



National Teach-In on Global Warming at UMBC

"Every nation on this planet is at risk. And just as no one nation is responsible for climate change, no one nation can address it alone. That is why, back in April, I convened this forum of the world's major economies – responsible for more than three-quarters of the world's carbon pollution. And it is why we have gathered again here today."

--President Barack Obama
July 9, 2009, L'Aquila, Italy

This past February, UMBC joined colleges and universities across the country by participating in the National Teach-In on Global Warming. The university followed up on what its Climate Change Task Force (CCTF) has accomplished to date since being enacted by UMBC President Freeman Hrabowski in 2007 as well as examined ways to improve sustainability efforts. University professors across several disciplines wove climate change themes into their courses on February 4th and 5th, from Biology to Economics, Anthropology to English, and Geography to Physics. As part of the CCTF's planning team, JCET's **Dr. Jeff Halver-son** was immersed in environmental awareness on February 5th, from his Geography courses "Formation and Exploitation of Fossil Fuels" and "Tools and Techniques used in Climate Change Studies" to his post-discussion of the PBS Frontline documentary *Heat*, which was shown in the evening to a mixed audience of students, professors, and community members.

Along with an environmental fair featuring local green businesses and sustainability efforts through the arts, the day also included a panel discussion in the Albin O. Kuhn Library moderated by JCET's **Dr. Ray Hoff**, who is also a member of Maryland's Commission on Climate Change Scientific and Technical Working Group. The discussion, titled "Planet in Peril: Responses to Climate Change", focused on necessary actions and legislation to avert climate change; panel members consisted of Wayne Gilchrest, former Congressman and co-chair of the Climate Change Caucus, Sarah Zaleski, Coordinator of Baltimore City's Office of Sustainability, and Donald Boesch, Chairman of the Governor's Climate Change Commission. By addressing and responding to climate change on individual, local, statewide, and national levels, the hope is that actions will bring responses. As Mr. Gilchrest suggested, "When knowledge and wisdom (of global warming) become pervasive, then it can affect public policy."

The overall goal of this, the third, National Teach-In was to get Congress and then-incoming President Obama to pass laws in the first 100 days of the new administration to stabilize the global climate. Certainly clean energy and combatting climate change were part of the President's campaign platform, and certainly there is no way to tell how far the efforts of February 5, 2009 reached; what is certain is that President Obama has taken steps and created the Major Economies Forum on Energy and Climate, which recently convened again, Thursday, July 9th in Italy. While the climate change issue looms large on an individual and international scale, awareness, education, and efforts are all necessary to make progress. As we were reminded throughout National Teach-In Day, write to your congressman, follow the news, be involved and do your part. Stay tuned for the 4th National Teach-In in Spring 2010. Visit <http://www.nationalteachin.org/> for more information.



Photo Credit: Samantha Frey, www.my.nature.org.

Smog Blog in *Scientific American*

Dr. Raymond Hoff and his fellow “Smog Bloggers” were recently recognized in *Scientific American* for maintaining UMBC’s US Air Quality Blog. Created in 2003, the blog provides an analysis of what is happening in the ozone, primarily over the US, based on information from NOAA, EPA monitoring, NASA satellites, and other monitors. As an example of surface air quality measurements combined with a satellite image, this image (right) from August 15, 2008 shows that forest fires in Northern California created hazardous air quality readings for particulate matter smaller than 2.5 microns (the red and orange levels seen in the middle of San Joaquin Valley) in California. The color of the dots corresponds to the EPA’s Air Quality Index. UMBC’s Atmospheric Lidar Group members **Ruben Delgado, Meloe Kacenenbogen, Nikisa Jordan, Ana Prados, Jill Engel-Cox,** and **Patricia Sawamura** post daily comments, theories, and explanations for what accounts for clear skies or smoky regions/healthy versus unhealthy air quality areas throughout the country. The site has had over 15 million hits with nearly 2000 unique visitors a week, among them athletes, astronomers, scientists, and the generally curious. The blog has even produced a sister site, the Mesoamerican and Caribbean Smog Blog, operated by the University of Panama. To read the article and view the accompanying slide show, please visit <http://www.scientificamerican.com/article.cfm?id=smog-satellite-data>. And be sure to bookmark <http://alg.umbc.edu/usaq/> on your computer.

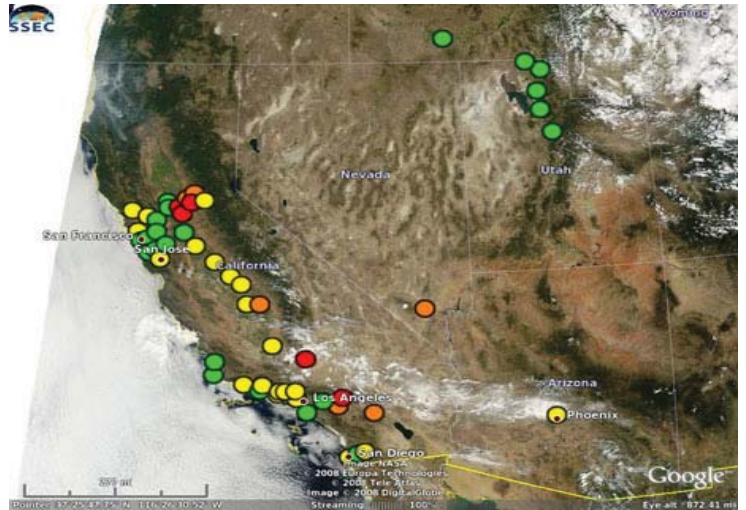


Photo courtesy of UMBC

Congratulations

Two JCET graduate students have completed their Ph.D.s and were recently hooded at UMBC’s Spring Commencement this past May. Marine, Estuarine and Environmental Sciences student **Nikisa Jordan** successfully defended her thesis, “Validation of the Version 5 Goddard Earth Observing System (GEOS-5) Using Cloud-Aerosol Lidar and Infrared Pathfinder Satellite Observations (CALIPSO)”. Her mentor was Dr. Raymond Hoff. Atmospheric Physics student **Mengsteab Weldegaber**, whose co-mentors were Drs. Belay Demoz and Lynn Sparling, also successfully defended his thesis, “Investigation of Stable and Unstable Boundary Layer Phenomena Using Observations and a Numerical Weather Prediction Model”. Both Dr. Jordan and Dr. Weldegaber have joined JCET in short-term post-doctorate positions.

Additionally, congratulations are extended to **Dr. Juying Warner** who was recently promoted to Research Associate Professor. Dr. Warner has been with JCET since 2004 and is affiliated with UMBC’s Geography and Environmental Systems Department.

Finally, late this Spring, **Dr. Jeffrey Halverson** was conferred tenure at UMBC as Associate Professor in Geography. He will remain Associate Director of JCET. He was also selected by the National Center of Atmospheric Research (NCAR) to serve as an Affiliate Scientist for the next three years. He will work with NCAR scientists and engineers to pioneer an autonomous, high-altitude dropsonde system for the NASA-Northrup Grumman Global Hawk UAV. Dr. Halverson will also guide the scientific analysis of a comprehensive dropsonde dataset (more than 12,000 dropsondes) released into tropical cyclones by various NASA, NOAA and USAF “hurricane hunter” aircraft.

Staffing News

JCET welcomes a new member to its Administrative Staff, **James (Jim) Citro**, who has assumed the duties associated with staffing, including both faculty and staff hires. Jim is located in the GEST/JCET office in Building 22 and can be reached at 301-286-4226. Jim has a long history at UMBC, having worked for the last 19 years in UMBC’s Financial Services Division where he most recently held the title of Administrative and Operational Services Director. Jim has been a member of numerous search committees at UMBC, and brings his interviewing expertise as well as his contacts with UMBC’s

Office of the Provost, the Human Resources Department, and the Office of International Education Services to this position. He has a Bachelor of Science in Accounting/Management from The Johns Hopkins University and held several accounting and financial administration positions prior to coming to UMBC. Welcome, Jim!

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