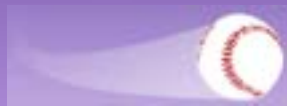# COACh

Working to Level the Playing Field for Women Scientists and Engineers

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In the U.S. PhD scientists and engineers we have many career options.

But many women are "Opting Out" of the academic route.

WHY???

Are their perceptions scaring them away?

Do we give them the education and mentoring experience that makes feel they are competitive?

Who is mentoring them?

Where are their networks?

What about kids?

18 Enter college
 5 (BS)
 6 (PhD)
 2 (Post Doc)
 5 (Asst. Prof.)

Tenure (or not)
    at 36.

Pre-tenure kids?

Her-stories

"Early on in the time I have been at my current university, I had the strong sense that there were people who were concerned with creating opportunities for me and supporting me. This stopped abruptly around year 3 or 4."

From many COACh workshop participants.

COACh

COACh is a grass-roots effort aimed at increasing the number and success of women in academic STEM fields.

Started initially in 1997 to serve the chemistry community, COACh programs have been widely adopted by many other science and engineering disciplines.

Website: www.coach.uoregon.edu
Sponsored by NSF, NIH and DOE

COACh Goals

• Identifying inequities that negatively impact the women in STEM fields.

• Developing programs to level the playing field so women can compete on equal footing with men.
 - Institutional efforts
  - Individual efforts

COACh Programs

Its highest impact programs are COACh workshops that provide:

• Training in professional skills and strategies to help women achieve their career goals - and take more control of their career path. Developed for faculty, postdocs and grad students, and minority groups.

• Leadership training for STEM faculty, department chairs, deans, research center directors, etc. For single and mixed gender groups, and minority groups.

The workshops provide a unique setting for networking, brainstorming and sharing experiences in a supportive and empowering environment.

COACh Activities and Collaborations
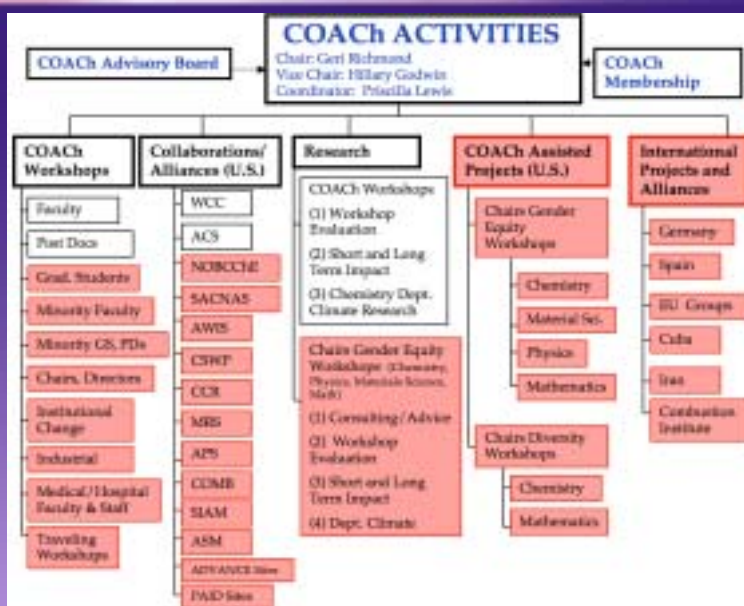
Acronyms used: WCC- Women's Chemist Committee; ACS - American Chemical Society; NOBCChE - National Organization of Black Chemists and Chemical Engineers; SACNAS - Society for the Advancement of Chicanos and Native Americans in Science; AWIS - Association for Women in Science; CSWP-Committee on the Status of Women in Physics; CCR - Council on Chemical Research; MRS - Materials Research Society; APS - American Physical Society; COMB-Combustion Institute ; SIAM - Society for Industrial and Applied Mathematicians; ASM – American Society of Microbiology.

COACh Programs

Workshop Successes

• To date over 450 women chemistry faculty have attended COACh Sponsored Workshops - 30% of the women faculty in the top 100 chemistry departments.

• Over 3000 *additional* women in: geology, computer science, physics, mathematics, engineering, materials science, biology, and medicine have attended these COACh workshops funded by the hosting institution or group.

Professional Skills Workshops

The Art of Effective Negotiation

- *#Communicating ideas*
- *#Negotiating effectively*
- *Being heard*
- *Effecting change*
- *Leading a group*

#Especially effective for graduate students, postdocs and early career scientists and engineers.

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Beyond Negotiation: Difficult Conversations

Putting out fires without burning bridges

Learning Goals:

- Identify behavior and langu
is
    unproductive or inappropriate.

- Develop skills that reduce the heat
rather than flame the fire.

- Learn techniques to help maintain
your composure.

- Learn how to keep the dialogue

© co...

The Art of Effective Leadership

Many roles: Teacher, group leader, department head, institute director…

QuickTime™ and a
TIFF (Uncompressed) decompressor
are needed to see this picture.

Learning goals

- Effective strategies for effecting change.

- Bringing groups to consensus on difficult issues.

- Team building techniques

- Leadership styles effective for women leaders.

- Effective use of composure, body language and voice projection

- Characteristics of good and bad leadership.

Leadership Workshops for Chairs

For Men and Women

Participants learn leadership strategies that can increase the success of their departments, institutes or centers.

• Unique challenges in leading scientists

• Communication skills, including management of conflict

• How to lead faculty through a change process

• How to bring a group to consensus

• Establishing and using allies

Participants apply skills to their own leadership challenges through group strategizing and role-playing.

COACh Programs

What makes these programs so successful?
Key elements:

• Professional facilitators that have many years of experience in training and coaching in higher education.

• Research based strategies.

• Role playing and group discussions in small group settings.

• Research before and after workshops conducted to learn the impact of the

COACh Impact

SCORES AND STATISTICS

Research on long-term impact of workshops on participants:

- 94% state that what they learned in the COACh workshops helped with their career advancement.

- Over a third (38%) reported that they took administrative positions after attending the COACh workshops;

- 86% of those credited COACh with either the decision to take on the position or with helping them in leadership effectiveness.

- Over 70% of postdoc attendees have attained faculty positions after leaving their postdoc.

COACh Impact

SCORES AND STATISTICS

Research results on short and long-term impact of workshops on participants:

- 91.3% state that they now feel more in control of their career because of the COACh workshop.

- 83% credit COACh workshops for reducing their personal stress.

- Over 90% have mentored others in the skills that they learned at the workshops.

What's good for the goose is good for the gander!

Who needs these skills?

Isn't my scientific prowess enough?

Good science - *requires good communication skills.*

- increasingly relies on effective teamwork.

- thrives on good leadership and sponsorship.

- requires active listening and observation.

- flourishes in a supportive work environment.

COACh

COACh

A career in academia?

Why ~~Bother?~~

Why NOT?

Website: **www.coach.uoregon.edu**

*Workshop on
Building Strong Academic
Chemistry Departments
Through Gender Equity*

*January 29-31, 2006
Arlington, VA*

*56 Department Chairs from top Chemistry Departments
~30 University Leaders, Funding Agency Leaders and Speakers/Panelists*

Followed by Physics (2007)
Materials Science and Engineering (2008)

Goals of the Workshop

❖ **Educating Chairs on the factors that contribute to under-representation and under-participation of women faculty in the U.S. scientific enterprise.**

❖ **Developing a series of goals for the departments and institutions to increase the number and success of their women faculty in their institutions.**

❖ **Following up on implementation of the goals.**

Program:

Data Driven Presentations by Social Scientists and Academic Leaders

Panels and Break-out Sessions

Research on Immediate Workshop Impact

From COACh pre and post survey of the Chairs:

PRE: Principle factors limiting Chairs' ability to hire women were beyond their control, e.g.

too few applicants, losing candidates to other departments, spousal hires.

POST: More likely to report limiting factors were within their control, eg.

departmental faculty not committed to or opposed hiring women, didn't have enough financing.

Immediate Workshop Impact: Attitude shifts

The Chair's perceptions of factors that slow the progress of women chemistry faculty *changed* for 9 of the 11 sampled barriers including:

- *Few available mentors*
- *Inability to recruit best graduate students.*
- *Women excluded from important departmental decisions.*
- *Lack of success in securing funding.*
- *Subtle biases against women.*
- *Unwelcoming departmental climate.*
- *Discrimination in peer review process.*
- *Heavier service/teaching load.*
- *Women do less self-promotion.*

Workshop Action Items

- **Departmental Level:** Each department was to select 2 action items for implementation.

- **Administrative Level:** Propose gender equity action items to institutional administration

- **Funding Agency Level:** Work with funding agencies to develop new strategies for funding equity

- **Follow-up:**
  Interactive website created by COACh for chairs to report their goals and progress towards these goals.

Follow through: Commitment to Action Items

Action items selected by Department Chair goals: 45/56 responded on Website.

- Establish effective mechanisms for assisting career development of young faculty, especially women. (n=26)
- Double the percentage of women applicants in the pool. (n=22)
- Assure that mid- and senior-level women faculty in leadership roles. (n=21)
- Develop policies to facilitate the hiring women, including spousal hiring. (n=15)
- Make diversity an academic priority and develop programs that enhance recruitment and retention of faculty.(n=13)
- Consider personal obligations in academic scheduling and planning. (n=10)
- Educate faculty members in your department regarding the accumulation of disadvantage that impact women faculty. (n=10)