Leaders in the tech industry gathered at UC Santa Cruz - Silicon Valley on Friday, June 2nd for the fourth bi-annual Women in Technology Leadership Round Table. Participants included an accomplished group of industry executives, professors, and leaders at non-profit organizations. The aim of the meeting was to discuss progress made towards improved diversity metrics and professional development training, two initiatives that are part of the group’s mission to develop and implement solutions that will reduce the attrition of women in the technical workforce. Together with leading psychologists and sociologists, the group also gained insights into implicit bias and professional culture as they relate to diversity in tech.
1 EXPLORING THE CURRENT CLIMATE IN TECH: IMPLICIT BIAS, PROFESSIONAL CULTURE, AND STORIES OF SUCCESS

Implicit Bias. The round table began with a presentation on implicit bias from Dana Carney, a UC Berkeley Professor in the Haas School of Business with a joint appointment in the Department of Sociology. Through interactive exercises, Carney demonstrated concepts from cognitive psychology and discussed how they may result in implicit bias. The concepts discussed included spreading activation (when decisions are made based on the most immediate or immediately accessible information); inattentional blindness (when an individual fails to perceive something salient because of limited cognitive capacity); and cognitive interference (when past, learned material interferes with learning new material). While often unintentional, these phenomena can affect our everyday thoughts and behaviors, leading us to make biased decisions. In the field of tech, these biases can in turn make it difficult to attract and retain diverse talent. Carney ended her presentation by describing several ways to ‘bust’ biases and overcome these common psychological tendencies:

1. Awareness: Recognizing that biases exist.
2. Openness: Openly admitting to our biases.
3. Motivation: Wanting to change, e.g., by highlighting the importance of diversity.
4. State of mind: Realizing that we are less likely to act in a biased manner when we have full cognitive capacity.
5. Blinding the process: Removing the option for bias whenever possible.

Professional Culture. Later in the day, Professor Carroll Seron, a sociologist at UC Irvine, presented findings from a study of students in four US undergraduate engineering programs on the differences in professional socialization processes as they are experienced/interpreted by women and men. Professional culture is the indirect transfer of attitudes, values, and behaviors that occur via interactions within a profession. Engineers value meritocracy and objectivity, view science as a neutral problem-solving tool, emphasize teamwork and collaboration, and are generally apolitical. The study looked at both Orientation, where in contrast to men, women are primarily motivated to pursue engineering because of a desire to improve society; and Initiation Rituals: 1) When faced with the reality that they are not the smartest in the class, women seek external validation, while men blame external factors; and 2) With regard to teamwork, women reported that they tended to be relegated to administrative roles while men took on the technical work. The study suggests the main reason women leave engineering is the professional culture rather than technical ability. Professory Seron concluded her presentation by pointing out that the female students in the study were less likely to regard themselves feminists and oppose affirmative action because it is counter to their views of meritocracy. A key takeaway is that the engineering field’s apolitical tendency impedes female students’ ability to question the justice or legitimacy/illegitimacy of the status quo. Engineering faculty members are therefore accountable for improving the culture within the academic setting for undergraduate women.
Lessons from Intel. Finally, Dr. Barbara Whye, Chief Diversity & Inclusion Officer at Intel, shared best practices and success stories from Intel, which announced in February 2017 that it met its 2016 year-end goal of achieving 100 percent pay parity for women as well as underrepresented minorities (URM). Intel has made great strides in improving diversity, particularly at the leadership level; they have increased the number of female fellows eight-fold in the last decade and the percentage of women in senior positions from 14% to nearly 19%. Dr. Whye attributed these successes to several factors, including: 1) Transparency (tracking diversity metrics and publishing results twice a year); 2) Accountability (not only maintaining an up-to-date diversity dashboard, but providing scorecards and tying improved diversity to performance reviews); 3) A holistic approach (working on retention from day one, and addressing the problem across the entire ecosystem). Intel’s program also addresses the concerns of white/asian male employees who feel left behind, by establishing a platform for people to address concerns, facilitating workshops on implicit bias training, and recruiting male allies to advocate for women/URM.

2 WIT INITIATIVES: DIVERSITY METRICS AND PROFESSIONAL DEVELOPMENT TRAINING

The past Round Tables selected the following goals: 1) promoting the adoption and reporting of diversity metrics by the tech industry; and 2) empowering women through professional development. The June 2 event continued development and planning of these two foci.

Diversity Metrics. In the afternoon, Dr. Gitanjali Swamy, IoTask, discussed updates to the WiT Leadership Round Table’s ongoing initiative to promote adoption of diversity metrics in tech. Dr. Swamy has continued to develop a partnership with McKinsey & Co. that has been conducting annual surveys on women in the workplace, involving 260 companies across many industries, with 15,000 respondents. Of interest to the WIT Round Table group is access to and analysis of a subset of tech-only data from the upcoming 2017 survey which is being conducted in the second quarter. The hurdles toward this goal are: 1) The raw data is covered by non-disclosure agreements and cannot be shared by McKinsey; 2) McKinsey is reluctant to run additional specialized, customized analysis, as the effort is fairly extensive. Dr. Swamy presented two alternatives for consideration.

- **Alternative 1**: Each company participating in the survey provides McKinsey with a release to share its data with WITI@UC, which in turn will work with McKinsey to analyze the data. Then, McKinsey will release the analysis to WITI@UC.
- **Alternative 2**: The WiT Round Table group, through the newly formed WITI@UC, maintains its own tech-only database from the McKinsey survey. Each company adds to the WITI@UC database by sharing a copy of the data it receives from McKinsey. Then, WITI@UC analyzes and reports on the aggregate shared data.

Some thought that Alternative 2 was more practical, while others pointed out that it will be very important to define how the data will be used. Professor Andrea Goldsmith, Stanford, plans to follow-up with McKinsey about the feasibility of Alternative 2.
Professional Development Training. Next, Professor Tsu-Jae King Liu, UC Berkeley, the lead convener of the Round Table, presented a vision for a professional development training program with the goal of equipping women entering industry with leadership skills, social acumen, and resilience to stress in order to successfully navigate biased workplaces and thrive in technical professional careers. The pedagogy would be informed by social science research on gender differences and similarities in the experiences of students and professionals in STEM and would include interactive role-play and case studies. The training would initially be offered to women graduate students aiming for a career path in the tech industry, in the form of two seminar courses, the first to be taken during the first two years and the second during the last two years of graduate study. The professional development training would involve faculty from various disciplines (e.g., engineering, sociology, psychology), and industry professionals would be invited to share their experience and advice with students through a mentorship program and an annual networking event. The plan is to pilot professional training development modules at UC Berkeley and then deploy them at UC Davis. The Round Table participants discussed the importance of grounding such a program in research (e.g., on implicit bias, professional culture, etc.). Participants also agreed that the program should be framed as a toolkit to enhance their professional careers, rather than a way to ‘fix’ the participants themselves. Finally, participants suggested that the program should enable companies to become directly involved and benefit from the program, e.g., a company may help fund the course or curriculum if they are also able to use it internally.

3 NEXT STEPS: WITI@UC AND A CALL TO ACTION

WITI@UC. Lastly, Dr. Camille Crittenden, Deputy Director, CITRIS, shared information on the development of the new initiative, WITI@UC, first announced at the Fall 2016 Round Table. The new initiative’s differentiating approach to the challenging issues of women in technology will be the integration of research with action, as a thought and action leader anchored at UC. Interdisciplinary research findings will guide the work of WITI@UC: 1) Promoting and sustaining the career growth of women technologists; 2) Increasing access to a range of technology workplace settings; 3) established tech companies as well as startups; 4) Facilitating and documenting improvements in companies (metrics & measurement, reporting organizational progress); and 6) Coordinating programs among the top educational institutions that supply talent to the tech industry in Silicon Valley. The presentation served as a vehicle for the release of WITI@UC’s draft Strategic Plan. Dr. Crittenden and Dr. Jo Yuen invited the participants to review the plan and provide their input.

Call to Action. Continuing the Round Table’s action-oriented tradition, the meeting ended with participants committing in writing to take action to lower the barriers for women in technology (as summarized in the figure to the right).