Summer in the Advanced Study Program by Paula Fisher

There is no summer break in the Advanced Study Program; that’s when things really start to (pardon the pun) “heat up” with an onslaught of summer visitors, the ASP Colloquium, and the arrival of the first postdocs for the coming year. The ASP does much more than support Postdoctoral Fellowships. Read on to see what’s happening in the ASP this summer.

The Graduate Visitor Program

The Graduate Visitor Program (GVP) provides opportunities for graduate students to spend 3-12 months at NCAR in pursuit of their thesis research. In addition, there is also funding for the GVP student’s advisor to spend up to two weeks at NCAR. For many students, this is the best part: the chance to have their advisor all to themselves for a few precious days. For others, it’s the opportunity to spend one-on-one time with NCAR scientists or to have access to the world-class facilities that NCAR has to offer.

This year, the ASP will host more GVP students than in any other year: twenty-five to be exact. Although the Graduate Visitor Program is not technically a summer program, most of the participants will be here at sometime this summer. Students must be sponsored by an NCAR staff member to participate in the program. The ASP does not provide salary, but does provide travel costs and a living per diem to offset the cost of maintaining a household in Boulder.

If someone asks me about how is to be part of the ASP-Graduate Visitor Program my answer will be: GREAT! For: Gathering new knowledge with the crème de la crème in atmospheric sciences, Reinventing yourself with new ideas, Experiencing the world through the international people, Advancing to a new level in our career as young professionals and the perfect Training to become a good scientist.

In other words, NCAR is the Disney Land for young researchers in this field. It is the perfect school to jump to the real world, and it is definitely the place to be. The GVP gives you not only the necessary tools to improve in your academic level, but it also helps you to understand the importance of making interdisciplinary and collaborative work, and to explore new cultures and ideas that speak the same language of science.

— Yaitza Luna-Cruz (Howard University)

The Faculty Fellowship Program

The Faculty Fellowship Program (FFP) is the reverse of the GVP: Faculty members apply to come to NCAR for 3-12 months and they may bring their students. Typically we have 5-10 FFP participants per year. Currently, there are two participants at NCAR along with two students.

The ASP Summer Colloquium

The ASP Summer Colloquium has been an annual tradition at NCAR since 1966! The summer colloquium is designed for graduate students and favors subjects that represent new or rapidly developing areas of research for which good course material may not yet be available. The colloquium brings lecturers and graduate students together at NCAR for classroom presentations and other forms of instruction and interaction. The workshop generally includes about 25 student participants and several

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Also new to 2011 was the addition of the Researcher Colloquium during the middle week of the three week student colloquium. The topic was the same, but the lectures were attended by both students and researchers alike. This portion of the colloquium was organized by Mike Patterson (U.S. Climvar Program, which also co-sponsored the event), Balaji Rajagopalan (University of Colorado, Boulder), and Arun Kumar (NOAA). The students this year were an exceptional group of researchers. Not only were the student projects and presentations top notch, but some students plan to continue working on their project and submit a paper as a result.

ASP Sumner (continued)

ASP Student Colloquium

lecturers from NCAR and the community at large. That first colloquium in 1966 was six weeks long, but in recent years, the colloquium has been shortened to two weeks... until now. As of the 2011, the colloquium will expand to three weeks to give students plenty of time to complete hands-on projects and tutorials as part of the colloquium experience. This year’s student colloquium was organized by Eric Gilleland, Rick Katz, and Greg Holland and focused on Statistical Assessment of Extreme Weather Phenomena under Climate Change. The three-week format was well received by the students and praised by the organizers.

ASP in a nutshell

So what do all of these programs have in common? They all help us realize our mission:

- Stimulating the intellect of the research community
- Fostering the professional development of early career scientists
- Promoting advanced scientific educational opportunities at NCAR
- Focusing attention on emerging areas of science
- Facilitating interactions between NCAR, universities, and the broader community

While summer might be the slow season for some academic programs, summer in the ASP is one of our busiest times of year. How do we bring all of the divergent visitors, staff members, and postdoctoral researchers together? With a hike of course. On June 16th our group of 25 headed out from the Mesa Lab for the annual ASP hike up to an abandoned quarry in the Boulder Open Space. There’s nothing like fresh air and brisk walk to facilitate new collaborations and a better understanding about what others are working on here at NCAR.

ASP Hike

ASP Student Colloquium
The graduate visitor program is an extraordinary opportunity for graduate students to work with NCAR scientists on projects mutually beneficial to both parties. For myself, this has involved accelerating my Ph.D. research dealing with assimilation of radar data for the prediction of convective storms. The interactions with my mentors and other NCAR scientists will surely extend beyond the dates of my visit when I return to my home institution, providing me with an invaluable set of resources and collaborators as I continue through my career.

-Ryan Sobash, University of Oklahoma

Visiting NCAR through the ASP Graduate Visitor Program has been invaluable to both my research and career. My favorite part of the program has to be that I have been able to meet and discuss science with so many who share an infinite curiosity about atmospheric sciences and whose doors are always open for any questions I might have. The connections I have made and conversations I have had will last with me throughout my career. I suggest applying for this program to any graduate student interested in expanding the breadth and depth of their research.

-Catrin Mills, University of Illinois at Urbana Champaign

I think that the knowledge I get from direct person to person interactions is priceless.

-Xiaowen Tang, Nanjing University

The Graduate Visitor Program (GVP) is a great opportunity to interact with fellow researchers and graduate visitors to exchange ideas and network with professionals on a daily basis within NCAR and NOAA. I have been lucky enough to interact with these people both in the workplace, but also in a more relaxed, out of the office setting (e.g., softball, tennis, hiking, storm chasing, etc.). This program is excellent in making sure you are in the correct setting to help you succeed to reach your near term research goals, and in helping make lasting connections for future endeavors.

Also, the GVP is allowing me to work on my mentoring skills. Currently I am working with a HIRO student in testing total lightning applications across the CONUS. This allows me to build on my communication, leadership, and time management skills, along with providing me with a glimmer of what advising a student will be like if I choose a career path in academia or at a national research lab.

-Christopher Schultz, University of Alabama, Huntsville

I have had the unique experience of seeing first-hand what goes on at a climate modeling center. The view into the model development process has given me a greater appreciation for the efforts undertaken at places at NCAR and has made me a much more informed scientist and will no doubt influence my future research directions and efforts.

-Benjamin Hillman, University of Washington

The thing I like most about GVP is that it gives an opportunity to meet and work with influential leaders in my field, which will benefit my career a lot.

-Yanshi Huang, University of Texas, Arlington
Future Leaders of Research Event at CU

Five NCAR postdocs were invited to present posters at the inaugural Future Leaders of Research poster and networking event hosted at the University of Colorado, Boulder by the Postdoctoral Association of Colorado (PAC) on June 15, 2011. Aimed to showcase the activities of postdocs at area universities and government labs or agencies to spur collaboration, 50 posters were featured. NCAR postdocs reported that the event was helpful for their professional development. Says Vanessa Schweizer, ASP postdoctoral fellow, "Lately I have been working on my research statement for academic positions, and talking about my poster at this event helped me crystalize ideas for discussing my research." Christoph Erath, postdoctoral fellow in CISL, says, "It was very interesting to talk to scientists from different research areas. I think such events give you a better understanding for the whole scientific community." Michael Toy, ASP postdoctoral fellow, states, "It was a challenge to present my research on non-hydrostatic modeling in a way that would be understood by and interesting to scientists from outside the atmospheric science community. We were greatly outnumbered by molecular biologists and particle physicists." Nevertheless, Michael's poster left a good impression and was recognized as one of the best. He was presented an award certificate and gift card to Amazon.com.

For more information on PAC events, please see www.colorado.edu/pac/

Mike Toy with his winning poster at the “Future Leaders of Research” event in June