Howard University – Report to UCAR Membership Committee on 2008 Renewal Application

Howard University has been a UCAR member since 2000. It offers a graduate degree program in atmospheric sciences through the Howard University Program in Atmospheric Science (HUPAS). HUPAS is the first program at a historically black college or university offering a graduate degree in atmospheric sciences. It currently has 9 tenure track faculty members, all of whom have joint appointments in either the departments of Physics, Chemistry, or Mechanical Engineering. Since joining UCAR, HUPAS has graduated 10 Masters and 6 PhDs in atmospheric science. It offers courses in three tracks: atmospheric chemistry, atmospheric physics, and geophysical fluid dynamics. Affiliated departments offer further coursework in atmospheric chemistry, atmospheric physics, and fluid dynamics. HUPAS educational facilities include the Laboratory for Atmospheric Chemistry, the HUPAS Computer Lab, and classrooms that are equipped with a variety of information technologies.

HUPAS faculty are actively involved in research related to climate change, air quality, and tropical storms, including work in West Africa to study tropical storm genesis and in the eastern Atlantic to examine impacts of Saharan dust. Research centers and facilities include a NOAA Center for Atmospheric Sciences (NCAS) and a heavily instrumented 103-acre research facility that makes up the Atmospheric Measurement Program at Howard University Beltsville Campus.

HUPAS faculty and students have participated in UCAR activities, including governance, programs and facilities. Specifically, HUPAS faculty have served on UCAR’s University Relations Committee and the UCAR Board of Trustees. Roughly one-third of both faculty and students use NCAR models (WRF, WRF-Chem), while a smaller number use the NCAR computing facilities. One student has participated in the UCAR SOARS program, while three students have visited and worked at NCAR through the NCAS Advanced Study Program.

The UCAR Membership Committee concludes that the membership criteria are fulfilled, and recommends to the Members’ Representatives that the membership of Howard University be continued as provided by the bylaws.