Bridging the gap: promoting women’s careers in CS

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The picture of our department

- **Numbers**
  - 77 Academic staff (29 Professors).
  - 90 Research Staff.
  - 178 PhD, 251 MSc, and 347 undergraduate students.

- **Research**
  - 11 groups cross-cut with 8 large-scale interdisciplinary centers
  - Ranked top in the UK (2014 Research Excellence Framework)
  - 96% of its research rated internationally excellent

- **Teaching**
  - Introduced lab- and project- based work into the classroom
  - Inspired development of the Integrated Engineering Program

- **Equality and diversity**
  - Athena Swan silver award 2016 – one of 3 UK CS departments

**ARRIVE - ASPIRE - ADVANCE**
The leaking pipeline

The ratio of men to women gets worse as you climb the ranks. Our overall aim is to see equality in male and female progression. The ADVANCE initiative includes several action goals:

1. Help women get a fellowship
2. Help women get a lectureship
3. Help women get promoted

which we describe and evaluate next.

A key point of attrition of female staff in the department is the transition from research staff to academic staff. Academic posts are permanent whereas research posts are open ended with a funding end date. As can be seen in the pipeline figure below, over 5 years, there is an average drop from approximately 28% of women in student and research posts (non-permanent) to 13% of women in academic posts (permanent). Hence, our ADVANCE initiative addresses this transition and focuses on increasing the number of women at the lecturer level by use of the Proleptic Lectureship Scheme.

The Proleptic Lectureship Scheme (PLS) is a way of “promoting” talented Research Fellows (researchers on independent external fellowships) within the department (and wider), to a Proleptic Lectureship post, which automatically turns into an Academic post once their fellowship is finished. Not every Research Fellow will obtain a Proleptic Lectureship, the selection is based on the academic merits expected for that stage in the individual’s career. The scheme is open to women and men.

We started the implementation of the scheme 3 years ago, and found it to be equally successful for women and men. In 2012 we had 2 male and 1 female proleptic lecturers (PL), in 2013 we had 2 male and 2 female PLs. In 2014, one female PL and one male PL were transferred to permanent academic posts (Lecturer and Reader respectively). That same year, 3 new PLs joined (two male and one female), making a total of 3 male and 2 female PLs for 2014. When these numbers are included in the total academic staff count, the percentages of female lecturers are boosted as shown in the graph below.
Why?

- Atmosphere
- Life choices
- Work-life balance
- No perspective of stability
Work-life balance

• Hard one to address - especially further on in the career
• Good maternity solutions:
  • Post-maternity grants
  • Nursery on site
  • Flexible hours
• Departmental understanding and support
• Mentoring
• Advertisements for jobs to incorporate work-life balance
description of our department
ADVANCE initiative - create a path

• Get a fellowship
  • Centralised website with resources, e.g. list of fellowships, relevant development courses, maternity leave options for different stages
  • Fellowship writing workshops, run by people in the department that have had success at attracting funding

• Get a lectureship
  • Proleptic lectureship - essentially a “promotion” from fellow
  • Mentoring program - advice on how to prioritise, etc

• Get promoted
  • Maternity support: Post-break award
  • Transparent promotion process
We believe that the PLS suits women as commonly the transition to academic posts happens during the 30's, when women usually decide to have children and are not very keen to change city or country in search of the very rare permanent posts. It allows them to stay in one place and start families. The department offered three women Proleptic Lectureships in 2012-14, and all three women had children the following year while they were still Fellows. This guarantee of a permanent post gave them the necessary stability and security for their career and family.

Once on the Academic track, staff have a number of challenges they face at different stages of their career. These include work-related stresses arising from increasing responsibilities, and also challenges outside of work. Junior members of academic staff have formal mentoring as part of their probation process. However, after that there is no formal mentoring in place. We discovered through talking with female academics that some of them did not know one another, and that instead of having formal randomly assigned mentors, most preferred having stronger social interaction and informal mentoring that can arise from developing spontaneous relationships.

Having an independent externally funded fellowship is a necessary requirement for having a chance of a proleptic lectureship and also improves a researcher's chances of obtaining an academic post using the more traditional application routes. ADVANCE puts in place annual fellowship training workshops open to all CS PhD students and postdocs.

Promotion
In order to ensure equal consideration, all non-professorial members of staff are required to submit their CVs for consideration in a yearly meeting of the departmental professors together with any Heads of Group (HoG) who are not professors. This goes beyond the standard UCL process which requires individuals to put forward an application to their HoD. Previously the professorial committee would review only those non-professorial academic staff who submitted their CVs, and those considered worthy would be invited to apply for promotion. However the survey results from 2013 indicated that only 51% of the staff members were satisfied with the process, 51% males and 45% females.

The results of the survey prompted the Department to change its promotion procedures to that described above in which all non-professorial staff are required to submit their CVs and feedback is provided whether promotion is recommended or not. This feedback process is being further formalised into an appraisal starting this year. The promotion criteria have
Promotion process

- Every member of staff submits their CV
- Evaluated by a promotions committee
- Feedback every year

Important: we need more female lecturers!
Small steps, high impact

• Seminars and meetings 10am-4pm
• Post break award 10,000£
• Encouragement from the HoD to not shorten maternity leave
• Babies @ meetings
• Working from home
• …

Much more to be done!