

Supplementary material to “Networking as a Tool for Earth Science Women to Build Community and Succeed”

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Women are often underrepresented in academic positions in Earth sciences [Shaw and Stanton, 2012; M. A. Holmes and S. O’Connell, Where are the women geoscience professors?, 2004, <http://www.eas.unl.edu/~mholmes/images/Where%20are%20the%20Women%20Geoscientists.pdf>], with numbers below the critical mass to induce change and improve conditions [Etzkowitz *et al.*, 1994]. This can lead to lower productivity and a lower success rate for female scientists [Gupta *et al.*, 2005; Kyvik and Teigen, 1996]. However, women can overcome these problems by expanding their networks [Davis, 2001; Welch and Melkers, 2008].

Whether one purposefully engages in its practice or not, networking is everywhere in science, from invited talks to award nominations, teams for a field campaign, collaborative proposals, calls to review panels, reference letter requests, advice, jobs, or even the general goal of building of a scientific reputation. This June, 70 early- to mid-career Earth science women participated in a workshop focused on building networking and communication skills, part of the Earth Science Women’s Network’s (ESWN) series of annual professional development workshops. Throughout the workshop two professional facilitators, Christina Olex and Kerry Ann Rockquemore, raised awareness of the importance of networks, highlighted opportunities for building or improving professional relationships, and instructed training in communication skills.

Participants were challenged to approach networking not focused exclusively on their own benefits but as mutual service in a supportive community. This approach lessens the sense of burden often connected to networking and makes being sought out for support, advice, feedback, or a letter of reference an expected part of the job. Workshop attendees became aware of the importance of identifying their short- and long-term professional goals and communicating them to mentors and peers—prerequisite to having a need intentionally met. They then learned how to create opportunities to expand their networks

at conferences and meetings or through mutual contacts, by identifying people they would like to meet and preparing an introduction in advance.

Participants put their newly acquired skills and perspectives into practice by identifying peers and mentors in their existing networks and categorizing them according to their strengths. By understanding the role that individuals play in meeting professional needs, researchers can avoid taxing professional relationships and build a balanced support system, with each relationship providing unique value.

As one approach to purposeful network building, the workshop addressed Web-based communication. There are many options for social or professional online networks. For example, ESWN is developing an online networking space on its Web site, <http://eswnonline.org> (this space, sponsored by AGU, is currently in the internal test phase, and the current ESWN listserv provides a friendly and safe community where women can seek professional advice and discuss all topics related to research, teaching, job advances, and sensitive gender-related issues).

ESWN brings together women from around the world who share a passion and enthusiasm for Earth sciences, thus meeting one of the largest recognized needs for female students: a feeling of connection with others in their field [Kemelgor and Etzkowitz, 2001]. We invite everyone who identifies herself as an Earth science woman to visit us at <http://eswnonline.org> and become part of this community.

The Skills for Networking and Communication workshop was created by ESWN, supporting ESWN's mission to promote career development, build community, provide informal mentoring and support, and facilitate professional collaborations. Professors Tracey Holloway and Erika Marin-Spiotta are to thank for their leadership in organizing the conference at the University of Wisconsin-Madison, with specific support from the Nelson Institute. The workshop was funded by NSF ADVANCE PAID grant #0929782.

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