ACM-W

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Welcome!

We truly want to create a newsletter that is appealing to people interested in women in computing at all stages of their careers, but we cannot do it without your help! Please feel free to send us your ideas or, better yet, submit an article proposal for our summer issue.

This issue has been an exciting learning experience, as we experimented with publishing articles from undergraduate, graduate, and industry women. In addition, we tried to highlight some of the activities happening around the world.

We'd love to hear more from you. How are your perspectives different from the ones discussed here? Even if you do not have time to write an article, please stop by our facebook group and join the conversation.

— Suzanne Menzel and Katie Siek, Editors

In this issue...

From the ACM-W Chair

by Elaine Weyuker

I am very pleased to be introducing ACM-W's newly re-established newsletter. Many thanks to Bettina Bair for several outstanding issues in our earlier series, and welcome to new co-editors Katie Siek and Suzanne Menzel who have put together a wonderful new issue.

In each issue we hope to have highlights of some of our regular projects. In this issue, for example, you'll read about two of our ACM-W student chapters and interesting things they are doing to provide community and make a difference. Hopefully articles of this nature will inspire others to create a chapter and provide interesting activity suggestions for existing chapters. Chapters can now be chartered on-line and can be started anywhere in the world. Why not tell the world what your chapter is doing so we can highlight your interesting activities? We also have started a new professional chapter program. This is intended for women working in computing, again anywhere in the world. Bylaws have been written and you can determine whether you want to make your chapter geographically-based or industry-based, or come up with your own idea for affinity.

Also in this issue are information about two different recent ACM-W Regional meetings. Both were highly successful and both were outside the United States. Think about how much fun and how exciting it would be to help organize an ACM-W Regional meeting where you are. We can provide expertise on how to get started

plus a small amount of seed money to help you begin.

Each issue will also have announcements of upcoming awards and/or relevant scholarships that can be applied for, and about relevant meetings that may be particularly interesting to women at different levels of careers ranging from students to the most senior women academics and practitioners. We have an interesting article about an up-coming meeting for women students.

In this issue we offer a fascinating look at the life of women who chose to have children while still graduate students. They carefully discuss both the challenges and rewards. Perhaps in later issues we can have profiles of women who made other choices.

This newsletter is **your** newsletter. In addition to reporting on regular ACM-W projects, we want readers to be our reporters. What is going on in **your** world vis a vis women in computing? A large number of women from all over the world responded to my call last year saying that they were interested in working on the newsletter. This is your chance to be a roving reporter. We'd all like to learn about the status of women in computing in your part of the world, or relevant activities you've been involved in. Are you involved with an outreach program for students? Let us know about it — inspire us! That's how every ACM-W project got started: someone had a smart idea that made us say "I wish I had thought of that."

Happy 2011 to everyone and a happy lunar new year as well! I hope this is a wonderful year for each of us!

Babies in Graduate School: Making it Happen

by Alexandra Holloway, Caitlin Sadowski, and Laurian Vega
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Abstract

There is never a perfect time to have a baby, but the present is always a good time. For women in graduate school, pregnancy and child-rearing present unique opportunities and challenges. In this article, we discuss ongoing perceptions about mothers in academia, including common prejudices and preconceptions. Although certain trends are helping mothers pursue a tenure-track position or re-enter the work force after starting a family, key challenges still exist for starting a family in graduate school. These challenges include maintaining both good interpersonal relations between partners and good professional relations within our graduate departments. We propose a checklist of the key ingredients for success in childbirth in graduate school—the things we found most important in our own and others' experiences for starting a family early in academia.

Background

Motherhood is a crosscutting concern for women spanning economic, religious, and cultural groups. A known problem is the "motherhood penalty:" mothers are rated as less competent and committed to paid work than non-mothers, are given less slack about being late, and may be offered a lower starting salary [1]. In fact, within particular demographics the pay gap between mothers and non-mothers is larger than the pay gap between women and men [2].

These challenges are particularly disparaging due to their inequity; children provide a benefit for men and a penalty for women. Fathers are rated as more committed than non-fathers, are given more slack about being late, and may be offered a higher starting salary [1]. In academia, men with young babies are 38% more likely than women with young babies to achieve tenure [7]. Perhaps a partial reason for this difference is the social expectations about who will care for children. For example, a survey of more than 440 faculty in the University of California system found that women with children spend almost twice as many hours per week acting as caregivers than men [7].

Taken together, all of these statistics present a daunting picture for a women thinking about, or starting to venture into, motherhood. Recognizing the problem and educating co-workers is the first step to combating these biases against mothers. Furthermore, research has demonstrated that a mother's ability to do science does not disappear after having a child. For example, a 2004 survey of German postdocs found that there was not a difference in scientific productivity between scientist mothers and female scientist non-mothers [5]. A similar study looking at working mothers across disciplines in the Netherlands also did not find a productivity difference between mothers and non-mothers [10]. Additionally, working mothers

have been shown to have better physical and mental health, higher self-esteem, and financial stability [11].

Much of the difficulty with academia and motherhood is because it is difficult to re-enter the pipeline once a woman drops out of the academic workforce [6, 7]. If time is taken off because of a difficult pregnancy or even just to spend time with a young infant, it can be challenging to return to academia. Some programs, such as British Daphne Jackson Fellowships, exist to help female scientists return to the pipeline after taking a leave of absence [5]. Unfortunately, programs to support mothers are not mandatory–not even paid maternity leave. Given the problems apparent at all stages in the academic pipeline, graduate school may be a particularly good time to have children before entering the tenure race.

Recently, awareness has increased of the challenges of combining motherhood with a career in academia as a whole and science in particular [3, 8]. Universities and organizations are taking some steps to improve the position of women who want to combine motherhood with a career in science. Part-time and "stop-the-clock" tenure-track options, which provide additional time before tenure reviews, are becoming more popular [5]. Progress is being made to change the landscape of women in academia.

We present this article for two purposes. The first is to start engaging in the discussions about motherhood in computer science. The second is to raise awareness on aspects of motherhood as a graduate student. With many female graduate students lacking female academic role models (not to mention role models who have children or who are pregnant), computer science as a field is particularly prone to the biases discussed above. To help raise awareness, in this article we describe personal experiences with motherhood in computer science graduate school. We start by discussing problems for women in graduate school, and then provide advice and personal experience on how we combated these problems. We then consider how computer science as a field can respond to–and support–parents in graduate school.

Time Is Ticking

Women in computer science are a rare breed. Mothers in computer science, at any stage of academia, are an even rarer occurrence. One large problem for any woman in academia having a child is the lack of communal knowledge about and support for this life-changing phase. Computer Science departments may be particularly prone to this problem, particularly at the graduate school level. For example, when one author told her department chair that she was pregnant and needed to change teaching assignments, the response was not one of congratulations, nor condemnation—but more one of confusion: "What? Students can get pregnant?"

Graduate school involves unique time pressures. Three considerations in graduate student family life are personal relationships, financial challenges, and the ticking biological clock. We do not have any magic bullets, but we do have key considerations we wish that someone had passed on to us when our babies were "loading."

Time == Love

Few graduate students strictly adhere to a nine-to-five schedule. Instead, we work in the evenings, nights, and weekends, playing a careful balancing game between work and personal life. This can lead to multitasking and unclear divisions between work and home life: while our code is compiling we may be heating up a bottle, running a load of laundry down to the washer, or quickly uploading baby pictures. Time is precious, and given how little of it is available, finding time to spend with a romantic partner can be vital. Given that leisure time spent with a significant other is already limited, how can we find the additional time to devote to a baby? Will having a child put too much stress on our adult relationship?

Grad_school != money

Graduate student research assistants are compensated by university fees and a living wage stipend, which is less than minimum wage when factoring in the long hours spent working. In a family composed of two graduate students and no outside support, money can be stretched thin. According to the National Association of Child Care Resources and Referral Agencies, child care for infants or toddlers costs between $4,388 and $14,647 per year [12]. To put this within the range of the authors' graduate stipend, child care alone costs half of our pay, without even accounting for the additional costs of having a child. We ask ourselves: How can we find the money to have a baby?

Time –= 1

For many graduate students, the refrain is the same: "I will wait until my Ph. D. to have children." Then: "I will wait until I have a faculty position." Then: "I will wait until tenure." For men as well as for women,

advanced age can contribute to decreased fertility [13,14], a more complicated pregnancy and birth [15], and other possible complications. Further, it can take some time—in some cases, as long as a year or more—to become pregnant; then, once pregnant, the normal side effects of pregnancy, such as nausea and fatigue, can negatively affect job performance. How long should we wait to have a baby? How can we make time to have a child?

Why Grad School?

With these very compelling constraints, why is graduate school a good time to have a baby? First, a graduate student's schedule is malleable. Especially after coursework is complete, a research schedule is generally flexible, allowing the student to work around the baby's schedule (and the parents to work around each others' schedules). Not all universities support tenure programs like stop-the-clock, nor do all employers support extended time off after giving birth. However, it is possible to take a semester off after having a child.

Second, graduate students have youth—hence, energy and creativity—on their side. A young person can adapt to circumstantial challenges and can overcome obstacles more easily. Moreover, grad students are surrounded by equally young peers who can help with occasional, free babysitting to let a new mom (or dad) study or sleep. If the grad student's parents are available, they are also likely to be younger, making it easier for them to travel and lend a hand.

Third, a grad student's support network is more flexible. Whether due to pregnancy complications or postpartum mayhem, changing teaching assignments formally within the department, or trading schedules with a peer informally, can be easy as a graduate student.

Finally, we answer a question with a question: Why wait?

Strategies for Success

Having a new baby can be a rewarding, yet challenging time for any family. In the first months, the parents are up throughout the night, frequently as often as every two hours—and that is if everything is all right. Meanwhile, meals need to be made, the house needs to be cleaned, and, perhaps most importantly, graduate work needs to move forward. These are the ingredients we have found to be key in making childbearing in graduate school a reality.

A Supportive Advisor

An advisor that supports his or her student's decision, both in word and in deed, to have a baby is a keeper. The support can be as mild as suggesting ways in which to make sure classes are completed prior to the birth of the child; providing a flexible schedule to allow the student to work in the time between infant feedings; relaxing the deadlines, understanding that the student's probable decrease in productivity is temporary (although one atypical new mom reported clocking in 80 hours the week after giving birth to twin girls). One progressive advisor suggested to her student that she Skype in to all of her classes after giving birth, and allowed all work to be completed from home.

If your advisor seems cool to the fact, ask outright about his or her feelings about your impending motherhood. The battle over work responsibilities will not stop at the baby's birth, but will continue until either you graduate or you move to a different advisor. If your advisor assumes you will continue producing at the pre-pregnancy level without missing a beat, one of you may end up disappointed. Think proactively.

Adequate Me-Time

With all the work that is waiting, it is easy to lose focus of what is also important: You. Not to make having a child seem insurmountable, but there are times when your child is first born when time feels like the enemy. There is just not enough of it to sleep, work, and eat. This lack of time can lead to the malaise that overworking and under-sleeping induces. There are two things that can help you re-charge and re-focus. The first is spending time telling people objectively how cute your kid is, and breathing in the new-baby smell of your kid's hair. The second is taking time for yourself. Find time to read a book, go on a walk, play video games, go to the gym, or do whatever it is you need to do to recharge.

Although it may be difficult, realize that there are times where you might have to put your career first. There are times when your kid is sick, and he really wants to be held, but you have to get that paper edited by midnight. For one of the authors, her baby boy had just had surgery for ear-tubes earlier that day, but because there was an important networking event that night, she had to leave her child with her partner. There will be conflicts between your career and your family. Knowing that sometimes it is okay to put your career first can help with this dichotomy.

An Amazing Partner
A pinch of prevention is worth a pound of cure. If a partner is involved, having an honest conversation with him or her, in advance, about what is expected postpartum can smooth the new-parent transition. Who is going to do the laundry? Change midnight diapers? Go grocery shopping? If no partner is involved, the bright side is that there will be no conflict about who will do all of these things. There is no way that you can prepare for everything before the baby comes, but setting expectations will help. For one of the authors, having a partner who understood that she might be a mom, but her career was important, made a large difference. This meant talking about how soon she might want to return to work, what child care options were available, visiting the child care centers together, and setting some ground rules. Those rules included who pays certain bills, who gets to work which nights late, who stays home when the child is sick, and who does the grocery shopping. If a partner is not responsive to talking about these issues, parenthood, in general, can become very difficult.

A second benefit of an amazing partner is having someone who values your experience. The shock of being walked in on while expressing milk with a breast pump in a mostly male department is, to put it mildly, upsetting. Or, when people start asking you if you are planning on staying in graduate school now that you are pregnant (because pregnant women should be barefoot and cooking), you need someone at home who will let you express your feelings and then help you react. Or, when you get told for what feels like the hundredth time that, "You must have a very supportive partner," and you realize that a man in the same position would not get told the same thing, a discussion with your partner about the (hopefully unconsciously) biased workplace is key for your own sanity.

Trustworthy Child Care
You can't start code-slinging again when you literally have your baby in a sling. Find someone that you can trust your child with, even if it is for only a few hours. Trust is the key part in that sentence: check with friends, listservs, and websites for good home care, child care centers, and nanny shares. Talk to pregnant women; talk to both men and women swinging their toddlers in the park. They face the same decisions, and have probably investigated some of the same, or different, options. One point of advice, though: mom-networks are often sources of second-hand information (e.g., Sally says that Sue says...). Verify anything you hear.

There are many options for trustworthy child care, even though it might not feel like it: day care, live-in nanny, live-out nanny, nanny-share, au pair, and stay-at-home partner are just a few of the options. Just because you visited a child care center when pregnant and you know that it is the right place for your child, that does not mean that in six months you will still feel the same way, when you leave your kid there for the first time. Similarly, just because you like your child care solution does not mean that your child will. Anything can happen: your nanny might move (or graduate); your child care center might close down; you might realize school is too far from the center. It is important to stay adaptive and recognize that you can find alternate creative solutions.

A Support Network
Tap into your family network: your parents, your partner's parents, and even cousins, aunts, and uncles. One of the authors was able to attend classes for a quarter by asking her partner to take her infant every Tuesday, and mother to come every Thursday for ten weeks. Ask friends. Be creative, accept help when it is offered, ask for help before it is needed, and be thankful.

Having a baby changes your outlook on life. Suddenly, your priorities shift entirely, and it can be a bit of a culture shock to realize that you have a hard time relating to the friends who have not yet had children. If they are interested and supportive of your life's changes, bring them up to speed and include them as much as they like. But also, find other new and expectant moms that can share your experiences. Even if you are the only female graduate student you know, we promise that you are not the only mom in town. Find others who are having kids. Your obstetrician or gynecologist may know of a working-mom support group, and you could ask your graduate school about any university-wide efforts.

A Positive and Grounded Outlook
As a final note in the checklist, be positive and celebrate your accomplishments as they come. Enjoy these limited years with Thesis Baby as much as possible and keep the big picture in mind. In the grand scheme of things, your child's infancy and toddler years, and your dissertation years, are short. For many working women, compartmentalizing motherhood and academia is an ongoing battle: when working on your research, you feel like a bad mother because you are neglecting your child, yet when with your child, you feel like a bad student because you are neglecting your work. Our advice is to remember the big picture, and try not to let the guilt take over. Being a grad student is mental exercise and is as important as having a child. Both of these aspects of your life make you a complete, unique, and fascinating woman.

Making It Happen
One mother-professor, known to store expressed breastmilk in her laboratory refrigerator, quoted Gandhi:

"Be the change you wish to see in the world." The only way to change perceptions of, and biases associated with, mother-students, mother-faculty, and mother-professionals is to gently, firmly, and consistently prove these perceptions wrong. Show the world that it can be done: mothers defend their dissertations; mothers produce quality work; mothers are incredible, productive professors and industry professionals.

Conclusion

Having a child is a life-altering event, no matter when the child comes. However, being a student should not impact a mother's decision to have a child. Computer science and engineering, to succeed as disciplines, are positioned to examine how to support students with lifestyle circumstances such as having a child in graduate school. Our generation of student-mothers paves the way for student-mothers that come after us. In this article, we presented reasons having a child in graduate school are favorable, yet difficult. In addition, we presented some of the tools and strategies that have helped make our experiences with being student-parents easier. Finally, we end this article with a request from the authors to women faculty: be the kind of role model you would want to have.

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CMU School of Computer Science Workshop Inspires Young Women from the USA and Beyond to Explore Research in Computing

by Mary Widom, Women@SCS Administrator, Carnegie Mellon University
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Opportunities for Undergraduate Research in Computer Science (OurCS) is a three day, hands-on, research workshop for undergraduate women. The second OurCS workshop will take place March 4-6, 2011 at Carnegie Mellon University.

OurCS is presented by Carnegie Mellon's School of Computer Science and Women@SCS. Women from Israel, Denmark, England, Canada, and Qatar will join women from across the United States at OurCS 2011 in Pittsburgh. Throughout the workshop, they will work in teams to solve real research questions in various areas of computer science. The teams are led by faculty researchers from Carnegie Mellon and researchers from industry. At the end of the workshop, each team will present their results.

Keynote speakers at OurCS 2011 include 2009 Turing Award winner, Barbara Liskov and 2006 Turing Award winner, Frances Allen; Interim Department Head of Mathematical and Computer Sciences at the Colorado

School of Mines, Tracy Camp; and CMU Computer Science Department Head, Jeannette Wing.

Dr. Carol Frieze, Director of Carnegie Mellon's Women@SCS, and her team of OurCS organizers, extended this invitation to undergraduate women in CS everywhere: "Come, explore, and learn what computer science research is about!" Undergraduate women in both CS and math seek this type of research experience and responded eagerly.

Registration opened at the start of November and already 80 participants filled the workshop and registration is closed. Students who grew up exploring computers, as well as those newly interested in CS, signed up. With such an enthusiastic response to OurCS 2011, Carnegie Mellon hopes to offer many more OurCS workshops in the future.

The first OurCS workshop (October 2007), sponsored by Microsoft Research, also attracted international participants from Denmark, India and Qatar, as well as women from the United States. Three 2007 attendees, Sunayana, Iris, and Sarah, are now back in Pittsburgh pursuing graduate degrees in the School of Computer Science at CMU, and helping to plan the second OurCS workshop! Sunayana Sitaram was born in the western Indian city of Ahmedabad and grew up using computers: "My father had access to some of the first computers available in India and to the Internet in the 80s…[so] I had exposure to computers since age 3…". In 2007, eager to meet Turing award winning scientist Fran Allen, and excited about an opportunity to present her speech and language research, Sunayana traveled the 7,700 miles from Surat to Pittsburgh.

"My favorite part was the research workshops - I had never done research in a group before. It was amazing to see different people with different skills all coming together to make contributions to the research problem. The conference was even better than I expected, and I had very high expectations!"

This fall Sunayana retraced those 7,700 miles to return to Pittsburgh as a graduate student in the Language Technologies Institute of the School of Computer Science at Carnegie Mellon. "OurCS definitely convinced me that grad school is something I wanted to do. It also convinced me that CMU was the place I wanted to come to for it!"

Iris Howley and Sarah Loos also selected Carnegie Mellon for graduate study after attending OurCS.

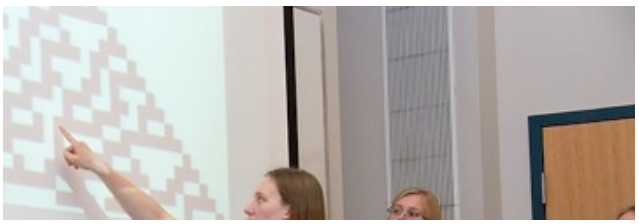
Iris grew up outside of Philadelphia and attended Drexel University as an undergraduate. As president of Drexel's Women in Computing Society (WiCS), she felt a responsibility to the other women in the organization. She wanted to lead a group of her fellow undergraduates to CMU so that they could all broaden their research abilities.

"Our undergraduate co-op program generally exposed our students to industry experiences, but I thought it might be worthwhile for our WiCS members to get some research exposure as well."

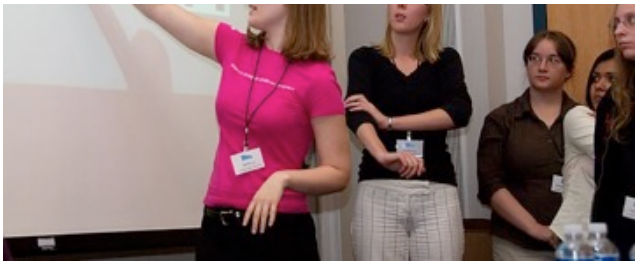
The affordability of the OurCS workshop allowed her organization to send ten participants to the 2007 workshop, and "It fulfilled our desire for a conference that introduced our members to other females in the same area, while opening them up to opportunities that they may not have otherwise considered."

Iris remarks that she was "already pretty intent on applying to a PhD program before I attended OurCS… OurCS was simply another opportunity reinforcing the great reputation, environment, and resources available at Carnegie Mellon."

Sarah attended OurCS in 2007 so that she could present the research she did in an REU (Research Experience for Undergraduates) the summer before. "The workshop gave me a chance to present my research in a very encouraging environment. I got lots of great feedback, which was invaluable when I presented the same material for the ACM Student Research Competition."



Another aspect of the workshop which had a profound impact on Sarah was the opportunity to meet other women interested in computer science research. "Even though I had done research before, working in a group of seven female scientists was a wonderful experience



which is unique to this workshop. It made me realize just how important it is to recruit and retain female researchers in our field."

OurCS is sponsored by Microsoft Research and a number of CMU entities: Carnegie Mellon Qatar, the School of Computer Science, the Microsoft Research-Carnegie Mellon Center for Computational Thinking, the Human-Computer Interaction Institute, the Machine Learning Department, the Institute for Software Research, the Lane Center for Computational Biology, the Robotics Institute and Women@SCS.

A New International Flavor for ACM-W's Successful "Regional Celebrations of Women in Computing" Project

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ACM-W's project, Regional Celebrations of Women in Computing (RCWIC) involves very inexpensive conferences that register women from geographic radii, small enough to permit convenient driving times ranging from a few minutes to a couple hours. SRCs pledge that no woman in computing will be "left out" of opportunities for support and encouragement. Conference leadership designs programs so that every, single woman has an option to participate in Poster Sessions, Birds-of-a-feather discussions, Lightning Talks (short research presentations) and internship contacts. Additional activities involving food and fun create inter- and intra-school connections among women and underrepresented groups.

Goals of Small Regional Celebrations:

1. Create connections among women and other underrepresented groups in computing
2. Provide role models and mentors
3. Destroy myths about computing
4. Encourage women to stay in computing
5. Give information/help with opportunities such as graduate school, scholarships, fellowships, workshops, conferences, etc.
6. Build community (inter and intra)
7. Supply (for many) a first opportunity to participate in a professional venue, and thereby creating a resume item
8. Offer contacts with industry, a chance to distribute one's resume, experience "interviewing," and learn about internships/jobs possibilities
9. Foster confidence

Our conference organizers and student attendees describe RCWICs in positive terms. Unsolicited feedback follows:

> "Your description of the cadence of this conference organizing is right on the money....who knew life could be this interesting? I can't WAIT to meet your students!!!" (from a conference organizer)
>
> "I honestly don't think it could be any better. The organizers clearly put a lot of thought into the program and the arrangements. I especially enjoyed the technical lightning talks. All the student presenters were poised, articulate and well-prepared. It was really a terrific time!" (from a student attendee)

The title of the article refers to the fact that ACM-W sponsored two new international regional conferences in 2010 (to join the long-standing OzWIT conferences in Australia), so that we now host RCWICs in three different continents:

We describe the Amrita [India] ACM-W Celebration of Women in Computing (A2CWiC) first (September 16-17, 2010) and emphasize that the conference links three vital ACM-W projects, RCWICs, ACM-W Chapters (see below) and the Ambassador's Program, since our ACM-W India Ambassador, Gayatri Buragohain served as a general chair, along with Dr. Krishnashree Achuthan, Amrita University, India.

Gayatri states in her June 2010 ACM MemberNet article, "The fact that women have contributed hugely to

India's remarkable progress in the field of Computer Science (and other technologies) cannot be refuted easily. However, the stereotype that women bear enmity with technology is still deeply engraved in the minds of the Indian population and beyond. This stereotype in turn discourages women from experimenting, preventing them from discovering their own technical ability and from pursuing technical careers. One of the biggest reasons behind the prevalence of this stereotype is lack of role models. Although it is true that very few Indian women have been able to mark their presence in the tech world by achieving remarkable success, equally true is the fact that even the ones who have made remarkable achievements are not recognized enough and known. We do get to hear about [a] few outstanding Indian women in technology, but sadly, they are very easily forgotten."

The conference that Gayatri co-organized reflects the preceding quote, regarding the need for role models. The conference goals adhere to the quote, as well:

- Visibility for women researchers and their work in Computer Science and Information Technology
- Identification of potential research areas and methodologies for collaborations
- Motivation of budding women researchers through interactions with women achievers
- Mentors and role models providing encouragement for women to pursue higher education and research in the field of Computer Science
- Expansion of the community of "women in computing"
- A directory of "women in computing"

The program included the inauguration of the Amrita ACM-W Student Chapter, spreading ACM-W's projects further around the globe. Additional sessions dealt with research paper writing, "Fusion of Mathematics and Computing" and "The Road Ahead for Women in Computing".

Next, we feature ONCWIC (the Kingston, Ontario, Canada, regional) organized by Wendy Powley, October 22-23, 2010. (Read more about ONCWIC in our January 2011 ACM MemberNet article and on Facebook.)

The conference featured welcome remarks from our ACM president, Alain Chesnais, a workshop "Communicating Effectively in Male Dominated Professions", a panel "The Imposter Syndrome", a CA Sponsored Session "Technology Trends for the Future, and Their Implications" & an IBM Sponsored Session "Enabling a Smarter Planet".

The ONCWIC conference registered 160 people, an excellent size for a first-time conference. A large delegation from Syracuse University attended, including Shhavi Gupta, who chairs the Women in IT organization at Syracuse. "I am inspired by the management team of the conference and want to organize such an event at Syracuse University," Gupta said. "I am looking forward to attending more conferences like this in future."

Two established ACM-W conferences return, during spring 2011: the fourth central Ohio conference (OCWIC) and the third Michigan conference (MICWIC). Contact, date and Web site information for each of these conferences follows:

Ohio (February 18-19, 2011) OCWIC (#4)
http://www.ocwic.org
Rachelle Hippler rkristo@bgsu.edu
Jodi Tims jltims@bw.edu

Michigan (April 1-2, 2011) MICWIC (#3)
http://www.cse.msu.edu/micwic/
Fatma Mili mili@oakland.edu
Laura Dillon ldillon@cse.msu.edu
Teresa Isela VanderSloot iselava1@cse.msu.edu
Kim Glass glasskim@cse.msu.edu

On September 1, 2009, ACM-W, the Anita Borg Institute and the National Center for Women & IT (NCWIT) obtained a large NSF grant from the Broadening Participation in Computing (BPC) Program. The grant provides funding for four, new regional celebrations each of the next two years. The grant will also pay for two organizers to attend the next Grace Hopper Celebration for training, for three conference students to attend the subsequent Grace Hopper Celebrations and for three professors to attend an NCWIT meeting. http://ghregionalconsortium.org

This spring, the fifth Small Regional Conference (SRC) funded by the grant takes place in Albany, NY:

New York Regional (April 8-9, 2011) NYC-WIC (#1)

http://nycwic.acm.org/Site/Home.html
Jen Goodall jgoodall@uamail.albany.edu
Valerie Barr barrv@union.edu
MaryAnne Egan maegan@siena.edu
Sharon Mason sharon.mason@rit.edu

For more information about the celebrations, contact Gloria Townsend (gct@depauw.edu).

Australian Ambassadors and International Collaboration for Women in IT

Catherine Lang, the current Australian Ambassador, and Annemieke Craig, former leader of the ACM-W Ambassador program recently published a journal article:

> *International Collaboration for Women in IT: How to Avoid Reinventing the Wheel*, pp 329-338, Issues in Informing Science and Information Technology, Vol. 7 (2010). The full text of the journal is available online without charge at http://iisit.org.

The genesis of this article was a presentation given at Grace Hopper in 2008 where the ambassadors at that time provided data from their countries and those who could attend Grace Hopper participated in the presentation. Annemieke and Catherine explored the concept further, adding information about each country according to Hofestede's 2005 index, a social historical perspective from the Australian viewpoint, and some of their own experiences as Ambassadors for the ACM in Australia.

Abstract This paper uses information contributed by ACM-W Ambassadors from nine countries to build a picture of women working to improve the gender balance in IT around the world. The focus on women's participation in education, the workforce and the political arena is presented using Hofstede and Hofstede's (2005) dimensions of cultural masculinity, power distribution and individuality for each of the ACM-W Ambassador countries to set the scene. It is apparent from this compilation of information that different social and cultural climates in many parts of the world will necessitate different actions by ACM-W Ambassadors in their respective countries. While the ACM-W Ambassador program provides a forum for ideas, support and strategies to deal with the under-representation of women in IT, many of the current Ambassadors have more pressing issues to deal with, and indeed a 'one size for all' model for programs to promote IT to women will not be suitable. Exploring the network from an Australian perspective, this work demonstrates that much is to be gained from increasing international networks to share the strategies and support required to encourage more women into IT.

What's Gender Got to Do With Publishing?

ACM-W Council member Joanne McGrath Cohoon, with co-authors Sergey Nigel, and Joseph 'Jofish' Kaye, have written a paper titled *Gender and Computing Conference Papers* to be published in an upcoming issue of the *Communications of the ACM (CACM)*.

Abstract More than 40 years of data on authors of ACM conference papers describe women's contribution to this important aspect of computing professional life. The data show that women's authorship increased substantially over time, and that relative to their representation in the pool of likely ACM conference paper authors, women Ph.D.s were especially productive. Initial tests indicate that the increase in women's share of papers was due in large part to the increase in number of women in the community of potential authors. Variation in women's authorship across conferences was associated with conference topic and paper acceptance rates. This first description of women's participation as ACM conference paper authors raises questions about publication productivity and conditions that affect diversity in computing, and opens several interesting avenues for future research.

ACM-W Student Chapter Updates

Want to organize into an ACM-W Student Charter?

> Learn about how to organize a chapter here:
> http://women.acm.org/participate/student_chapters.cfm

Need a great technical speaker for your next ACM-W event?

Look at speakers here: http://dsp.acm.org. Note: Hosts are responsible for local expenses (including transport, hotel and meals) and getting the number of attendees required (ACM travel funding is based on attendance size requirements).

Update from Indiana University – Bloomington
by Sarah Reeder, President of WIC@IU
smreeder@indiana.edu

At Indiana University, Bloomington, Women in Informatics and Computing (WIC) has been helping women in the School of Informatics and Computing (SoIC) make their voices heard since its founding in 2002. Part of the Central Indiana Regional ACM-W chapter, this student organization reaches out to women at all levels in technical fields, including undergraduate and graduate students, faculty, staff, and professionals in the community. One of the things that sets WIC apart from other student organizations is the opportunities we create for technical women students, faculty, and professionals to network together. All of our events are open to anyone interested in supporting women in technical programs, and are designed to encourage open communication among the various groups within our organization. We hold monthly events during the school year to help women connect, network, and excel in academia and beyond.

2010 has hopefully been a fun and informative year for those who attended some of our WIC sponsored events. We kicked off the year with a ladies movie night complete with chocolate fondue, and toured the new Data Center and Innovation Center buildings on the east side of campus. For our "Inspiration Panel" we brought in IT professionals in our community to tell their stories, talk about what they do now, the path that brought them to this point in their careers, and what their goals are for the future. In honor of Women's History Month, we held our second annual WIC Banquet in March. At the dinner we recognized faculty who had been nominated by students for the WIC Faculty of the Year award, which was presented to four faculty members who showed extraordinary support to women students both in and outside of the classroom. We also highlighted events and projects WIC sponsored that year, including efforts by our undergraduate students who started an e-magazine, "CLICK," which is published by co-editors Halsey May and Taneesha Parker at http://click.informatics.indiana.edu. We closed the school year with a Work-Family Balance Panel, inviting faculty and doctoral students with families to share tips and tricks they have discovered for maintaining work-life balance when young children are part of the equation.

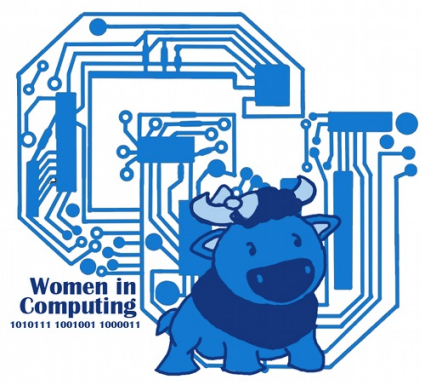
We kicked off the 2010-2011 academic year with our annual WIC Welcome Breakfast. In September we also held the annual WIC Potluck to provide an opportunity for faculty and students to network in a relaxed setting. Students contributed ideas for events, played a networking game for prizes, heard from faculty about classes and research opportunities, and everyone enjoyed homemade dishes from around the world. In October WIC co-sponsored a pumpkin carving and s'more toasting event along with two other SoIC student groups, and had a great turnout of first-time pumpkin carvers despite the chilly weather. In November we co-sponsored a portfolio workshop with the Graduate Informatics Student Association, to help students prepare their online portfolios for their spring job/internship hunt. We teamed up with the local TED chapter, TEDxBloomington to bring the TEDWomen teleconference to campus, and closed the year with a holiday cookie exchange and an "Ugly Sweater Party" hosted by our undergraduate women.

In order to better address the needs of undergraduate women, we formed a subgroup called uWIC, which has its own leadership and has worked hard to build community among our undergraduate women in the Computer Science and Informatics programs. In addition to social events, uWIC has started a big/little sister program that pairs those new to these majors with students who are a year or more into their program.

In 2011 we hope to improve our community presence with a revitalized outreach program, to reach undecided undergraduate students and also young girls in local primary and secondary schools. In addition to outreach, we hope to continue building a stronger community of technical women at IUB through our monthly events. Some of our events for 2011 might include a hands-on workshop to explore the inner

workings of a CPU, workshops to prepare students for spring poster sessions, and outdoor adventure activities. Plans for the March banquet are already underway, and we hope the WIC faculty of the year award will become a coveted title in the years to come.

Update from University of Colorado at Boulder
by Dola Saha, President of CUWIC and Neeti Wagle, Vice President of CUWIC
{Dola.Saha,Neeti.Wagle}@colorado.edu



CU Women in Computing (CUWIC) is a group within the Computer Science (CS) Department at the University of Colorado at Boulder (CU) that is dedicated to supporting women and diversity in computing. The group officially became an ACM-W chapter in Fall 2010. CUWIC encourages interaction from all who are interested in women and diversity in computing issues to create a platform to share information about technical, social, networking, and academic opportunities. The objective of the group is to unite all women in the field of Computing at the University of Colorado at Boulder, irrespective of their department, to meet, discuss, collaborate and increase their professional networking. Although most of the members are from the Computer Science (CS) Department, CUWIC also has members from the department of Electrical, Computer and Energy Engineering (ECEE), Molecular, Cellular and Developmental Biology (MCDB) and Alliance for Technology, Learning and Society (ATLAS) Institute.

The semester of fall 2010 was a very educational and a formative period for CUWIC. In its course, it brought several hurdles, but in due time it also helped us learn some valuable lessons about what makes a group like this take hold in a computing department. And, although, a lot of what we know now was not apparent to us when we started, we were fortunate to have a group of women who saw the potential of building such a social community. So we started from the basics.

Becoming an ACM-W Group
The very first thing we did was spread the word and gather support for the ACM-W chapter. We used Google Forms to easily collect the names of at least 10 people (per the ACM-W rules for getting started) who were interested in participating in our ACM-W group activities and found out who would like to run for office. Then, we held open elections for our ACM-W group officers. Once we had our officers and a group of interested people, we submitted our ACM-W form online and were notified within two weeks that we were an official ACM-W chapter. Our effort became more organized through this process since we had a structure (officers, interested people, etc.), professional affiliation, and developed a culture of involving multiple departments interested in computing.

Creating an Identity
During a brainstorming meeting with the new ACM-W chapter officers and our faculty sponsor, we continued to think of ways to spread the word about our group and mission. We created a website (http://wic.cs.colorado.edu/) that contains information about all the aspects that CUWIC aims to address. This includes crucial information, the requirements and deadlines of several scholarships, conferences, and research opportunities.

For CUWIC to benefit all its members, it is important for them to identify and connect with the group. This can only be achieved by conducting events and making the meetings appealing. Due to the diversity in the member population, this task is one of our most challenging ones. We found that the solution comprised of keeping a few simple things in mind while planning our events. For example, we are able to get a greater attendance by not conducting the events at fixed or inconvenient times (like evenings) but instead by changing the time slot every month. Further interaction with undergraduate students taught us to avoid the time slots in which undergraduate classes were scheduled.

Developing an Inclusive Community
However, as a fledging group, planning an event was not sufficient: we had to spread the word and encourage our members to actively participate. Initially, we only announced our events through the mailing list of the department and on our Facebook group. Alongside, we also posted fliers at different places throughout the Engineering Center of the university. The faculty sponsor and officers used their personal contacts in other departments to invite women working in the field of Computing to attend the event.

But we soon found out that in addition to these we would need to do more to encourage the undergraduates, who were intimidated by the graduate student majority present at the meetings. We realized that we had to take our message to them directly and have since extended our efforts. Firstly, we enlisted help from the faculty who were teaching undergraduate courses and requested them to encourage

their students to become involved in CUWIC events. Secondly, CUWIC officers themselves visited these classrooms and personally extend an invitation to the students. These simple planning notes have helped us increase the number of attendees; new faces are always showing up at the meetings along with regular attendee faces.

Our incessant efforts to attract new members have resulted in a new wave of support in the department. Towards the end of the semester we found the faculty taking initiative and even attending some of our events, which in turn encouraged more student participation. The different methods of publicity all together have created a positive impact on the members, who now attend the events on a regular basis.

Getting Involved in the Larger Women in Computing Community

Nothing brings a group together in spirit like collective endeavor in a common cause. With this in mind, in September we decided to unite the members in planning for the upcoming Colorado Celebration of Women in Computing (CCWIC), which is a regional meeting modeled after the Grace Hopper Celebration (GHC) of Women in Computing (see the article by Gloria Townsend on Regional Celebrations in this newsletter). So, the group organized a 'Brainstorming Session for CCWIC Submissions', where students and faculty met to discuss the possibilities of submissions. The meeting led to the generation of several great ideas and collaborations for papers, posters, Birds of Feathers (BoF) sessions, and lightning talks. The excitement of the planning inspired members to take initiative in designing their own submissions, which were accepted and presented at CCWIC. On the same lines, CUWIC officers conducted a pre-final study session for undergraduates to help them prepare for their upcoming examination.

The success of the group activities taught us that members could gain a lot from motivating social interactions with each other. So when the new ACM-W chapter required a unique logo, we decided to use the opportunity to organize a logo and T-shirt design competition among students and harness the group's creativity. In addition, we timed the competition so that the printed T-shirts could be worn by the members while attending the upcoming CCWIC conference. We received multiple submissions after which we asked the members to vote for their favorite. Not only did we get an overwhelming response from students and faculty, but it also generated a lively discussion on the forum with members commenting on the details of the logo and providing creative suggestions. Finally, the most voted design won the competition, and CUWIC got its logo. This process started a conversation among those members who rarely attended the meetings. This particular activity taught us the importance of including social events alongside career-related and technical meetings.

Sustaining the Group

CUWIC is mostly funded by the department of Computer Science at the University of Colorado at Boulder. However, one of the constant challenges is to plan diverse and appealing events throughout the semester within the means of our budget. One of the smart decisions the officers took with regard to the budgeting was to buy some electrical appliances, e.g., a coffee maker, waffle iron, and a griddle and use them repeatedly to make breakfast for the attendees. So, even on a very low budget, CUWIC officers are able to serve pancakes, waffles, bagels, coffee, tea and juice multiple times within a semester. This allows the group to meet regularly for breakfast to discuss various issues.

The ACM-W chapter of CUWIC is only a semester old, and has a long way to go. The officers (the authors, Madeline Leary, Undergraduate Vice Chair and Allison Brown, Secretary/Treasurer) are dedicated and sincere in keeping up the achievements so far, and is always striving to improve. The group is planning to visit local high school to encourage students to consider Computer Science as one of their career goals. With all the activities throughout the semester, CUWIC has created a support system for women in the field of Computing, and aims to continue this effort of sharing knowledge, helping others, encouraging women to break stereotypes and celebrating women in computing.

Dates & Deadlines

Borg Early Career Award (BECA)

The Committee on the Status of Women in Computing Research (CRA-W) is pleased to announce the BECA (Borg Early Career Award). The award honors the late Anita Borg, who was an early member of CRA-W and an inspiration for her commitment in increasing the participation of women in computing research.

The annual award will be given to a woman in computer science and/or engineering who has made significant research contributions and who has contributed to her profession, especially in the outreach to women. This award recognizes work in areas of academia and industrial/government research labs that has had a positive and significant impact on advancing women in the computing research community and is targeted at women that are relatively early in their careers (at most 8 years post-PhD).

Due date: 15 February 2011. For more information about the award, see http://cra-w.poweredby365.com/ArticleDetails/ArticleID/47.

2011 Grace Hopper Celebration of Women in Computing Opens Call for Participation

The 11th Annual Grace Hopper Celebration of Women in Computing (GHC) has opened its Call for Participation. The annual conference, presented by the Anita Borg Institute for Women and Technology, is the world's largest gathering of women in computing. The Grace Hopper Celebration will take place from November 9 - 12, 2011 at the Oregon Convention Center in Portland, Oregon. This year's theme "What if...?" recognizes that innovation in technology arises from the question, "What if a culture of technology that encourages participation and inquiry from a diverse workforce leads to greater levels of innovation?" Submissions are encouraged that answer the question - What if ...?

Due Date: 15 March 2011. The Grace Hopper Celebration is designed to bring the research and career interests of women in computing to the forefront. Leading researchers present their current work, while special sessions focus on the role of women in today's technology fields, including computer science, information technology, research and engineering. The technical conference features well known keynote speakers and invited technical speakers, panels, workshops, new investigator technical papers, PhD forums, technical posters, birds of a feather sessions, the ACM Student Research Competition and an Awards Celebration.

ACM-IEEE CS Eckert-Mauchly Award

Due Date: 30 March 2011. For more information about the award, see http://awards.acm.org/html/award_nominations.cfm

Society of Women Engineers Awards (multiple)

The Society of Women Engineers strives to advance and honor the contributions of women at all stages of their careers and recognize the successes of SWE members and individuals who enhance the engineering profession through contributions to industry, education, and the community.

Due Date: 31 March 2011. Multiple awards are available including many early career awards. For more information about the awards, please see http://societyofwomenengineers.swe.org/index.php?option=com_content&task=view&id=16&Itemid=43

National Academy of Engineering of the National Academies Awards (Multiple Awards)

The NAE dedicates more than $1 million annually to recognize leaders in engineering for their lifetime dedication to their field and their commitment to advancing the human condition and to bring better understanding of the importance of engineering and engineering education to society. Multiple awards including: Charles Stark Draper Prize, the Fritz J. and Dolores H. Russ Prize, the Bernard M. Gordon Prize for Innovation in Engineering and Technology Education, the Founders Award, and the Arthur M. Bueche Award.

Due Date: 1 April 2011. For more information about the awards, please see http://www.nae.edu/Activities/Projects20676/Awards.aspx.

ACM-W Travel Scholarship Applications for Students

ACM-W provides support for women undergraduates and graduate students who wish to attend research conferences. Deadline information is available at

http://women.acm.org/participate/scholarship/index.cfm. Information about scholarship recipients and their conference experiences is available at http://women.acm.org/participate/scholarship/in_her_own_words.cfm#acmwscholars.

CRA-W SIGCSE Pre-Workshop for Women Faculty and Grad Students

The Computing Research Association Committee on the Status of Women in Computing Research (CRA-W) will sponsor a career/mentoring workshop titled Managing the Academic Career for Women Faculty in Undergraduate Computing Programs. The day-long workshop, to be held on Wednesday, March 9, will be co-located with the SIGCSE 2011 conference in Dallas.

The goal of the workshop is to provide critical mentoring information for women at all career levels in undergraduate teaching. The target audiences of the workshop are pre-tenure faculty and graduate students in Computer Science and Engineering who are interested in an academic career, as well as post-tenure (senior) faculty seeking to improve their teaching and mentoring skills.

Tentative topics will include: mentoring, teaching survival tactics, getting what you need, getting started with research, research with undergraduates, promotion and tenure, time management, and balancing strategies for coordinating teaching, research, service activities.

For more information about the workshop, see http://cra-w.org/ArticleDetails/tabid/77/ArticleID/75/Default.aspx, or contact Susan Rodger (rodger@cs.duke.edu) or Sheila Castaneda (sheila.castaneda@clarke.edu).

Contribute to the Next Issue of This Newsletter!

Please consider writing an article for the June edition of this newsletter! We are eager to create a great newsletter that captures Women in Computing issues at all educational and career stages. Interested authors should submit a brief (< 400 words) proposal/abstract here: http://tiny.cc/ACMWNewsletterProposal

Proposal deadline: April 10, 2011

Notifications will be sent on April 15, 2011 and authors will have approximately one month to submit the full (up to 5,000 words) article using Google Docs.