



## **Announcing the 4<sup>th</sup> Annual ESWN AGU Reception Monday, 15 December 2008**

7-9:30PM

Jillian's at the Metreon (101 4<sup>th</sup> St., Suite 170)

Come meet other ESWNers in person at our fourth annual ESWN get-together! We'll be meeting at Jillian's in the Metreon, located across the street from Moscone West, on Monday evening from 7-9:30PM. Stop by for some appetizers and informal networking! We thank our generous sponsors: ASCENT Program via the Division of Atmospheric Science at Desert Research Institute (DRI), the Center for Sustainability and the Global Environment (SAGE) and the Center for Climatic Research (CCR) in the Nelson Institute for Environmental Studies at the University of Wisconsin-Madison, National Center for Atmospheric Research (NCAR), and the National Wildlife Federation (NWF).

### **2007-08 Member Get-togethers**

Over the past year, ESWN members have had many opportunities to meet up at various scientific meetings. Feel free to organize an informal gathering at your next conference!

#### **AGU Fall Meeting**

##### **San Francisco, CA December 2007**

With support from the National Center for Atmospheric Research (NCAR), the Joint Institute for Study of the Atmosphere and Ocean (JISAO) and Environmental Research Letters (ERL) journal, ESWN hosted a reception during the Fall American Geophysical Union Meeting in San Francisco. Over 70 female research scientists, graduate students, professors, program managers, consultants and policy analysts attended the reception held on December 12<sup>th</sup>. Big thanks to Erika Marin-Spiotta, Meredith Hastings, Tracey Holloway and Christine Wiedinmyer for organizing our biggest annual event!



Fall 2007 AGU Meeting. From left to right: Manda Adams, Tracey Holloway, Allison Steiner, Meredith Hastings, Erika Marin-Spiotta, Asmeret Berhe, Lara Kueppers, Karen Shell

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More smiling faces at the 2007 AGU reception: Asmeret Berhe, Kamil Armaiz-Nolla, Luz Padró, Gannet Hallar, Erika Marín-Spiotta, and Marilyn Fogel

### **AGU Ocean Sciences Orlando, FL February 2008**

About 30 people got together at TuTu Tango in Orlando, for tasty tapas. Thanks to Agatha De Boer and Galen McKinley for organizing!

### **AAAS Annual Meeting Boston, MA February 2008**

Several ESWN members got the chance to get together for lunch at a nearby Indian restaurant during the AAAS meeting.



From left to right: Gyami Shrestha, Amada Babson, and Christine (hopefully soon to be ESWN member!)

### **Soil Science Society of America Houston, TX**

Six ESWN members gathered for lunch. The group had fun, exchanged ideas

about strategies for finishing dissertation writing and job searches!

### **EGU**

#### **Vienna, Austria April 2008**

ESWN hosted its first reception at the European Geosciences Union General Assembly in Vienna on April 15th. It was attended by 30-40 female earth scientists who enjoyed drinks, Viennese cakes and conversation. The launch was greeted with a very positive response and we plan to repeat it in future years. Many thanks to the organizers, Parv Suntharalingam, Clare Goodness, Agatha DeBoer and Sonia Roudesli. The event was generously sponsored by the University of East Anglia and the Roberts Foundation.



### **Ecological Society of America Meeting Milwaukee, WI, August 2008**

ESWNers met for a meal in Milwaukee in August during the Ecological Society of America meeting.



From L to R: Jessica Cruz de Osuna, Erika Marín-Spiotta, Tana Wood, Michele Thorne, Daniela Cusack & Stephanie Eby enjoying Milwaukee's best.

## Feeling Stupid?

The article “The importance of stupidity in scientific research” by Martin A. Schwartz, published in the June 1, 2008 issue of *Journal of Cell Science*, sparked a lively discussion among ESWN members. Schwartz argued that feeling stupid is an essential ingredient to productive research, especially when tackling important scientific questions. Yet, the training of Ph.D. scientists often does not adequately address the challenges resulting from “immersion in the unknown.”

For some, the crisis in confidence associated with feeling stupid can go beyond what Schwartz described to the point that one feels like an imposter or fraud. These individuals are convinced that they do not deserve their achievements, instead attributing their success to luck, timing, or an ability to convince others that they are more intelligent than they really are. While feeling stupid from time to time is inherent in the process of scientific discovery, extreme feelings of being an imposter can be paralyzing.

Many ESWN members shared their own experiences of feeling stupid and how it affected their training and professional development. These experiences ranged from crises in confidence on the one end (“I still have to talk myself into believing I'm doing good work, and my default reaction is that I'm not up to snuff.”) to embracing these feelings on the other. As one member noted: “I believe that if I didn't have moments of [doubt] from time to time, and then spend all day convincing myself otherwise, then my science would be a lot worse. But the breaking down and building up cycle of research itself is what ultimately gives us the necessary baseline confidence in our ideas and in our ability to do good work in the

future. So, I am grateful for my ‘scientific mood swings.’”

Women scientists may be more susceptible to feeling stupid. Some members suggested that this reflects a difference in how some women approach science. One member wrote about how her “male peers seemed a lot more comfortable throwing out ideas, while [she] was still struggling to formulate [her] own thoughts about the problem.” This dynamic made her feel stupid at first, but “eventually [she] noticed that what they wrote down was frequently wrong, and that [she] preferred ... to carefully go through step by step.”

Others opined that women lack confidence, or perhaps just the ability to project a sense of confidence. As one member states, “The real problem that female scientists have [...] stems from lack of belief in themselves, rather than any concrete evidence of others' ability.” Another notes “men are better at faking a higher degree of confidence. Women often feel like they have to prove themselves and work really hard to be taken seriously as scientists. Sometimes they do not believe in themselves and hence do not come across very confident.”

Advisors and mentors have played a pivotal role in helping several members confront these feelings. One advisor helped a student deal with challenging questions during a departmental seminar with the remark “To think we just don't know the answers to these fundamental questions....” Another advisor encouraged a student to share her unique experiences during group discussions. A third had a successful senior colleague share his own fears that his PhD had been awarded in error and joke about how he is “perpetuating the fraud” to this day.

ESWN members identified several ways to help each other deal with feeling stupid as they pursue their careers. Some of these insights include:

- “mentors [need to] admit that they don't know answers either, and then show the participants how to try to find answers”
- “students need to be taught to interpret ‘I don't know’ as a launch point for discovery rather than an end point in failure”
- “be consistent with the standard you hold yourself up to vs. other people (e.g., be your own friend, not enemy).”

- “make sure to compliment others’ good work, even while you offer constructive criticism”
- “the more I would acknowledge and joke about the ‘imposter syndrome’ the less it seemed to be anything I really suffered from”
- “the other thing that works for me is pretending that I am somebody who I think is successful”

Any other thoughts or recipes for success? If you are still interested in discussing this topic, visit the discussion board to put in your two cents!

## Board Meeting Summary – March 2008

On March 16-18, 2008, the Earth Science Women’s Network (ESWN) held its first official leadership board meeting, sponsored by the National Oceanic and Atmospheric Administration’s Office of Oceanic and Atmospheric Research (NOAA OAR) at the Geophysical Fluid Dynamics Laboratory (NOAA GFDL) in Princeton, NJ. The goals of the meeting were twofold: (1) to develop a plan for a NOAA OAR-sponsored ESWN workshop before the AGU Fall Meeting in San Francisco in December, and (2) discuss the future direction and goals of ESWN.

Leaders from other programs to support women in science careers including the National Science Foundation (NSF) ADVANCE program, Mentoring Physical Oceanography Women to Increase Retention (MPOWIR, <http://www.mpowir.org>), the Committee On the Advancement of Women in Chemistry (COACH, <http://coach.uoregon.edu/>) and from NOAA OAR were invited as external consultants. Throughout the meeting, they provided

valuable insight and advice to the ESWN Leadership Board. On Sunday evening, the ESWN Board met with Geri Richmond, professor of chemistry at the University of Oregon and the leader of COACH. Dr. Richmond described the history of COACH and the resources that the COACH program could offer ESWN, such as workshops on negotiations and leadership within scientific organizations. On Monday, Dr. Laura Kramer gave an overview of the NSF ADVANCE program and discussed ways in which ESWN could work within the ADVANCE funding umbrella. Drs. Sandra Knight and Cassandra Barnes, of NOAA OAR, gave an overview of NOAA’s needs and directions, beginning a dialogue that continued throughout the meeting on areas where ESWN might team with NOAA to help recruit and retain women scientists within the organization. Dr. Victoria Coles, a research professor at the University of Maryland, presented an overview of the MPOWIR program, sharing her experience and ideas about ways in which the

MPOWIR program and ESWN might work together.

On Tuesday, the ESWN Board and external consultants were joined by area ESWN members for an informal breakfast that provided an opportunity for some networking among those in attendance. The meeting then opened up to the GFDL and Princeton communities for a presentation from Professor Tracey Holloway (University of Wisconsin-Madison) who summarized the history of ESWN, accomplishments to date, and potential future directions for ESWN. Tracey's presentation sparked a lively discussion on the successes of ESWN and possibilities for shaping its future role in advancing women in science. Specific topics included the challenges that women in science face, which of those challenges are shared by men, and how men, and women, in science can help to create a scientific community that encourages and advances women.

Throughout the meeting, the board discussed the direction of the organization,

organizational infrastructure, near- and long-term goals and strategies for achieving these goals, as well as the value provided by ESWN to the earth science community. Consensus was reached that the scope of the NOAA-funded December workshop will be on leadership training for advancement within scientific organizations. A white paper outlining the outcomes of the discussions at the board meeting, as well as the future needs of ESWN, is posted on the ESWN web site (<http://www.sage.wisc.edu/eswn/>).

Special thanks to ESWN members Becca Barnes (Yale), Asmeret Asefaw Berhe (UC Merced) and Sarah Derouin (Golder Associates, Inc.) for their assistance with welcome emails for new ESWN members!



From left to right: ESWN board members Kim Popendorf, Tracey Holloway, Christine Wiedinmyer, Allison Steiner, Arlene Fiore, Meredith Hastings, Galen McKinley, MPOWIR representative Victoria Coles, NOAA OAR representatives Cassandra Barnes and Sandra Knight. Missing from the photo are ESWN board members Erika Marin-Spiotta, Amanda Staudt, Agatha De Boer; NSF ADVANCE representative Laura Kramer and COACH representative Geraldine Richmond.

## Upcoming ASCENT Workshop

### ADVANCE grant awarded to Gannet Hallar at the Storm Peak Lab!

Congratulations to ESWN member **Dr. Gannet Hallar** and her team both at the Desert Research Institute (DRI) and the University of Colorado on the funding of their NSF ADVANCE grant! Recognizing the importance of peer mentoring and personal networking for the success of women scientists, they are launching the Atmospheric Science Collaborations and Enriching NeTworks (**ASCENT**) program. The program consists of a three-day summer workshop to be held in Steamboat Springs, Colorado in 2009, 2010, and 2011, with follow-up reunion events. Participants will have the opportunity to network with like-minded women scientists and discuss ways to eliminate the "leaky pipeline" (defined by the attrition of women at different stages in their academic careers). By fostering relationships among women faculty and researchers, one of the goals of ASCENT is to improve the quality of collaborative atmospheric research conducted at multiple universities and colleges.

ASCENT will share information assembled during the workshops on techniques and methodology to strengthen the participation of women within the fields of atmospheric science and meteorology to the general scientific community and to ESWN. Come hear more about the program during ESWN's reception at AGU! (ASCENT is one of our generous sponsors)

ASCENT application deadline March 15, 2009. For further information, go to the website: <http://www.ascent.dri.edu/>. Or contact Dr. Gannet Hallar, Lead PI, [Gannet.Hallar@dri.edu](mailto:Gannet.Hallar@dri.edu), 970-819-0968.

## News from the Group

**Amy (Benoit) Frappier** gave birth to baby boy Luc Brian on December 20, 2007. Mom and baby are doing great! Luc is staying home with his dad now that Mom is back to work at Boston College.



The Frappier Family

**Arlene Fiore** is thrilled to announce the arrival of her daughter Clarissa, born on July 13, 2007.

**Elisabeth Nadin** finally published her first paper -- a GSA Special Paper in a volume dedicated to geologist Cliff Hopson (see publications list!). She also got married on July 22 to Carl Tape, a seismology grad student at Caltech. They're both hunting for postdocs and faculty positions.

**Gabrielle Dreyfus** has been selected to be the 2008-2009 William L. Fisher Congressional Geoscience Fellow by the American Geological Institute. This September, she joined the other AAAS Science and Technology Fellows on Capitol

Hill for an exciting year at the intersection of science and policy. She finished a joint PhD between Princeton University and the University Pierre and Marie Curie in Paris, France. She's happy to be back on the ESWN list after a two-month hiatus as a core handler for the West Antarctic Ice Sheet (WAIS) Divide ice core project.

**Galen McKinley** has been busy in the lab with her research group, using models and data to investigate North Atlantic and Lake Superior carbon cycling. She's also been having fun in the classroom, particularly with teaching Physical Oceanography for the first time in Fall 2008. Another recent milestone for Galen is having her first student, David Ullman, graduate with his masters degree in January.

**Gayle Hagler** graduated from Georgia Tech with her PhD in Environmental Engineering in August 2007 and is now in a 3-year postdoc at the EPA's National Risk Management Research Laboratory in Research Triangle Park, North Carolina.



Gayle Hagler and Meredith Hastings working together on the Greenland Ice Sheet (Summer 2006).

**Katie Purvis-Roberts** has been promoted to Associate Professor of Chemistry with tenure at the Joint Science Department of Scripps, Pitzer, and Claremont McKenna Colleges.

**Krisa Arzayus** accepted a new position within NOAA in January 2008, as Chief, Planning and Programming Division in the Climate Program Office. Her division coordinates strategic planning of NOAA's Climate research and operational activities.



**Gillian Galford** in the soybean fields of Mato Grosso, Brazil. She's collecting reflectance spectra and land-use histories from farms as ground-truth data sets for validation of remote sensing data. Marcos, a student at Universidade de Sao Paulo, helps with the field work.

**Kirsten Koehler** completed her PhD in Atmospheric Science at Colorado State University under Dr. Sonia Kreidenweis in September 2007. She is currently working as a postdoc in Dr. Kreidenweis' lab and also in the CSU Environmental Health Department, under Dr. John Volckens. She and her husband have very recently started a nonprofit organization aimed at providing goods dealing with the five senses to some

of the poorest regions of the world—check out a description under ‘Member Initiatives’.

**Meredith Hastings** completed a year of treatments for stage IIA breast cancer in March of 2008. Upon diagnosis last year, Meredith was able to extend her postdoc at the University of Washington for an additional year. Last December, she made it to the Fall AGU meeting in San Francisco to co-convene a special session (Atmospheric Chemistry of Ice and Snow) with fellow ESWN member, V. Faye McNeil. Amidst recovering from cancer treatments, Meredith and her husband moved from Seattle, WA to Providence, RI in July 2008, where Meredith has joined the faculty at Brown University.

**Nina Trautmann** has started a Ph.D. through the UW-Madison interdisciplinary NSF IGERT program focusing on sustainable development in southwestern China. She recently got married on 08/08/08 at 08:08:08pm.

**Rynda Hudman** moved this fall from Cambridge, MA back to her hometown, San Francisco, to start a post doc with Prof. Ron Cohen at UC Berkeley. She'll be looking at space-based constraints on NO<sub>x</sub> emissions/chemistry interpreted with the WRF-Chem regional model. On a personal note, she got married in August 2008!

**Stephanie Shaw** joined the Electric Power Research Institute (EPRI) as a project manager in the air quality group. EPRI is a non-profit institute that performs public interest energy and environmental research.

In August 2008, **Tracey Holloway** was appointed the Director of the Center for Sustainability and the Global Environment (SAGE) at the University of Wisconsin--Madison ([www.sage.wisc.edu](http://www.sage.wisc.edu)). SAGE is a

50-person research center addressing cross-cutting environmental research questions, connecting energy, land use, air quality, climate change, public health, and policy.

**Lindsey Chambers** successfully defended her dissertation entitled "Numerical Modeling of Saturn's Satellites and Ring System" and received her PhD in Earth & Planetary Sciences from UC Santa Cruz in June 2008. She is currently splitting a post-doctoral position between continuing to work on Saturn's rings with Dr. Jeffrey Cuzzi (NASA Ames Research Center) and starting new work on asteroid collisions with Dr. Erik Asphaug (UC Santa Cruz).

**Asmeret Asefaw Berhe** will be starting an assistant professor position in Soil Biogeochemistry at the School of Natural Sciences in University of California, Merced.

**Nadine Unger** was invited to speak at the Chinese-American Kavli Frontiers of Science Symposium in early October in Irvine (organized jointly by the U.S. National Academy of Science and the Chinese Academy of Science). The session was Chemistry-Aerosol-Climate Interactions and Nadine gave a talk entitled: 'Clean Air - Cool Planet: on the global climate benefits of smog control'

**Angie Knapp** had a baby, "Maggie", Margaret Ellen Hufferberger, on July 10, 2008, 7 lbs 4 oz. Angie, Maggie and her husband (Kevin Hufferberger) will be moving from Los Angeles to Miami, FL in December to start jobs at the University of Miami. Angie will have a postdoc at the Rosenstiel School of Marine and Atmospheric Sciences (RSMAS) and her husband will start a faculty job in the physics department.

**Christine Wiedinmyer** was promoted to Scientist II in July 2008.

After 11 years in the northern hemisphere, **Alex Thompson** has moved back to Wellington, New Zealand. She's now a senior climate change researcher for the

Parliamentary Commissioner for the Environment - sort of an independent environmental watchdog. In her spare time, Alex is figuring out how to build a zero-carbon house.

## Member Initiatives

Kristen Koehler and her husband have very recently started a nonprofit organization aimed at providing goods dealing with the five senses to some of the poorest regions of the world. It is called **Sense The World**. They got the idea from their recent travels to Southeast Asia, including Myanmar and Cambodia in 2007 and to Peru earlier this year. On both trips, they brought goods donated from friends and family to donate to poor regions. These included school supplies, toys, toiletries, vitamins, and reading glasses. The picture below is of children at a small school outside Yangon, Myanmar. This school was built to help the poorest children in the area and we provided them greatly needed school supplies, as well as the balls, which the children were thrilled to receive! Kirsten and Greg found that the eyeglasses and toiletries (especially shampoo) were the items in the highest demand in both regions. The idea evolved to providing goods for all the senses:

- hearing - hearing aids
- sight - eyeglasses
- taste - toothbrushes and toothpaste
- smell - shampoo and soap
- touch - clothing, sewing kits, etc.

Their goal is to return to these communities, in effort to build a lasting relationship, and to branch out to other needy regions. They are in the beginning stages of development and in the building of their website and network. If you are interested in seeing more pictures of the adults and children benefited from their recent trips and for more information about their organization, please check out [www.sensetheworld.org](http://www.sensetheworld.org), or email them at [info@sensetheworld.org](mailto:info@sensetheworld.org). Be sure to check back often, as they are working continuously to add information to the website.



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## ESWN Resources

ESWN has added a lot of new resources over the last year! Here's a summary of ways to connect with the group.

### **The ESWN website:**

<http://www.sage.wisc.edu/eswn>

### **Email lists:**

#### ***ESWN listserv***

This email list is to communicate information between members, including member introductions, upcoming conferences and ESWN get-togethers, and other topics of interest to the group at large. To email this list, please send mail to:

[eswn@web2.acd.ucar.edu](mailto:eswn@web2.acd.ucar.edu)

You can change your list settings (including switching digest format off or on!) by logging on at: <http://mailman.acd.ucar.edu/mailman/options/eswn/>

If friends or colleagues would like to join, direct them to: <http://mailman.acd.ucar.edu/mainman/listinfo/eswn>

### ***ES Jobs list:***

Due to the large number of job postings on the original ESWN list, we have created a separate Earth Science Jobs List open to the public. You can join, change your settings, or unsubscribe at:

[http://mailman.acd.ucar.edu/mailman/listinfo/es\\_jobs\\_net](http://mailman.acd.ucar.edu/mailman/listinfo/es_jobs_net)

To email this list, please send mail to:  
[Es\\_jobs\\_net@mailman.acd.ucar.edu](mailto:Es_jobs_net@mailman.acd.ucar.edu)

### **Discussion board:**

Last fall we started a discussion board, where members can have more in-depth conversations on a particular topic, or look up archived discussions or information. Check it out at:

<http://eswn.aos.wisc.edu/>

### **Facebook group:**

To join the ESWN Facebook group, contact Manda Adams or Erika Marin-Spiotta. Or search for ESWN on Facebook!

Please continue to personally invite friends and colleagues to join the group!

## ESWN Earth Sciences Women's Network

### **Leadership Board Members:**

Agatha De Boer, University of East Anglia  
Arlene Fiore, NOAA GFDL  
Meredith Hastings, Brown University  
Tracey Holloway, University of Wisconsin  
Erika Marin-Spiotta, Univ. of California Santa Barbara  
Galen McKinley, University of Wisconsin  
Kim Popendorf, MIT-Woods Hole Oceanographic Instit.  
Amanda Staudt, National Wildlife Federation  
Allison Steiner, University of Michigan  
Christine Wiedinmyer, NCAR

### **Web address:**

<http://www.sage.wisc.edu/eswn>

### **Mission:**

To promote career development, build community, provide informal mentoring and support, and facilitate professional collaborations.