

## CMMAP Summer Internship Offers Research Experience for Undergraduates

The National Science Foundation Science and Technology Center for Multiscale Modeling of Atmospheric Processes, CMMAP, gives undergraduate students the opportunity to conduct innovative and cutting-edge research in Atmospheric Science and Climate Policy. Each summer, students with majors ranging from Meteorology, Physics and Chemistry to Math, Environmental Science and Engineering, join world class Atmospheric Scientists to investigate the science of clouds, climate, weather, and policy. CMMAP offers interns a broad range of research areas: climate modeling, cloud processes, atmospheric chemistry, tropical meteorology, hurricanes, climate policy, and much more.

Each intern has a mentoring team, which consists of a CMMAP faculty mentor, research mentor, and community mentor. The internship program introduces interns to the intensive research environment of CMMAP and the graduate student experience. Through partnership's with the Graduate School, CMMAP undergraduate interns interact with other residential internship programs at CSU, including being co-housed, participating in seminars and engaging in social activities.

During summer 2009, research projects were very diverse and include studies of, carbon offsets, transport modeling of carbon dioxide, the madden julian oscillation, air quality, hurricane eyewalls, and tropical convection in a climate model.

Samantha McGraw, a Meteorology major and Government and Political Affairs minor at Millersville University, completed a research project on climate policy initiatives in New Jersey municipalities, and identified a number of factors that make it difficult for local governments to move from talk to action. Samantha created a database documenting climate action (or inaction) in more than 90 cities that have signed on to the US Mayors Climate Protection Agreement and conducted in-depth case studies of six cities. She reviewed materials available online and conducted phone interviews with municipal officials. In order to test a number of hypotheses to explain which cities are most likely to develop climate action plans. Sam wrote a detailed report as well as an executive summary, which she shared with several of the New Jersey municipalities involved in the study. Sam will present the research as a poster at the American Meteorological Society Annual Meeting in Atlanta, GA. Samantha has recently applied to numerous graduate schools to study climate policy issues.



**2009 CMMAP Summer Interns**