# Newsletter
# WINTER 2012
# Winter 2012 Newsletter

You would think that winter would be a quiet time here in the SOARS office, but that's not the case. Winter is a time of grant writing, helping with graduate school applications, ongoing mentoring and attending conferences. Our online application for next summer is now also open (see below). Please help us spread the word.

Wherever the winter takes you, we wish you safe travels and happy holidays!

*The SOARS team.*

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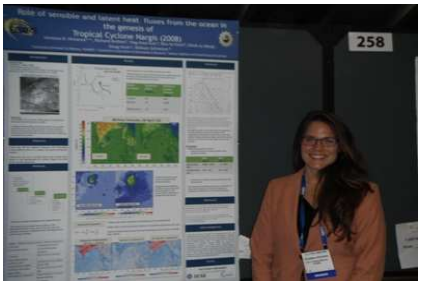
## Updates

### SOARS at AGU

SOARS once again had a strong presence at the **AGU Fall Annual Meeting (http://fallmeeting.agu.org/2012/)** , held in San Francisco from December 2 - 8. Seven current protégés and nine alumni attended the meeting, presented posters, gave talks and attended sessions, all while doing an amazing job of representing SOARS. We also enjoyed a wonderful dinner, with current protégés enjoying the opportunity to network with our very successful alumni!




Above: Protégé Vanessa Almanza presenting at AGU, 2012

Below: The SOARS dinner at AGU

### SOARS at AMS

SOARS is preparing to take the annual **AMS conference (http://annual.ametsoc.org/2013/?CFID=468293&CFTOKEN=56718590)** by storm! Fifteen of our current proteges and numerous alumni will be attending and presenting at the meeting, to be held in Austin, Texas, from January 5 -10. In addition, SOARS will be at the Spark booth at **WeatherFest (http://annual.ametsoc.org/2013/index.cfm/weatherfest/)** on January 6, and at the SOARS booth during the **career fair (http://annual.ametsoc.org/2013/index.cfm/programs-and-events/special-sessionsprograms-of-general-interest/ams-career-fair/)** on January 5 and 6 - please make sure to come and say hello!

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## SOARS now accepting applications for summer 2013

UCAR's Significant Opportunities in Atmospheric Research and Science (SOARS) is an undergraduate-to-graduate bridge program for students interested in the atmospheric and related sciences. It provides up to four years of paid summer research experience, strong mentoring, community support, and funding for conferences, undergraduate and graduate education. SOARS participants spend the summer in Boulder at NCAR and partnering laboratories on projects matched to their interests and skills.

SOARS invites students from many disciplines, including meteorology, chemistry, physics, engineering, mathematics, ecology, and the social sciences. In particular, SOARS seeks to involve students from groups that are historically underrepresented in the sciences, including those who are black or African-American, American Indian or Alaska Native, Hispanic or Latino, female, first-generation college students, and students with disabilities. SOARS welcomes lesbian, gay, bisexual, and transgender students; students who have experienced, and worked to overcome, educational or economic disadvantage; and students who have personal or family circumstances that may complicate their continued progress in research careers.

Application deadline: 1 February 2013
Contact: Karen Smith-Herman, UCAR/SOARS
303-497-8622, **soars@ucar.edu**
To apply: **http://www.soars.ucar.edu/apply (http://www.soars.ucar.edu/apply?utm_source=newsletter&utm_medium=email&utm_campaign=2013+Application)**

Please spread the word, **apply (http://www.soars.ucar.edu/apply?utm_source=newsletter&utm_medium=email&utm_campaign=2013+Application)** , or post a **poster (http://www.soars.ucar.edu/DOCS/Advertising/Poster.pdf)** in your department!

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## Q&A: Applying to Grad School PART 2

**Our fall newsletter (http://www.soars.ucar.edu/about/newsletter/fall2012.php) brought together a panel of SOARS protégés to answer questions about applying to graduate school. This newsletter we follow up with the second of our two-part series and answer questions about choosing your school.**

**Panelists:**


Name: **Annareli Morales**

Grad school: Colorado State University

Major: Atmospheric Science
Advisor: Sonia Kreidenweis
Undergraduate school: University of Illinois at Urbana-Champaign
Major: Atmospheric Science and Geology
Number of schools applied to: 5

Name: **Diamilet Pérez-Betancourt**
Grad school: Massachusetts Institute of Technology
Major: Atmospheric Science
Advisor: Dr. Kerry Emanuel
Undergraduate school: University of Puerto Rico at Mayagüez
Major: Theoretical Physics
Number of schools applied to: 5

Name: **Curtis Walker**
Grad school: University of Nebraska - Lincoln
Major: Atmospheric Science
Advisor: Dr. Mark Anderson
Undergraduate school: State University of New York College at Oneonta
Major: Meteorology
Number of schools applied to: 6

**Questions:**

- **How do you evaluate offers? – Jenny Eav**

Personally, I looked at what the research project entailed. I am not going to give up 5 years of my life if I have no love or interest in the project I am doing. After that, I looked at the funding. To me, money isn't everything, but I do need to have at least enough money to get by while I study and do all this research. I also asked current grad students for their opinion on my offer. **- Annareli Morales**

I evaluated and compared them in terms of academic aspects (such as courses offered, program rankings, type of advisor, amount of professors doing research in my area of interest, etc.), financial aspects (stipend, cost of life, etc.), social aspects (local atmosphere, for example, whether or not it was a "college town", crime index, how were the graduate students when I visited/talked to them, etc.), and opportunities (to do outreach activities, to continue in SOARS, to go to conferences, to publish, to establish connections, etc.), among other factors. **– Diamilet Pérez-Betancourt**

I evaluated offers by first comparing the total package amount. Then, I considered the variable costs of living (i.e., rent in Norman, OK is not the same as New York City). Subsequent considerations included whether or not the offer would have me as a Teaching Assistant, Research Assistant, or Fellow. Most importantly, I wanted to ensure that the offers would provide me with the opportunity to conduct the research I desired. **- Curtis Walker**

- **For funding, were you supported by your advisor or did you have to look for other funding sources? If they were outside sources, where did you find them? - Andre Perkins**

I luckily had funding provided by my advisors. At one school I had a fellowship for the first year and then I'd be under my advisor's grant. At another school I would have been a TA for the first year then been under someone's grant or would have had to apply for outside fellowships/grants. I did apply to the AMS Fellowship, and there are many other fellowships out there such as NSF, NASA, etc. **–Annareli Morales**

All the schools that accepted me offered me full tuition, health insurance, and a stipend. The funding either came from a school's fellowship, or a research assistantship under a grant acquired by the prospective advisor. I did not have to look for external funding sources. However, I think having an external fellowship (from NSF, NASA, AMS, or DoD, among others) is always a plus. It basically gives you the opportunity to work with anyone (if you fulfill school requirements and the professor wants to work with you), because you are bringing your own funding.**- Diamilet Pérez-Betancourt**

I have fortunately been supported by my advisor and the department; however, I have also pursued other funding opportunities as well. In the Atmospheric Sciences specifically, the AMS awards Graduate Fellowships to first-year graduate students. Similarly, the NSF has several highly competitive funding opportunities. I even searched on Google to determine whether or not individual organizations (e.g., airlines) offered funding for graduate students conducting research that might be applicable to their operations. For historically underrepresented students there may be additional funding opportunities to pursue degrees in higher education. The basic point is that some outside funding venues are easy to recognize and others will require digging on your part - they are out there! **- Curtis Walker**

- **When coming to your final decision, what made you realize which school was right for you? – Ana Ortiz**

I decided to pick the school that I felt would provide me with more opportunities to study what I enjoyed and to collaborate with others. I had a good vibe from the school and I felt part of the research group already. People were friendly and it was a welcoming and supportive environment. Money was low on my list. The top things I took into account were the advisor and the project. All the schools I got into were great, so that was not an issue. I also looked at location and size of the department. In the end, I chose to go somewhere I would be happy. One professor gave me great advice, "…graduate school is tough enough that one needs to choose a place where they will be happy and comfortable." **– Annareli Morales**

First, I tried to learn as much as possible about the schools, the specific programs, and prospective advisors. I found very helpful discussing my grad school options with SOARS staff and with my mentors. I had a preference after doing that, but I was still having doubts. A friend of mine suggested I made a list of factors that I considered relevant, then gave the different grad school options a score from 1-3 on each factor, and finally added the scores. My initial preference came up first place, so I became certain that it was the right grad school choice for me. **- Diamilet Pérez-Betancourt**

For me personally, it was something of a 6th sense. My decision was particularly difficult, but there was something that I latched on to during my visit to the University of Nebraska-Lincoln. I enjoyed my conversations with faculty and students there the most out of any institution. I will note that UNL did not make the most generous offer, though there is more to graduate school than funding. You have to like where you will be living, be amicable with your surroundings, and formulate good bonds with the faculty in your prospective department. I felt as though all of these ingredients came together for me there. **- Curtis Walker**

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## Conference Presentations

**Society for the Advancement of Chicanos and Native Americans in Science (SACNAS), 2012 National Conference  Seattle, WA, October 2012**
***Posters***

Ma'Ko'Quah Jones: “Statistical analysis of relations between monthly teleconnection indices.”

Ana Ordonez: “Energy extraction from ocean currents and waves: Mapping the most promising locations.”

Jake Zaragoza: " Comparison of LIDAR detections statistics using SCIPUFF and WRF LES."

## AGU Fall Meeting, San Francisco, CA, December 2012

***Posters***

Vanessa Almanza: "Role of Sensible and Latent Heat Fluxes from the Ocean in the Genesis of Tropical Cyclone Nargis.”

Adrianna Hackett: “The Response of the Magnetosphere and Ionosphere to Solar Wind Variability for 2002-2010.”

Manny Hernandez: "The Change of the North American Monsoon Seasonal Precipitation in the CCSMv.4 under IPCC CO2 Emission Scenarios.”

Ana Ordonez: “Energy extraction from ocean currents and waves: Mapping the most promising locations.”

Aaron Piña: “Transport of pollutants from cow feedlots in easternColorado into Rocky Mountain alpine lakes.”

Curtis Walker: "The Impact of Cloud Type on Surface Radiation and Road Pavement Temperature.”