

ADVANCE E-NEWS VOL. 2, NO. 6, MARCH 2010

ADVANCE-Nebraska: Advancing women, advancing STEM

Please feel free to forward, opt out, or provide feedback via email to: advance2@unl.edu.

Visit ADVANCE-Nebraska online: <http://advance.unl.edu>

Please forward any items (announcements, new or classic papers, funding and job opportunities) to advance2@unl.edu.

Thanks to all who contributed articles: Julia McQuillan. Mindy Anderson-Knott.



Here they come!

A. Announcements

1. Spring Semester, 2010 ADVANCE Activities
 - a. COACH Workshop: Powerful Presentations – Women in Academic Leadership Roles, **Monday March 29**
 - b. Research Fair: Panel Discussion by ADVANCE's External Advisory Board **Tuesday April 6**
 - c. Allison MacKay, Civil Engineering, UConn – Paths to Success Luncheon speaker, **Thursday April 22**
 - d. Second ADVANCE-Nebraska **Writing Retreat: M-F May 10-15** includes writing coach and grant-writing specialist
2. Office of Research Grant-Writing Seminar, **THIS FRIDAY March 12**

B. New Papers on Work-Life Balance, Gender Equity, The Pipeline

1. Power Couples and work-life integration (from *The Scientist*)
2. "Family-Friendly" policies – backlash at some institutions; how it works at UNL
3. Aggressive Recruiting Strategies to Diversify and Strengthen Faculty are Working at RIT – ADVANCE-Nebraska Funding Opportunities for recruiting
4. Gen X Faculty Priorities (from COACHE)
5. Alternate Paths to Full Professor (from *Inside Higher Ed*)
6. Keeping an eye on your eggs

C. Funding Opportunity

EPA Grant-writing Webinar April 1

D. Awards to Recognize Leadership in Engineering and Physical Sciences

E. Obit: Joanne Simpson, First Woman PhD in Meteorology

F. Social media for scientific journal discussion: JournalFire.com



A. ANNOUNCEMENTS

1. SPRING SEMESTER, 2010 ADVANCE ACTIVITIES

- A. COACH WORKSHOP: POWERFUL PRESENTATIONS IN THE CITY CAMPUS UNION, **MAR. 29. 9AM – 4:30PM.**



There are a few slots left!

Do Not Miss This Opportunity! Nancy Houfek and Lee Warren are returning with another exceptional workshop that will give you skills that you can begin using immediately to become more effective at everything that you do. It is well-worth your finding a substitute for classes that day – show a film, give a quiz – your classes will be better in the long run for it!

This workshop, designed to complement Strategic Persuasion and Strategies for Leading Change, will give women the opportunity to hone their speaking skills. In an interactive format, participants will learn techniques from the theater for increasing confidence and charisma, expanding vocal power, using effective body language, and dramatic strategies.

You will learn how to bring structural clarity to the content of your speech, whether speaking spontaneously or with prepared remarks.



You will discover how powerpoint can become a tool rather than a distraction.

You will explore the relationship between time, structure, and silence, in order to most effectively land their points.

Participants will be asked to bring in examples of their most challenging speaking events, whether in meetings, negotiations, informal presentations, or formal lectures. There will be plenty of practice and individual coaching on how to improve performance.

These workshops have a tuition cost of up to \$350 in the public realm; the ADVANCE grant brings it to you for free!

Participants will leave with the confidence and ability to present themselves and their ideas with power. **Register now** at advance2@unl.edu.

B. RESEARCH FAIR: PANEL DISCUSSION BY ADVANCE’S EXTERNAL ADVISORY BOARD

ADVANCE-Nebraska’s External Advisory Board will kick off this year’s Research Fair with a panel discussion on **Tuesday April 6** right after the breakfast. EAB members Cheryl B. Schrader, Dean of the College of Engineering at Boise State University, and Karan Watson, Interim Provost and Executive Vice President of Texas A&M, will kick off the discussion with “Nuts and Bolts of Diversity: Successful Strategies to Multiply Women Engineers”.

C. PATHS TO SUCCESS LUNCHEON SERIES: DR. ALLISON MACKAY, CIVIL ENGINEERING, U-CONN, 22

APRIL

Mark your calendars to hear how a mid-career engineer balances work and family.

D. ADVANCE-NEBRASKA WRITING RETREAT, MAY 10-15, LOVE LIBRARY

Second annual ADVANCE-Nebraska writing retreat will feature optional 1/2-day grant-writing workshop with the Office of Research’s Sara Trickie. Writing coaches Shari Stenberg and Jessica Rivera (English Dept and Faculty Leadership for Writing Initiative) will also return for discussions of writing strategies, overcoming writer’s block, and writing clearly. Voluntary participation in peer review of writing.

Breakfasts and lunches served all week while you devote all of your time to finishing those papers, that grant proposal, etc etc!

One faculty member has submitted THREE papers finished up at the writing retreat! Comments from the first writing retreat participants:

“Great writing environment. I’m more productive here.”

“...being able to sit in front of my computer for hours in a row...was FANTASTIC”

“Please organize again”

“This was a wonderful event, excellent opportunity to finish some projects that I was procrastinating on...Providing [meals] was very nice as it allowed us to stay focused on the projects”

Register at advance2@unl.edu. NO COST to you!

2. OFFICE OF RESEARCH AND ECONOMIC DEVELOPMENT GRANT-WRITING SEMINAR, MARCH 12

Beef up your proposals and meet the folks responsible for getting your proposal out the door:

8:30 a.m. to 5:00 p.m. in the Nebraska Union auditorium

For more information, contact Peg Filliez in the Office of Research at pfilliez1@unl.edu or (402)472-2851. More information and link to online registration: <http://research.unl.edu/events/grantseminar/>

B. NEW PAPERS ON WORK-LIFE BALANCE, GENDER EQUITY, THE PIPELINE

1. POWER COUPLES AND WORK-LIFE INTEGRATION

Three academic STEM couples were profiled in *The Scientist* in January and offered advice to other academic couples. Here are two of the three:

Elizabeth and Gary Nabel gave their top three strategies for making the dual career / home life thing work: pay for childcare, if possible; stay together and turn down deals that won't work for both of you; and incorporate work into family time. For the latter, Elizabeth, President and CEO of Brigham and Women's Hospital, and Gary, Director of the Vaccine Research Center, National Institute of Allergy and Infectious Diseases, have a large study with 3 computers to accommodate themselves and their three kids. At night, they all work together as “family time”.

Maiken Nedergaard and Steve Goldman struggled with a 4-hour commute to keep themselves and their five kids together with jobs in the New York City area until they'd had enough and moved to University of Rochester Medical Center. They advise: keep weekends sacred; find couple time; take turns sacrificing. On Goldman's lengthy trips away from the lab, Nedergaard takes over and manages things. In turn, Goldman takes over a lot of baby duties when he is home. He “got used to getting 2 hours of sleep a night” while an intern in the intensive care unit.

A noted absence in all three tales: nobody said it would be easy!

<http://www.the-scientist.com/2010/1/1/55/1/>

2. “FAMILY-FRIENDLY” POLICIES – BACKLASH AT SOME INSTITUTIONS; HOW IT WORKS AT UNL

An article in the *Chronicle of Higher Ed* recently spotlighted some trepidation among faculty at Research I institutions about the career impact of using such policies (“Family-Friendly Policies Fall Short When Professors Worry About Backlash”: <http://chronicle.com/article/Family-Friendly-Policies-Fall/64134/>). The article points out that having a pioneer who has used the policies successfully leads to greater use. It was not a scientific sampling of faculty. Lucky for you, UNL has pioneers who have gone before you!

These policies benefit *all* faculty, so the preferred term these days is “Work-Life Integration” policies rather than “Family-Friendly”. These policies, ***all of which are in operation at UNL***, include:

(For details and forms, see the Senior Vice Chancellor for Academic Affairs Website:

http://www.unl.edu/svcaa/faculty/policies/work_life_balance.shtml)

- “stop-the-tenure clock” – at UNL this policy is termed “**Tenure Clock Interruption**”. Any tenure-track faculty member may request a one-year extension of the probationary period in cases where an individual may be unable to meet the usual demands of the job while experiencing high demands in other aspects of life.
 - Data from Associate Vice Chancellor Evelyn Jacobson’s office indicate that over the last 5 years, 32 leaves have been taken by faculty for Tenure Clock Interruptions: 12 by men and 20 by women. (UNL has over 1,000 tenured and tenure-track faculty)
 - This is a total of 32 *Interruptions* over 5 years, but represents fewer than 32 faculty, as some faculty took more than one Interruption.
 - Three broad areas of need were identified: childbirth/adoption, illness, and “other”.
 - Of the 12 interruptions taken by men faculty, 8 were for illness and four were for “other”.
 - Of 20 Interruptions taken by women faculty, 13 were for maternity leave/adoption. 5 for illness, and 2 “other”.
 - “Other” comprises personal as well as professional reasons: a lab wasn’t ready, paternity leave, difficult divorce and/or child custody dispute.
 - Interruptions are usually for one semester.
 - **UNL is among the very few institutions that grant multiple Interruptions for each faculty member.**
- **Modified Duties** – Female faculty members are normally excused from teaching during the semester or other instructional period that medical maternity leave, or a majority of that leave, occurs. A primary caregiver adoptive parent has a right to the same modified duties.
- **Part-time Tenure Appointments and Modified Duties** – faculty may also switch to part-time tenure appointments and/or modified duties to “successfully balance professional pursuits and responsibilities when dealing with ongoing family and medical issues”.
- There are also Maternity/Adoption Leaves, Parental Leaves, and other Work-Life Integration policies at the Senior Vice Chancellor for Academic Affairs website:
http://www.unl.edu/svcaa/faculty/policies/work_life_balance.shtml
- When these policies are in play for a faculty member, tenure and promotion committees mentally compress the calendar to evaluate faculty. Thus, if a faculty member has taken a one-semester Tenure Clock Interruption, the normal 6 years’ of effort applies, even if it took 6 ½ years to get there.

3. AGGRESSIVE RECRUITING STRATEGIES TO DIVERSIFY AND STRENGTHEN FACULTY ARE WORKING AT RIT

From the Chronicle of Higher Ed: <http://chronicle.com/article/A-Drive-to-Diversify-the-Fa/64384/>

The Rochester Institute of Technology has adopted some aggressive search and recruiting strategies to diversify their faculty. Between 2002 and 2009, underrepresented minorities on the faculty have more than doubled, from 35 to 78.

M. Renee Baker is RIT’s executive director of the office of faculty recruitment and retention. She attends doctoral student conferences and begins courting future PhDs for positions at RIT two and three years before their degrees are completed. Ms. Baker and her staff mine the internet, contact diversity officers, multicultural associations, and department chairs at historically black and Hispanic-serving

institutions that grant PhDs to begin recruiting early. She calls her reaching out to doctoral candidates “exploratory interviewing” and admits that this approach requires a cultural shift in academia.

RIT has instituted a “Future-Faculty” program, a four-day event that brings in doctoral candidates for an intense get-to-know-RIT set of seminars, field trips and interviews. Students must apply, and applications are now arriving from Georgia Tech, Stanford, and University of Maryland-Baltimore County.

It’s not too soon to be thinking about next fall’s positions! ADVANCE-Nebraska can help you:

- **Pay travel expenses for potential candidates (Showcase Visitor Program)**
- **Pay travel expenses for UNL faculty to attend conferences to scout for new faculty (Recruitment Ambassadors)**
- **Pay for your department’s innovative approach to recruitment – what works in your discipline? (ADVANCE grants)**
- **See: ADVANCE-Nebraska Funding Opportunities: <http://advance.unl.edu/funding/>**

4. GEN X FACULTY PRIORITIES

A new report, *New Challenges, New Priorities: The Experience of Generation X Faculty* by Robin Matross Helms for the Collaborative on Academic Careers in Higher Education (COACHE) debunks some myths about faculty born between 1964-1980. “Gen X” faculty, in general, “prioritize planting roots versus climbing rungs”. They are interested in building a community where they work, while maintaining a work-life balance.

The faculty members were generally highly satisfied with the flexibility, variety of activities, freedom, and autonomy of their positions. They do not view themselves as participating in a cultural clash between generations: the study participants value interdisciplinary work, mentorship, and cooperation over competition with colleagues.

Dr. Helms suggests five institutional policies and practices to further support Generation X faculty as a result of this study:

- Prioritizing interdisciplinary work.
- Evaluating current tenure and promotion policies to determine if they focus on quality over quantity or promote cooperation over competition among faculty members.
- Exploring the creation of formal mentoring programs,
- Supporting strategies for work-life balance.
- Increasing community by organizing events for interaction between faculty members.

Complete report:

http://isites.harvard.edu/fs/docs/icb.topic283787.files/COACHEUpdate_2010_Winter.pdf

5. ALTERNATE PATHS TO FULL PROFESSOR

There is a substantial amount of research that indicates that a lack of transparent policy, lack of mentoring, and lack of opportunities for re-tooling contribute to some faculty staying longer at Associate rank than their peers. I attended a workshop at a geological national conference last fall for Associate Professors to discuss the process for promotion to full and was a bit surprised to find a couple of Associate Professors counseling their peers to not worry about promotion. “What’s the point?” one of them asked.

How about a 9% raise? Over a couple of decades, compounding, this adds up!

UNL became part of an NSF-ADVANCE research project by Dr. Dana Britton of Kansas State last week. The project focuses on the transition from Associate to Full, a transition that can be difficult for faculty of both genders. Britton is testing whether the impact is greater on women faculty (a tough task with so few women ranked at full) and with an eye to compiling recommendations for facilitating this important transition for all faculty.

From *Inside Higher Ed*: Ohio State is re-thinking the way faculty are promoted from associate to full professor. E. Gordon Gee, president of Ohio State, started a conversation at OSU to consider promoting some faculty based on a research focus, and others based on a teaching focus. Gee calls it "multiple ways to salvation".

He noted that the criteria for promotion appear to be "more of the same" (criteria required for tenure), but that, in fact, much more emphasis is placed on research productivity – so much so, that "adequate" is a satisfactory score for teaching and service. This practice breeds cynicism among faculty, ignores other types of important contributions faculty make to the well-being of a university, and diminishes the value placed on excellent teaching by more experienced faculty, OSU's provost stated.

Measuring impact in teaching and service will be key to developing alternate paths to salvation.

<http://www.insidehighered.com/news/2010/03/05/osu>

6. KEEPING AN EYE ON YOUR EGGS

From *AWIS' Washington Wire*: Many women are aware that the production and release of viable eggs, which develop from follicles, diminishes with age, further supported by a new mathematical model calculating ovarian follicle reserves. This model, published recently in *PLoS ONE*, was developed through analysis of several histological studies of human ovaries, and included ovarian specimens that spanned a large age range from several weeks postconception to 51 years. This model showed that women have lost almost 90% of their prebirth follicles by age 30 and 97% by age 40, and the number of follicles recruited for maturation into eggs started to decline by age 14. This study is unique in its attempt to measure the number of follicles in ovaries from conception to menopause, and may support a deeper understanding of underlying causes of infertility.

Original article: <http://www.plosone.org/article/info:doi/10.1371/journal.pone.0008772#s4>

C. FUNDING OPPORTUNITY

1. EPA GRANT-WRITING WEBINAR APRIL 1

EPA's Office of Grants and Debarment is hosting a webinar for the EPA grants community on April 1st, 2010 at 2:00 p.m. EST. If you are interested in applying for EPA grants or are currently managing an EPA grant, please consider attending this one hour webinar.

The webinar will cover grants topics, including:

- how to find and apply for grant opportunities
- an update on the status of Grants.gov
- preparing a proper budget detail

In addition, we will be hosting a Q&A session during the second half of the webinar. If you have any questions, please email them to ogdweb.gad@epa.gov with the subject line "April Grants Webinar" in advance of the call. We will cover as many questions as possible during the session. Following the session we will post all questions and answers on

http://www.epa.gov/ogd/training/ recip_train.htm

To enroll in the webinar and see more details including conference materials, please go to http://hawkeye.epa.gov/imtapp/app/conf_enrollment.uix?mID=55547&preLogin=true

The Conference ID is 55547. When prompted for a conference key, please enter "Grants".

D. AWARDS TO RECOGNIZE LEADERSHIP IN ENGINEERING AND PHYSICAL SCIENCES

1. THREE ANITA BORG AND DENICE DENTON AWARDS

Anita Borg Institute for Women and Technology Honors Women Who Have Significantly Impacted Women and Technology

ALO ALTO, Calif. — February 22, 2010 — The Anita Borg Institute for Women and Technology announced today it has opened the [Call for Nominations](#) for three awards: the [Anita Borg Social Impact](#), [Anita Borg Technical Leadership](#) and the [Denice Denton Emerging Leader Awards](#). Nominees may be submitted by high-tech companies, universities, private industry, and the general public. One winner will be selected in each category.

The **Denice Denton Emerging Leader Award** recognizes a tenure-track (non-tenured) faculty member (under the age of 40) at an academic or research institution who is pursuing high quality research in engineering or physical sciences, while contributing significantly to promote diversity in his/her environment. The award winner will receive a \$5,000 prize.

The **Anita Borg Social Impact Award** honors an individual or team who has caused technology to have a positive impact on the lives of women and society, or who have caused women to have a significant impact on the design and use of technology. The award recipient will receive a \$10,000 prize.

The **Anita Borg Technical Leadership Award** recognizes and celebrates an outstanding woman technical leader. Nominees are women who have inspired the women's technology community through outstanding technological and social contributions and, through their leadership, have increased the impact of women on technology. The award recipient will receive a \$10,000 prize.

"These three awards recognize three extraordinary people whose contributions to leadership and technology are exemplary. The *Anita Borg Technical Leadership Award* recognizes great women whose technology contributions are changing our world. The *Anita Borg Social Impact Award* recognizes someone who demonstrates to the rest of us how technology can make a positive difference. The *Denice Denton Award* celebrates a young leader whose impact is already substantial, and will only increase." Said Telle Whitney, President and CEO of the Anita Borg Institute for Women and Technology, "They are role models whose work continues to reach across boundaries and inspire".

The awards will be presented on September 30, 2010, at the [Grace Hopper Celebration of Women in Computing](#) in Atlanta, Georgia. Nominations will be accepted at <http://anitaborg.org/initiatives/awards/> until **April 29, 2010**.

ABOUT THE ANITA BORG INSTITUTE FOR WOMEN AND TECHNOLOGY (ABI)

The Anita Borg Institute provides resources and programs to help industry, academia, and government recruit, retain, and develop women leaders in high-tech fields, resulting in higher levels of technological innovation. ABI programs serve high-tech women by creating a community and providing tools to help them develop their careers. ABI is a not-for-profit 501(c) 3 charitable organization. ABI Partners include: Google, Microsoft, HP, Cisco, First Republic Bank, Intel, National Science Foundation, NetApp, SAP, Sun Microsystems, Symantec, IBM, Lockheed Martin, Thomson Reuters, CA, Intuit, Wilson Sonsini, Goodrich & Rosati, Amazon, Facebook, and Raytheon. For more information, visit www.anitaborg.org.

Media Contact: Jerri Barrett

650-857-6095

jerrib@anitaborg.org

2. ANITA BORG CHANGE AGENT AWARD NOMINATIONS OPEN

PALO ALTO, Calif. — February 22, 2010, — The [Anita Borg Institute for Women and Technology](#) announced today it has opened the [Call for Nominations](#) for the [Anita Borg Change Agent Awards](#). The Change Agent Awards celebrate the accomplishments of technical women from, and who work in, developing countries. These awards are designed to recognize up-and-coming leaders that impact or advance women's participation in technology.

Three individual awards will be given to women in computing that demonstrate leadership within their communities, expand opportunities and influence the careers of girls and women in technology, and demonstrate impact on advancing women's participation in technology. Each winner will receive up to \$5,000 in travel reimbursement to attend the [Grace Hopper Celebration of Women in Computing](#). Past winners have come from Bahrain, Brazil, Egypt, Georgia, Nigeria, India, Kenya, Pakistan and Turkey. The Change Agent Awards are sponsored by Google.

The awards will be presented on September 30, 2010 at the Grace Hopper Celebration in Atlanta Georgia. Nominations will be accepted until April 29, 2010 at <http://anitaborg.org/initiatives/awards>.

Media Contact: Jerri Barrett
650-857-6095
jerrib@anitaborg.org

E. OBIT: JOANNE SIMPSON, FIRST WOMAN PHD IN METEOROLOGY

By Patrick Fitzpatrick, Mississippi State U.

Great pix of Simpson, early years: <http://earthobservatory.nasa.gov/Features/Simpson/simpson2.php>



in

ended up completing her Ph.D. work in 1949 with Riehl as her adviser.

Riehl and Simpson wrote several landmark papers about hurricane structure, hurricane energetics, the thermodynamic structure of the tropics, and key concepts about the role of the tropical general circulation. From 1951 to 1960, Simpson became a Research Meteorologist at the Woods Hole Oceanographic Institute to learn more about weather over the ocean. During this period, **she constructed some of the first mathematical models of clouds, and flew into clouds to validate her computations.** In 1954 she won a Guggenheim Fellowship to work in England, and in 1955 was an honorary lecturer at the Imperial College in London.

In 1962, Simpson wrote a chapter in the landmark book "The Sea, Volume I." This book presented the most comprehensive treatment to date of the coupling between the ocean and the atmosphere. Simpson's chapter dealt with the complexity of how large- and small-scale atmospheric features interact, and in particular how difficult it would be to explicitly compute the individual contributions of small-scale clouds and turbulence on large-scale weather patterns. This was a factor leading to the concept of

parameterization, in which the net effect of non-measurable small-scale weather features is computed in terms of large-scale (measurable) weather variables.

After five major hurricanes made landfall on the eastern United States in 1954 and 1955, Congress established the National Hurricane Research Project and named her as an advisor. There she met the first director of the project, Robert Simpson, whom she married in 1965. From 1965 to 1979, she was director of NOAA's Experimental Meteorology Laboratory in Coral Gables, FL, and participated in attempts to modify clouds and hurricanes using cloud-seeding techniques. In 1979 she went to NASA Goddard Space Flight Center.

As Head of the Severe Storm Branch; she remained at Goddard ever since. She served as the Project Scientist for the Tropical Rainfall Measuring Mission from 1986 until launch in 1997 and became Chief Scientist for Meteorology. Simpson won numerous awards for her achievements, including the American Meteorological Society's highest honor, the Carl-Gustav Rossby Research Medal.

F. ONLINE SOCIAL NETWORKING FOR SCIENTIFIC JOURNAL DISCUSSION: JOURNALFIRE.COM

From Earth Science Women's Network: Started by a couple of Caltech graduate students, this "social" networking site facilitates article discussion and sharing online. Journal clubs, lab groups, and seminar classes can post and share papers and also share their impressions or comments on the paper. You can "follow" other scientists or groups to see what they're reading, and what they think of what they're reading, so you can stay up to date on literature.

<http://journalfire.com/>



Crocuses coming up south of Andrews and Burnett!