. The Membership Committee recommends enthusiastically that membership of SUNY Albany in the UCAR be renewed.