

They're young, they're smart, and they're the next generation of Cambridge's computer scientists. Meet Women@CL, an organisation working to help women in computer science feel supported as they pursue their studies and careers

Helping women succeed

LIKE MANY women researchers at the University, Dr Mateja Jamnik works in an environment dominated by men.

It's a fact she can't fail to notice. She can count on one hand the number of the Computer Laboratory's professors and lecturers who are female. Looking at her students, she sees only 12.5 per cent who are female.

Nationally, the picture isn't much better. Only 5 per cent of computer science professors are women. With only 18 per cent of the students female, those numbers aren't likely to improve any time soon.

Encouraging other women to pursue a discipline she loves motivated her to help found the organisation Women@CL four years ago. The programme is a model for how to approach gender disparities in academia, by providing support to women staff and students through networking and information sessions. So far, nearly 1,000 women

in England and Scotland have participated in Women@CL sponsored events.

Getting organised

Women@CL was founded in Cambridge in 2003 with support from Microsoft Research and Intel. A £60,000 grant from the Engineering and Physical Sciences Research Council (EPSRC) helped it expand to sponsor activities throughout the UK.

In Cambridge, Women@CL supports Coffee & Cake conversation sessions; a Big Sister, Little Sister programme, formed at the request of students for informal student-to-student mentoring; and monthly lunches, open to students and staff, and attended by even numbers of men and women.

"We invite women from different streams of life in computing to talk about their work and tell us a little bit about how they got to where they are," Dr Jamnik says, noting that

recent speakers have included IBM, Intel and Microsoft employees.

For women outside of Cambridge, Women@CL organises regional meetings for technical talks, career planning and networking. The events, which have been held in London and Scotland, are targeted primarily at postgraduate students. "The hope is that the people they are mingling with at these events will be their colleagues and peers in the years to come," Dr Jamnik says.

Nationally, Women@CL sponsors career workshops at large technology and computing conferences, again aimed primarily at postgraduates, where highly successful practitioners discuss everything from how to apply for jobs in the field to what kinds of grants are available. For more senior academics, national leadership summits provide networking opportunities and the chance to share strategies.

Seeking balance

The hope is that these activities, with time, will help to even the gender balance in the field. "We don't have the resources to deal with secondary schools, where I think the root of the problem is," Dr Jamnik says. "But we are hoping to retain people who already are in research and give the undergraduates role models."

Dr Jamnik says she has encountered support throughout her education – stretching back to her girlhood studying mathematics in Slovenia – and career.

She is the holder of a highly prestigious Engineering and Physical Sciences Research Council (EPSRC) Advanced Research Fellowship and is a Lecturer for the University. Her research focuses on artificial intelligence, modelling how people reason and solve problems in

CONVERSATION AND CAKE

At a recent Women@CL Coffee & Cake event, women met to talk over lunch and cake in the William Gates Building café. In Term time, as many as 10 students might show up, but for an out-of-term gathering like this one, numbers get a bit lower.

The women – PhD students and a Research Associate – took advantage of the time to check in with each other on summer internship plans, how a recent Women@CL outreach event for teenagers went and what the best strategy might be for finding the time to write theses. They expressed concerns over the number of female students who drop out of computer science, frustration that the Computer Laboratory is still so heavily male, despite efforts like Women@CL, and the fear of stigma that keeps some women away from women-oriented events.

Second year PhD student Cecily Morrison organises the sessions, in part because of the isolation she felt when she completed a conversion diploma here before starting her PhD. "I was one of two women on my course," she says. Constantly working within an all-male environment could be tiring, despite well-meaning colleagues. "I think that motivated me to see what we could get started here," she says.

Dr Mateja Jamnik is working to encourage more women to stay in the field of computer science.



RESOURCES FOR WOMEN

All women staff at the University have a number of resources they can utilise to help them succeed at their jobs.

The **Women's Network** is open to all University women. For 2007-08, activities centred on five career-focused workshops, ranging in subject from mentoring to work-life balance. Attendees were encouraged to come early or stay late for sandwiches and conversation. Events are advertised on the *ucam-women* email list. To subscribe, visit <https://lists.cam.ac.uk/mailman/listinfo/ucam-women>
 → www.admin.cam.ac.uk/offices/personnell/equality/network/

The **Women's Forum Steering Group** hosts biennial conferences for all academic, research, technical, academic-related and assistant staff. The 2008 Conference, 'Confidence & Voice: Tools for Change' was held on 15 February at New Hall.
 → www.admin.cam.ac.uk/offices/personnell/equality/forum/

Springboard is a personal development programme for all women staff and graduate students. It aims to help women set and achieve clear goals, increase self confidence and improve work/life balance. The programme comprises four days over a three-month period and a workbook to be completed between sessions.
 → www.admin.cam.ac.uk/offices/personnell/staffdev/list.shtml or email staffdev@admin.cam.ac.uk

The University offers an extensive selection of options for staff with children. The **Childcare Office's** website offers details on maternity and paternity leave and benefits, salary sacrifice schemes, child care options in Cambridge, and the University's Holiday Playscheme.
 → www.cam.ac.uk/cambuniv/childcare/

The **Women in Science, Engineering and Technology Initiative (WISSETI)** was established in 1999 to address the under-representation of women in SET fields. WISSETI offers lunchtime seminars for women in SET departments, career seminars for undergraduates and termly meetings for WISSETI representatives from science and technology departments. WISSETI Project Officer Dr Esther Haines also offers workshop and advice to departments on gender bias and gender equality issues in recruitment and retention practices.

The annual WISSETI lecture will take place on Tuesday 6 May at 5pm in Robinson College's Auditorium. "My Life Among Quarks" will be given by Professor Christine TH Davies, Professor of Physics and Research Group Leader of the Particle Physics Theory Group at the University of Glasgow.
 → To register, visit www.admin.cam.ac.uk/offices/personnellequality/wiseti/

A joint meeting with Cambridge AWISE (Association for Women in Science and Engineering) will be held from 5:30pm to 7:30pm on Tuesday 13 May at Lucy Cavendish College. The event is for Ph.D students and post-docs and will focus on how to pursue a career in academia.
 → To register, email info@camawise.org.uk

mathematics on computer systems and how they solve problems with informal methods, such as using diagrams. Eventually, it might lead to computers that can solve problems using similar informal methods.

"I haven't felt that because I am a woman there is a disadvantage," she says. "The main problem for me, personally, is balancing my career and my family."

For her, it means working part-time so she is able to spend more time at home with her two daughters, ages 2 and 5. "I'm wired up at home almost just as well as I am at the office," she says, an option she acknowledges is not open to all women. "For me, I can still do my research, but it is slower. But this is the choice I made, the compromise I've made. I'm happy with it."

The EPSRC grant ends in June, so Women@CL's future is currently uncertain, but Dr Jamnik is hopeful she will be able to find additional sponsors, at least for the local activities.

Long-range results from the programme are difficult to assess, but informal feedback and formal surveys have shown that participants value the support, but don't want to be coddled. "Women staff and students said they felt isolated and valued support," she says, "but they didn't want to be seen as different."

The same is true for her. "Women@CL is one of the activities that I run, and I think it is an important one, and that's why I do it," she says. "But my bread and butter is really my research. In the years to come, I want to be known for my research work."

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