

**Grace Hopper Conference 2004  
Panel Submission**

**The Role of Mentoring in Recruiting & Retaining Female Undergraduate Students in  
Computer Science**

**I. Objectives:**

The panel will present mentoring initiatives launched by various educational institutions to retain and recruit undergraduate students in Computer Science. Research has shown that, given the low participation of women in university computer science programs in North America, mentoring programs are seen as one of the most valuable tools in preventing attrition and improving the overall learning experience among female computer science students. The objective of the panel is to share information on the background, structure, effectiveness and challenges of various mentoring initiatives in the context of the experience of female undergraduates in Computer Science. Our focus is on undergraduate mentoring since students' experience at the undergraduate level, especially during the first and second year in university, is crucial to their decision in choosing a career in Computer Science.

**II. Panel participants:**

Professor Nancy Amato (moderator)

Associate Professor

Department of Computer Science, Look College of Engineering

Texas A & M University

Phone: 979-862-2275, email: [amato@cs.tamu.edu](mailto:amato@cs.tamu.edu)

Nancy Amato has been active in designing and implementing mentoring programs through her involvement in AWICS at Texas A&M (<http://awics.cs.tamu.edu>) and the CRA-W Distributed Mentor Program (<http://www.cra.org/Activities/craw/dmp/index/php>). She has been directing the Distributed Mentor Program for the past 3 years.

Dr. Sheila Humphreys

Academic Coordinator for Student Matters

Department of Electrical Engineering and Computer Science

University of California at Berkeley

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As the academic coordinator for student matters, Sheila Humphreys has been active in designing programs that support female undergraduate and graduate students. She recently organized the UC Berkeley panel on mentoring

(<http://www.eecs.berkeley.edu/Programs/grad/Diversity/Tapia%20Conference%20panel.htm>).

Kate Libby

Coordinator

Big /Little Sisters Program

School of Computer Science

Carnegie Mellon University

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Kate Libby is the coordinator of the Big/Little Sisters Program that aims to bring together junior and senior undergraduate students through various activities.

Rachel Weinstein

Graduate Student

Department of Computer Science

Stanford University

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Rachel Weinstein has been actively involved in mentoring programs both at Brown University, where she did her undergraduate degree, and at Stanford University where she is currently pursuing her Ph.D.

Michele Ng  
Special Programs Coordinator  
Department of Computer Science  
University of British Columbia  
Phone: 604-822-5693, email: [mng@cs.ubc.ca](mailto:mng@cs.ubc.ca)

Michele Ng has been involved in the design and implementation of the tri-mentoring program at the UBC Department of Computer Science and is currently the coordinator of the program.

### **III. Discussion Topics:**

In the panel, we will examine:

1. Background of each program including program initiation, history and duration, partnerships and rationale.
2. Structure and characteristics of various programs including overall program design, informal vs. formal programs, mentor/mentee recruitment and matching, funding, staffing, and sustainability.
3. Impact of mentoring on students including evaluation and student feedback, effects of mentoring on student life including career goals, academic performance and overall satisfaction.
4. Challenges faced by mentoring programs including financial support from department or faculty, recruitment of mentors and mentees and finding the appropriate program structure.
5. New directions for the future. Topics such as program expansion and sustainability, partnership with industry and professional organizations and campus wide mentoring will be discussed.

### **IV. What competing points of view will be discussed?**

Mentoring has often been cited as a 'cure all' in retaining female students in Computer Science. A large number of educational institutions and professional organizations are eager to formalize mentoring so that people at different stages of their career can share information and network with each other. Given the variety of program structures that different educational institutions and professional organizations have launched, it would be pertinent to discuss the effectiveness and pitfalls of certain program design and structures. We will also be discussing the overall value of mentoring in retaining undergraduate female students, and what roles faculty members, alumni, companies, graduate students and other members of the Computer Science community could play in setting up effective mentoring programs.

### **V. Format and session length:**

Introduction of panelists, and discussion of the topics listed above by each panelist. There will be a short question and answer period after each discussion topic. There will be a general discussion period at the end of the session. The session length will be 90 minutes.

### **VI. Who should attend the session and what knowledge can attendees expect to gain:**

Anyone who is interested in how mentoring could impact female students in Computer Science will find the panel informative. The panel is especially useful for university or college educators who are looking into ways to formalize mentoring initiatives within their educational institutions. Anyone who has mentored or been mentored, anyone who has participated or organized formal or informal mentoring programs, will find the panel to be an interesting forum to share information and discuss new ideas.

### **VII. Will there be written materials, and if so, what are they?**

There will be no written material.