



Director Of UNH Research Institute Calls For Renewed Effort To Observe, Understand Our Changing Planet

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DURHAM, N.H. -- Berrien Moore III, University Distinguished Professor and director of the Institute for the Study of Earth, Oceans, and Space (EOS) at the University of New Hampshire, delivered the 2007 Dryden Lecture in Research at the opening of the American Institute of Aeronautics and Astronautics (AIAA) annual meeting in Reno, Nevada on Jan. 8 calling for a reinvigorated effort to understand global environmental change.

Moore, who was bestowed with the prestigious lectureship last year by AIAA, also received the Dryden Medal for Research after delivering his talk, "Challenges of a Changing Planet."

Addressing these challenges, Moore told the audience, requires that humankind confront key science questions related to ice sheets and sea-level change, large-scale and persistent shifts in precipitation and water availability, transcontinental air pollution, shifts in ecosystem structure and function in response to climate change, impacts of climate change on human health, and the occurrence of extreme events such as severe storms, heat waves and earthquakes and volcanoes.

Said Moore, "The linked challenges of confronting and coping with global environmental changes, and addressing and securing a sustainable future are daunting and immediate, but they are not insurmountable. The challenges can be met, but only with a new and even more vigorous approach to observe and understand our changing planet with a commitment by all to alter our actions."

Our planet's environment is changing rapidly on all spatial scales, perhaps more rapidly than at any time in human history, according to Moore. "Many of these changes are occurring because of human activity and these human-induced changes are over and above the stresses imposed by the natural variability of a dynamic planet," he said.

At the least, these human-induced changes in the global environment will require that societies develop a multitude of creative responses, including strategies for mitigation and adaptation, stated Moore.

AIAA is the world's largest professional society devoted to the progress of engineering and science in aviation, space, and defense. One of the institute's primary responsibilities is "recognizing outstanding achievement" by conscientiously surveying the aerospace field to identify practitioners in its arts and sciences who have made notable and significant contributions.

One of the highest tributes given by the AIAA, the Dryden Medal for Research is given in memory of Dr. Hugh L. Dryden, one of NASA's most visionary aeronautic engineers and deputy administrator of the space agency at the time of his death in 1976.

The first recipient of the lectureship was the pathbreaking astrophysicist James Van Allen. Past Dryden lecturers include Edward Stone of the California Institute of Technology, project scientist for the Voyager Mission at NASA's Jet Propulsion Laboratory, and astronomer Gerard Kuiper, who is considered to be the father of modern planetary science.

Moore, a mathematician by training, has authored more than 150 papers on the carbon cycle, global biogeochemical cycles, and planetary change as well as numerous policy documents in the area of the global environment. In addition, he has chaired and served on numerous international scientific committees on global change issues.

Currently he is co-chairing the National Academy of Sciences Decadal Survey in Earth Science, which charts the priorities for the next 10 to 15 years in Earth science from space and has just been released. He serves on the Board of Directors of the University Corporation for Atmospheric Research, the Advisory Council of the Jet Propulsion Laboratory, and the Science Advisory Board of the Max-Planck-Institut für Meteorologie in Hamburg Germany, among others. He has been the director of EOS since 1987.

Note to editors and reporters: A photograph is available to download here:

http://unh.edu/news/img/moore_dryden_lg.jpg

Photo caption: Berrien Moore 3rd (right), recipient of the American Institute of Aeronautics and Astronautics 2007 Dryden Lecture in Research, is presented with the Dryden Medal for Research by AIAA Honors and Award Chair G.P. "Bud" Peterson. Photo by Jerry Newton courtesy of AIAA.