Mentoring Handbook

The following material was pieced together from information attained at MentorNet: www.MentorNet.net

"Until women are fully represented in the fields of science and engineering, society is losing out on the talents of a vast number of potential contributors. Academic institutions are losing out. Corporations are losing out. Individuals are losing out. We all lose out." - Carol B. Muller, Ph.D., Founder, MentorNet

Definition:

Mentoring is the process by which an experienced person provides advice, support, and encouragement to a less experienced person. A mentor is a teacher or adviser who leads through guidance and example.

The Benefits of Mentoring:

In various studies across fields, being mentored has consistently been linked with academic and professional achievement. Proteges gain an increased understanding of a discipline or an organization, receive guidance and advice, report higher confidence levels, and gain access to networks and other resources.

Your mentor can help you "decode" the unwritten rules of the field. She can provide encouragement, guidance, and support that may not be available to you anywhere else on campus. She can tell you what are the most important things you can be doing now to prepare for a career in industry or academics later. She can be someone to whom you go to for advice knowing she won't be grading your paper or exam in the future.

Mentors also reap benefits. Mentors appreciate the opportunity for self-reflection about their own paths - they report gaining an increased understanding of their disciplines. Most widely, mentors report the intrinsic rewards for being involved in helping others; they mentor as a way to show appreciation for the mentoring they received as students or as a way to enact change in a male-dominated major.

What Does it Take to be a Good Mentor?

- Be flexible, take the initiative, and be responsive.
- Remember what it was like when you were in your protege's position.
- Take the initiative to suggest discussion topics, share personal experiences, pose questions, and engage in small talk until a relevant topic for discussion emerges.
- Be responsive to your protege's questions and comments.
- If you do not have the time to offer a full response shortly after you receive an email message, send a short message letting her know you will be in contact when you have the opportunity.

What Does it Take to be a Good Protege?

- Be teachable, take initiative, and honor your commitment.
- Be willing to learn new things, obtain another perspective, and be responsive to suggestions and constructive criticism.
- Take the initiative to ask your mentor a question, to let him or her know what you are working on, and to ask about his or her academic and professional experiences. In addition, sustain the mentoring relationship by engaging in small talk until a relevant topic for discussion emerges.
- Please be appreciative of your mentor's time and investment; mentors usually have very demanding schedules and are participating because they are committed to mentoring.
- Respond in a timely manner to your mentor's questions and comments.
- If you don't have the time to respond at the time, send a short message letting her know you will be in contact when you have the opportunity.

Questions to Ask Your Mentor

The following are some sample questions that you can ask your mentor:

- What is your experience like as a student? What do you know now that you wished you knew when you were at their stage.
- What did you do as a student that helped you be successful? What would you recommend that I do?
- What courses would you recommend I take? What course or courses did you take that proved especially helpful?
- What computer programming languages should I learn, and why?
- How do you spend your time outside of school?
- What do you like most about your job/school?
- What skills do you use most in your job/research? What skills did you learn in school and what skills did you need to learn outside of school?
- How did you end up in Computer Science? Did you have mentors or role models?
- What was the most valuable lesson that a mentor or supervisor taught you?
- And, ask your mentor what they think you should ask them. This may begin a very interesting discussion of a topic you would never have expected!

Questions to Ask Your Protege

The following are some sample questions that you can ask your protege:

- What they hope to get out of being a protege.
- Ask about any extracurricular activities, jobs, or hobbies they have.
- Any research, internship, or co-op projects on which they worked or are working.
- Why they decided on their current major.
- What classes they are currently taking.
- Ask them about their career aspirations.
- Ask them how they became interested in the field.
- Any concerns about school and work.

Getting the Mentoring Relationship off to a Good Start

We recommend that you use your first email message to your mentor/protege as a chance to introduce yourself. To begin establishing a mentoring relationship, you may want to give your mentor/protege some information about yourself, such as:

- Your preferred name or nickname.
- Your degree program, area of study (if known), expected year of graduation, and areas of interest.
- Any previous degrees you've obtained or other schools you've attended.
- Brief descriptions of any research or special projects you've done.
- Any engineering or science related jobs you've had.
- The URL of your personal homepage, if you have one and feel comfortable sharing it; URLs from any interesting web pages about projects or activities in which you were involved.

By revealing some personal characteristics in your first email, your mentor or protege will probably respond in kind. This will give you a starting point and help you to identify characteristics and interests you have in common. Equally important, it will help you identify areas where you differ, and where you may be able to teach, and learn from, each other.

Mentoring as a Solution

> "Mentoring in today's environment is a critical tool in the toolbox for success. The inherent lack of link between business and academics presents an awesome chasm for many, especially women, to face and bridge. Mentoring provides an outstanding opportunity to assist students in this endeavor."

Mentoring is a key element for improving the presence, retention, and advancement of women students and faculty in science. Progress on the broader agenda, of which mentoring is one important aspect, is significant for several reasons. First, it should lead to improved interest by and retention of women in CS at all educational levels. Success in this area would significantly increase the talent pool in science, create a more diverse community in institutions of higher education and in the work place more generally. Second, it will likely lead to greater equality and equity in the academy—that is, more equal access to resources and rewards, and freedom from either bias or favoritism. Third, it is likely to improve the quality and climate of our profession, leading to greater achievements for all members of the science community.

We hold no illusion that theses issues will be eliminated simply by improved mentoring of women students and faculty. However, improved mentoring of women can have significant impact on their careers and lives, and on the academic climate and structure more generally.