



Recruitment of Diverse Students: Goals and Strategies for CMMAP



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Winter Education and Diversity Retreat
January 2011

Where do we come from?



Summer Internship Program

Watch us grow!

Find out more about us here:
www.cmmmap.org/scienceEd/internships.html



2007

CMMAP welcomed three interns in our first year.



One of our first summer interns, Beth Beckel explored cloud and precipitation chemistry. She learned the basics of gas-phase atmospheric chemical sampling techniques and spent most of the summer learning about the mist chamber.

Parker Kraus investigated land-atmosphere interactions in the West African country of Mali, looking at evaporation and photosynthesis rates.



Claudette Ojo worked on the Tropical Ozoneprobe Dataset for Satellite Validation Processing and Modeling looking at spatial and temporal relationships between ozone and temperature as a function of height.



2008

CMMAP enjoyed six interns in 2008.

Claudette Ojo, a business major, interviewed companies for the organization Climate Wise to learn the progress they were making in reducing greenhouse gas emissions.



Alice Duvivier and Jette Petersen worked together on a numerical approximation for mathematical operators used in climate modeling.



Tyler Ruggles, interested in environmental science and policy, helped a city become part of the Mayors for Climate Change organization.



Zoe Keve has a strong interest in helping people and improving our world. She worked at the National Conference of State Legislators constructing a booklet on biofuels.



David Sullivan studied carbon pricing and taxation for the National Conference of State Legislators finding advantages and disadvantages of different methods and creating a booklet.

2009

Ten interns spent a summer at CMMAP in 2009.

Laura Witte worked with the Ft Collins Sustainability Group estimating how much CO₂ would be conserved by implementation of policies.



Lance Vanden Boogart worked with the land-surface modeling group comparing a chemistry transport model with observed CO₂ concentrations in the midwest.



Liz Huddle spent the summer determining parameters for a mist chamber to try to increase its efficiency.



Having a strong passion for disaster research, Heather Morgan tried to find a connection between the MJO and Atlantic hurricanes.



Terreka Hart focused her research on how concentric eyewalls and mesovortices influence the intensity of hurricanes in the Atlantic basin.



JoBeth Minniear came to CMMAP to research how water vapor, temperature, and vertical velocity relate to one another in a very high resolution simulation of a tropical convection system.



Cara Tabor performed research with a spin tank to compare mathematical models of a balanced vortex and what she observed in ice-generated vortices in the spin tank.



Katherine Heal learned to use an aerosol mass spectrometer to analyze aerosol emissions from types of biodiesel and later, perform sampling in Rocky Mountain Nat'l Park.



2010

Watch us grow, indeed! We hosted 12 interns this year!



Idamis Del Valle came from Puerto Rico to study the effects of enhanced moisture triggers on precipitation and winds.



Nick Geyer used the Vector-Vorticity Model to simulate the Tropical Western Pacific-ICE case.



Chris Alston researched hurricane activity along the US northeast coast.



Kyle Hemes researched the spatiotemporal influence of vegetation on global surface-atmosphere exchange.



Jackie Gushue looked at electrical rate structures and their impact on demand response decision making with a company in Fort Collins.



Stormy Stevens looked at the impact of tropical cyclone rainfall on drought in Alabama.



Erin Kashawlic compared data assimilation schemes used by operational forecast centers.



Tina Laboy spent her summer researching the propagation of the Madden-Julian Oscillation



Ariana Marrero, from Puerto Rico, studied the variability of the seasonal cycle in the Tropical Eastern Pacific and Caribbean.



Marie-Christine Razaire examined the responses of the ocean carbon cycle to climate change.

Daniel Rothenberg got into the nuts and bolts of a climate model dynamical core.



Christina McCluskey researched nitrogen samples collected from Rocky Mountain National Park.

4 summers - 30 interns

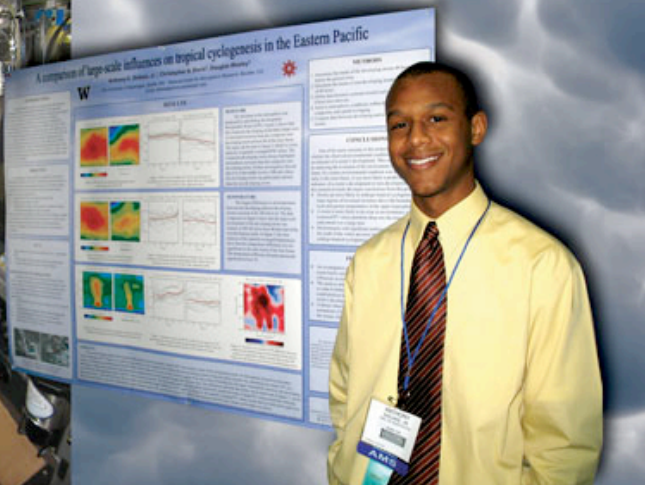


HOME ABOUT PEOPLE INSIDE GALLERY CALENDAR APPLY CONTACT

RESEARCH MENTORING COMMUNITY

SOARS is dedicated to broadening participation in the atmospheric and related sciences. It is an undergraduate to graduate program built around a summer research internship, mentoring by top scientists, and a supportive learning community.

“We soon became our own group, our own family — a family of friends and that makes a big difference.”

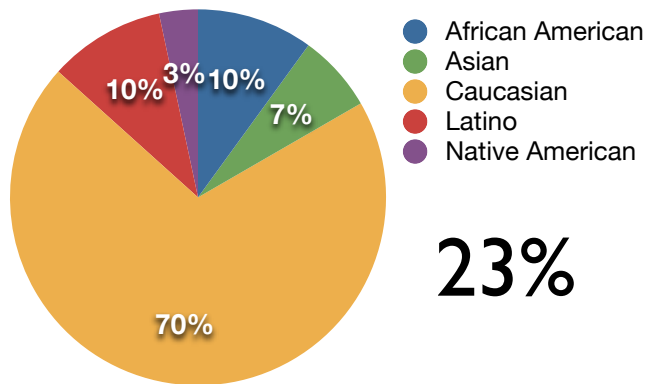
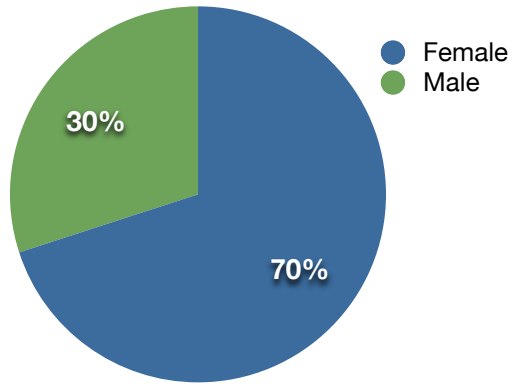


Significant Opportunities in Atmospheric Research and Science



5 summers - 7 proteges

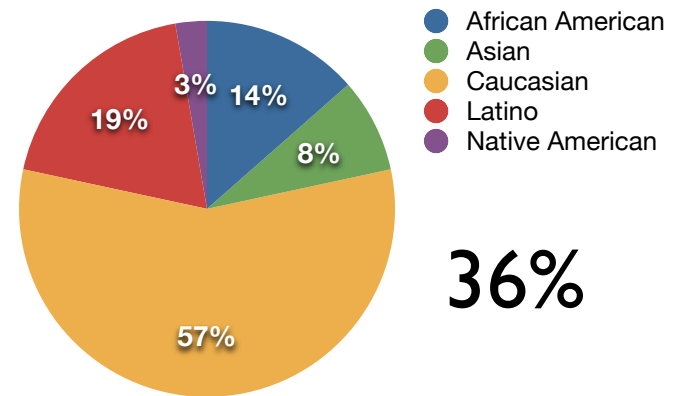
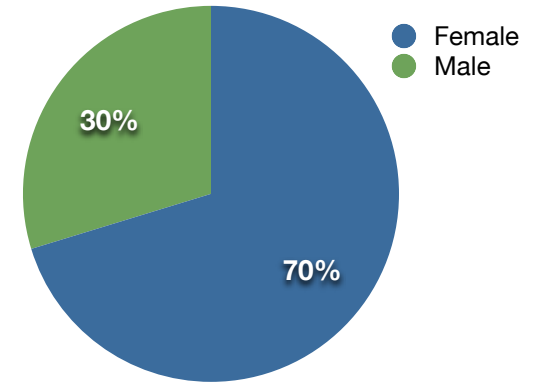
CMMAP Internship



N=30

23%

CMMAP and SOARS



N=37

36%

Goal I:

Increase the number of diverse undergraduate students in the CMMAP Internship Programs

Strategy:

Recruit, retain, and mentor students from underrepresented groups.

What are we already doing?

Targeting minority and majority institutions, focusing on multiple academic disciplines, and attending national conferences

To meet our goal...

Targeted recruitment at Minority Serving Institutions

Target a small number of geographic areas

Identify and enlist participation of alumni and current participants of various summer internship programs

Network with programs with like interests, goals, and successful histories

Meet with NSF representatives to enlist support



Goal 2:

Increase the number of diverse graduate students in the CMMAP ATS Programs

Strategy:

Recruit, retain, and mentor students from underrepresented groups.