

## **Participation of Women in Science: Problems and Solutions**

A Hugo Rossi presentation and discussion by Carol Gross (UCSF) - March 23, 2016

### ***Group Discussion:***

#### ***What can we do to improve diversity in STEM here at the University of Utah?***

Following Dr. Gross' presentation, audience members split into groups based on status at the University of Utah (students, staff, faculty, etc.). Each group developed its own list of recommendations for the University, below.

#### From the undergraduate perspective, including ACCESS students:

- Spread awareness of the disparity
  - Provide training for undergraduates on implicit bias
  - Pull students together to discuss diversity
  - Encourage collaborations between gender studies and STEM professors
- Spread awareness of available resources
  - Provide students with resources, so that they know how to handle perceived diversity issues
  - Compile a list of campus organizations involved in diversity and centralize the advertising/coordination of events
- Identify students who may need help
  - Work with faculty to identify students who might like additional support and/or involvement with diversity support groups
  - In class, provide students with opportunities to work in small groups that also provide support (ex. female-only project groups)
- Empower students to act
  - Encourage student-driven diversity efforts by providing necessary staff support/resources to help guide the process
  - Provide underrepresented undergraduates with opportunities to receive communications training in assertiveness
- Provide role models and encouragement
  - Increase visibility of female role models for students in science and give women a physical presence on campus (plaques, building names, etc.)
  - Encourage high school teachers to inspire minority students to pursue science despite the hardships
  - Create a mechanism where undergraduates can receive mentoring/advice from graduate students and others
  - Encourage people to voice their hardships and experiences and listen to those of others

#### From the graduate student perspective:

- Provide peer-to-peer mentoring via peer-led, small groups such as journal clubs, etc.
- Enhance the communication of available resources such as graduate student support groups/counseling center
  - Generate a specific UofU job/position dedicated to building support infrastructure
  - Encourage departments to provide frequent coordination/communication
- Build community across the College of Science with interdisciplinary events and active groups to bring people together (ex. Women in Physics & Engineering)
- Provide resources, such as department support and funding for student groups, space, time, etc.
- We must have faculty and administrators who encourage and value participation.

#### From the postdoctoral researcher perspective:

- Institute peer-mentoring opportunities linked to experts in the field and build awareness of paths inside and outside of academia
  - Place an employee in career services who specializes in postdocs and their career placement
- Offer on-site affordable daycare (shorten the waitlist, make daycare availability align with work hours)
- Ensure equal salary and benefits across all post-docs

- On a larger scale, examine options for paid maternity/paternity leave, better training for search committees and/or mandates to ensure females are hired, treat post-docs like employees with full benefits (retirement, vacation, annual review, etc.)

From the faculty perspective:

- Encourage diversity by providing career development opportunities
  - Give faculty annual feedback, rubrics, etc.; provide feedback early and often
  - Provide faculty trainings/resources on implicit bias, including issues with implicit bias in recommendation letter writing and how to handle biased letters when they are received. Implicit bias training would also ensure that this does not play into the RPT process
- Mobilize allies on campus
  - Encourage formation of groups of diversity “allies” on campus who can work on understanding gender issues, implicit bias, and spread awareness to others
  - Provide further opportunities for small group discussions, lunches, etc., to keep the conversation going.
- Provide peer-mentoring and role models
  - Encourage faculty at all levels to discuss their personal hardships and how they overcame obstacles
  - Develop different peer-mentoring groups for career-line faculty, tenure-track faculty, graduate students, and post-docs, since each group has different levels of experience, empowerment, and job security
  - Improve retention of women/minority faculty by developing a faculty mentoring clearinghouse or some sort of a center to help them get help, find peer-mentoring groups, etc.
- Support families
  - Provide nursing and changing rooms on campus
  - The UMatch program on campus could be used to help faculty/staff connect and support one another with childcare and work resources
  - Drive a culture shift with help of diversity “allies” on campus to make flexibility (parental leave) in tenure-track positions accepted. Without this flexibility, many women are pushed into career-track positions
- Provide resources/funding for diversity, spousal hiring, etc.

From the staff perspective:

- Provide role models by ensuring that there are diverse folks in high level staff and faculty positions. The UofU needs to lead by example.
- Provide professional development opportunities and peer mentoring groups for underrepresented staff; consider adding diversity specialists
- Enhance collaboration and conversation between departments
  - Look at collaborating with other fields to help enhance diversity
  - Increase awareness of available resources
  - Generate a more centralized campus list/resource of available STEM support groups for women and minorities.
- Set clear, measurable diversity goals for the institution as a whole and support continued efforts to recruit diverse people as staff, students, and faculty. Consider possibilities for job-sharing.
- Explore possibility for broader diversity initiatives in collaboration with PAC-12 peer institutions

***Common themes that emerge as recommendations for the University of Utah***

- 1. Provide role models, peer-mentoring, and training/professional development for underrepresented populations of all types (students, staff, faculty)**
- 2. Raise awareness of the problem and of available programs/resources**
- 3. Promote a supportive culture for campus members who have families/children**
- 4. Encourage communication and collaboration across campus**
- 5. Provide resources (funding, staffing, etc.) to address the problem**