



## Athena SWAN Bronze department award application

**Name of university:** University of York

**Department:** Mathematics

**Date of application:** 30<sup>th</sup> November 2013

**Date of university Bronze and/or Silver SWAN award:** Bronze Award, 2006; renewed in 2009 and 2011. Further renewal applied for in November 2013.

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### 1. Letter of endorsement from the head of department:

It has been my intention for many years to promote the cause of women in mathematics and I have been able to do so while Head of Department (in Durham from 1996-98 and in York from 1999-2004, 2005-2007, 2011-2015).

For permanent academic staff, this has entailed working to remove barriers, for example for those women who have been appointed from research fellowships through to their current positions (for example ██████████ and ██████████ now Durham University professors, the latter now HoD-elect, and ██████████ and ██████████, now University of York Professors), and creating conditions under which strong female candidates are appointed and subsequently promoted. In 1999 there were two female lecturers in this department but now there are seven female permanent academic members of staff, including two professors and a senior lecturer, and 5 female RAs. I see these as steps in the right direction but not nearly enough. Permanent academic positions are relatively rare and filling each vacancy is a highly competitive, international, process that disadvantages women who may be less free to move than their male competitors. In the UK, this is particularly acute because the numbers of female PhD/RAs is also relatively low. Recognising that, we are working to increase the numbers of female applicants. We are reaching a time when key senior posts in the department will be taken by women – and this will be significant because of the clear role models they will then provide to students and staff.

For undergraduates, the ratio of female to male is roughly 40:60 over recent years, but for postgraduates, female PhD students are relatively rare. Female MSc students are less rare but still a minority (roughly 45:55), with most from overseas. The admissions processes are reviewed regularly and adjusted to ensure there are no hidden biases within our systems, unintentionally sending female-unfriendly messages to candidates. This requires vigilance and continual monitoring of the outcomes. Increasing the proportion of female PhD students and female RAs also generates role models available to students via small group teaching.

Concerning RA/RFs, most originate from outside the UK – as is also now the case with permanent staff of either gender. Looking over the history of the department, there have been sixteen short-term female members of staff, with eight now in permanent academic posts, including [REDACTED]

[REDACTED] it was particularly pleasing that the University of York awarded [REDACTED] an honorary degree in 2000.

My aim, together with my senior colleagues, and within the constraints imposed by University rules and our immediate physical environment, is to create sustainable structures that promote a collegial atmosphere that is welcoming to men and women. I will encourage staff of either gender to fulfil their potential and, as far as possible, their ambitions, and strive to increase further the participation of women in mathematics at all levels.

## 2. The self-assessment process:

### a) The self-assessment team (SAT):

The eight members of the SAT represent a variety of career stages and caring responsibilities.

[REDACTED], **postdoctoral research fellow**, from Croatia, joined the department after getting her PhD in America in 2011. She was never told that ‘girls can’t do maths’. Recently, however, she has been watching her friends struggle with multiple postdoctoral positions, the need to move often until very late in the career, the inability to solve the two body problem, the question of when to have children, and work-life balance.

[REDACTED] **F.R.S., Head of Department**, has eleven years of experience as Head of Department at Durham and York, and four as Principal of Collingwood College, Durham. He has four children and five grandchildren. He has first-hand experience of the difficulties in the workplace faced by his female PhD students/postdocs and by both his daughters in their own fields (law and marine biology).

[REDACTED] began her academic career at a time when it was widely believed ‘girls can’t do maths’. She has seen many positive changes, but believes there is still much to do in levelling the playing field. She has supervised female PhD students from several cultures, which has broadened her perspective on the range of difficulties women encounter as mathematicians. Victoria is also a member of the University’s anti-harassment network.

[REDACTED] **Reader**, has held a wide range of administrative posts, including REF2014 manager. Until 2010 [REDACTED] partner was a full-time academic at another UK university, and commuted there weekly while their children attended the York Campus Nursery. He considers one of his more significant achievements to be his contribution to the introduction of a salary sacrifice scheme for nursery fees.

██████████ **Senior Lecturer**, joined the department in 2007 after completing her PhD at York. ██████ was heavily involved in the direction of an MSc programme until 2012. Having studied and worked in South Africa and the UK, she feels that her career would have developed differently (though not necessarily better) had she been male, rather than 'just a girl'. She fervently hopes that there will come a time when nobody would have to consider gender and class expectations as obstacles to developing their talents.

████████████████████ **Departmental Manager**, joined the University in 2011, initially working 3 days per week, and subsequently steadily increasing her hours. Married with one son at primary school, she was returning to work after a career break from the NHS. The University's flexible working arrangements have enabled her to balance work and home commitments.

██████████ **Lecturer**, began her career as a single parent with two young children. Initially working as a mathematician in Chemistry, a Department with a Gold Athena Swan, she now has a joint appointment between Mathematics and Chemistry and is resident in the York Centre for Complex Systems Analysis (YCCSA).

██████████, **Ph.D. student** is from Pakistan. In ██████ home society it is very difficult for women to get a scientific education and even harder to study Mathematics. On the other hand, childcare and domestic help are readily and affordably available.

████████████████████ have all been members of the University of York Athena SWAN Working Group; a member of our SAT, currently ██████ will continue as a member.

#### **b) The self-assessment process:**

The Mathematics department is one of 25 in the UK registered as Supporters of the London Mathematical Society's Good Practice Scheme (the LMS GPS) for women in mathematics. Until 2012 this implied working towards an associated Good Practice Award, now dropped by the LMS (so as not to replicate the Athena SWAN awards). Our GPS Working Group, established in 2011 under ██████ as chair, agreed in 2012 to work towards a Bronze Athena SWAN award. We thus reformed as the SAT, the chair passing to ██████.

The SAT meets regularly with two aims. One is to have an open discussion concerning situations particularly or disproportionately affecting women in the department or, more widely, in mathematics; one obvious focus has been to consider work-life balance issues faced by staff with dependants. The second aim is to work towards our application for an Athena SWAN award. The two are interwoven, the former often raising a discussion of qualitative issues, with the latter encouraging us to make a quantitative examination of data. The SAT passes recommendations for actions to the Departmental Management Team for endorsement.

In 2012 our LMS Working Group conducted confidential interviews with all members of staff to discuss departmental management and culture, in the light both of issues affecting women's careers and wider matters of ethnicity and diversity. This was fed into the LMS report *Advancing women in mathematics: good practice in UK university departments* launched at the House of Commons on 27th February 2012. The LMS produced feedback and advice for individual departments, which we have fed into our Action Plan.

As a result of the interviews a number of changes were immediately instituted, particularly with regard to managerial structures, openness, performance review and Workload Model.

Records of our SAT meetings and actions are available to all staff on our Departmental *Moodle* VLE.

### **c) Plans for the future of the self-assessment team**

From October 2013, twice-termly meetings of the SAT have been centrally timetabled so that approved working constraints will be automatically respected. The Action Plan details the reporting and monitoring mechanisms of our initiatives, with the Working Group reporting to the Head of Department and the Departmental Management Team, with whom the overall responsibility for the plan's implementation lies. One important feature of our approach is to find out as much as we can from colleagues and students at all career stages about their perceptions of the problems women face as mathematicians. We will dovetail quantitative assessment of our progress with feedback and suggestions gathered in this way, aiming to use this information to inform and assess our initiatives. First priorities include conducting an analysis of the most recent data, received from the university in November 2013, too late for use in this application, and reviewing REF selection and internal grading processes (Action 1.6).

## **3. A picture of the department:**

### **a) A pen-picture of the department:**

As at November 2013, the Department of Mathematics at the University of York has 44 permanent academic staff (7 women), 10 Researchers, that is, PDRF/RAs on various kinds of temporary contracts (5 women) and 7 administrative staff (6 women). We have 674 undergraduate students (245 women) of whom 199 (49 women) are studying for an Integrated Master's degree, 119 MSc students (84 campus-based of whom 60 are women, and 35 on an online distance learning programme of whom 3 are women) and 36 PhD students (7 women). About two-thirds of the undergraduates study single-subject mathematics, the remaining third a wide variety of combined programmes. Almost all undergraduates take a final-year project module.

The university teaches in three terms and course structures are fully modular. Lectures are given by academic staff and some researchers. Supporting classes, which grow in size as students progress through the programme, are taught by a mix of staff and PhD students. The university is now considering its options for semesterisation. The Mathematics and University SATs were instrumental in insisting that this process must take into account the UK system of school holidays.

The department's offices and some small teaching rooms are housed in James College, in keeping with the York vision of staff accommodation and teaching spaces being integrated with student rooms and facilities. Lecture theatres are mostly nearby, around the campus lake. The buildings are part of the original 1960s construction, and do not offer ideal spaces for community interaction and cohesion. For example, PhD students have offices in separate annexes. In the longer term the university expects the department to be re-housed, but in the short term a minor facelift to our buildings has led to a more pleasant physical environment.

A number of research areas are represented in the Department. We have several joint appointments with Biology and Chemistry, with interdisciplinary staff working under the auspices of YCCSA. Some of these staff are housed on the new, adjoining, development at Heslington East, which is distant enough to cause timetabling and other logistical problems. To ease the situation

the University has just instituted a staggered timetable, with lectures on the West and East campuses scheduled with a half-hour difference. However, in spite of this, and efforts made by Mathematics administrators, timetabling continues to present problems for staff and students alike.

There are three 'Heads of Section' although the line manager for academics remains the HoD, appointed on a 4-year term. The HoD chairs termly staff meetings. Teaching programmes are overseen and administered by the Board of Studies, the Chair of which is supported by various other posts: a Deputy Chair; a small Teaching Committee and its Chair (who closely monitor delivery, and generate and evaluate new teaching initiatives); and Admissions Tutors. The Board of Examiners, again comprising academic staff, implements and monitors assessment, with its own Chair and supporting Assessment Committee. Heads of Section, the HoD, the Chair of the Board of Studies and representatives from other groupings, together with managerial support, form the Departmental Management Team. Recently, the Team members have received training from Elementa Leadership.

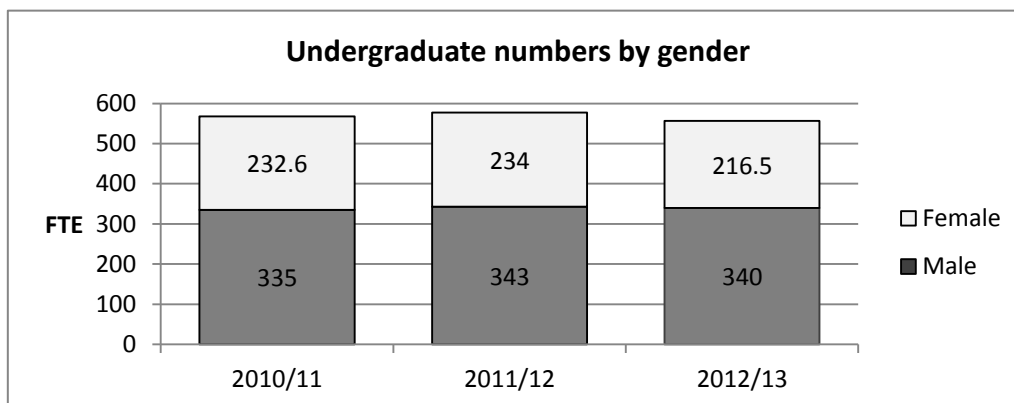
### b) Student data

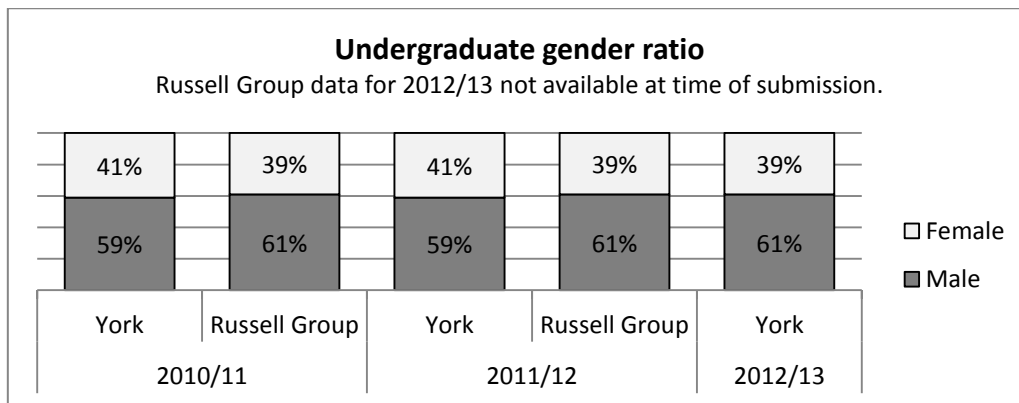
The biggest concern highlighted from the Student Data is the drop-off from Master's level to PhD study. We particularly struggle to attract female EU applicants that are successful, in competition with males, under our current approach to selection.

(i) **Numbers of males and females on access or foundation courses:** N/A

(ii) **Undergraduate male and female numbers:**

The female:male ratio for undergraduates remains fairly stable around 40:60, which is reasonably consistent with undergraduate programmes in Mathematics and Statistics offered at other Russell Group universities (see figure below). Nevertheless, the department will remain fully aware of the underrepresentation of women in undergraduate mathematics and will continue to monitor the numbers. We now offer one-to-one chats for applicants (who already have received an offer) with a representative group of staff, and conduct selection interviews for some applicants without Further Maths A level. We are particularly aware that men and women with the same levels of ability may present themselves differently at interview.



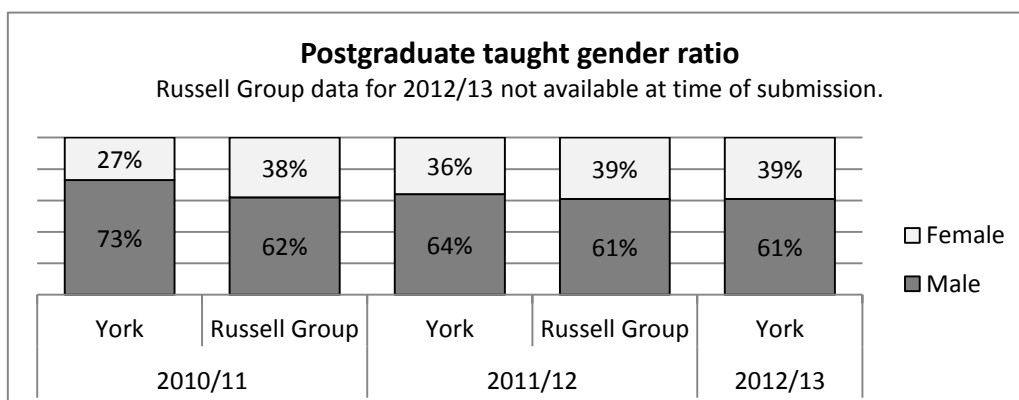
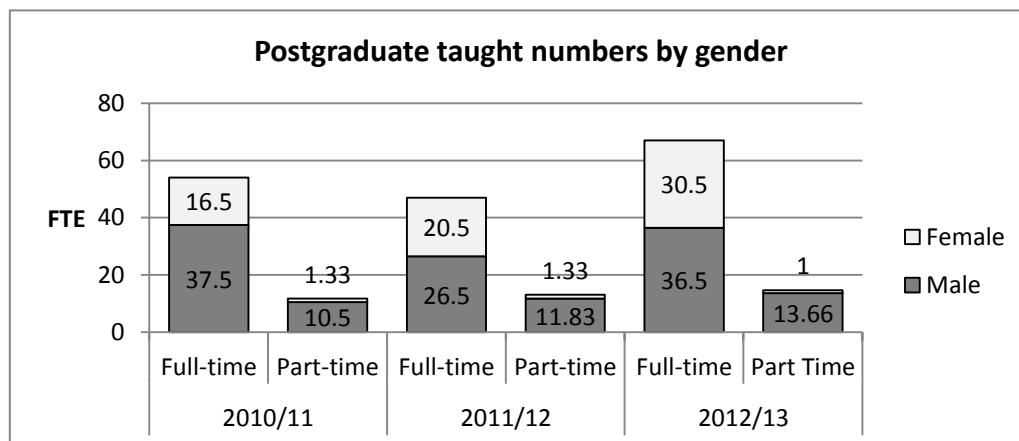


**(iii) Postgraduate male and female numbers completing taught courses:**

The female:male ratio of students on full-time programmes has been steadily improving in recent years, to 45:55 in the last two years. This compares well against gender ratios on comparable programmes offered by other universities in the Russell Group.

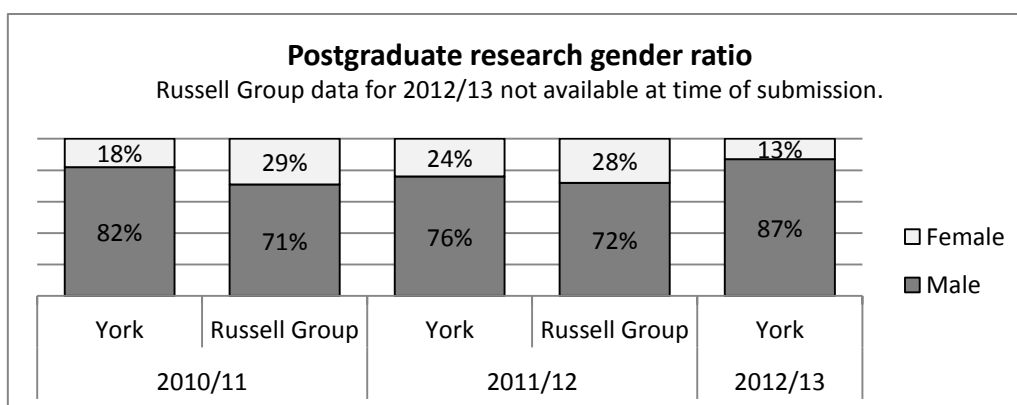
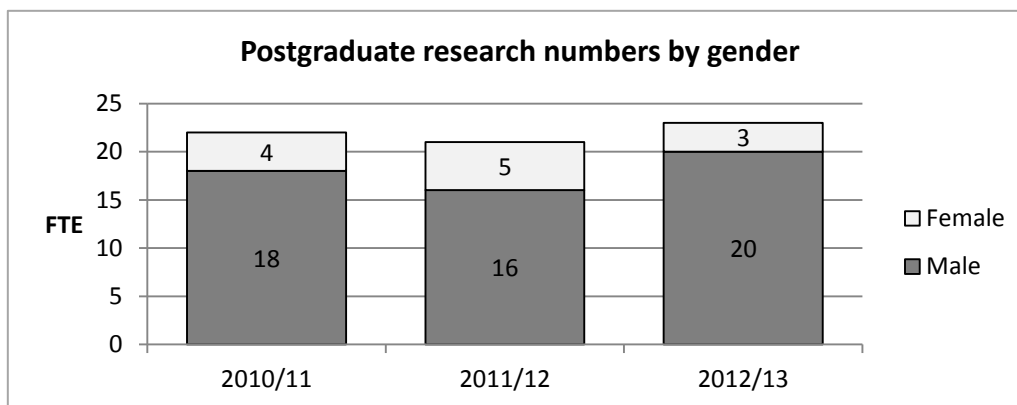
The majority of students on the campus-based programme are from the PR China. Our 'healthy' female:male ratio is largely due to current Chinese educational aspirations. In a changing climate, we must continue to make our MSc programmes and application processes appealing to women.

The female:male ratio on our single part-time programme, an online distance learning programme in Mathematical Finance, is much lower. The gender balance of students on this programme reflects at least in part the gender balance of professionals in the finance industry, at which this programme is aimed.



(iv) **Postgraduate male and female numbers on research degrees:**

The female:male ratio is towards the bottom end of the gender ratios of comparable programmes at Russell Group universities. The low student numbers explain the size of the fluctuations in the ratio. Moreover, the Russell Group itself performs rather worse in this regard than some other groupings of universities, for whom the numbers of women mathematics research students tends to be 5-10% higher.



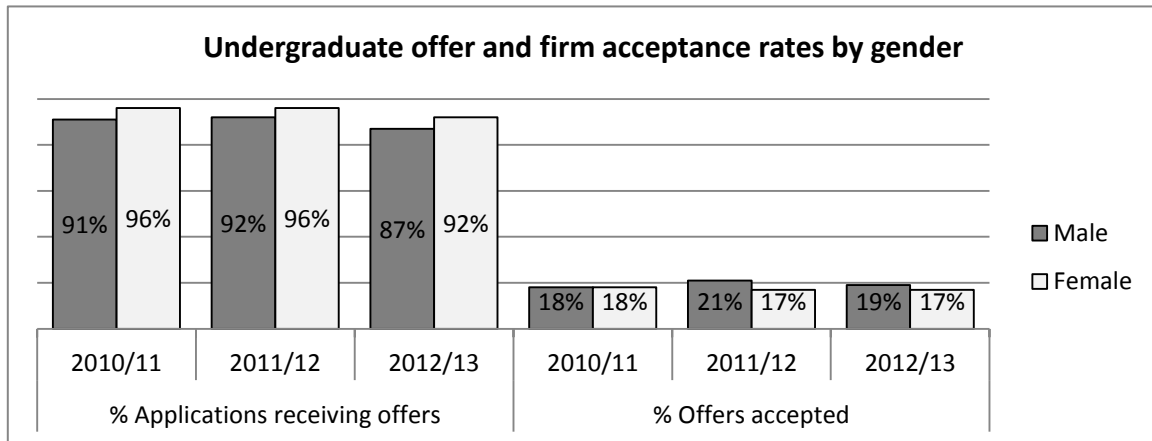
The data above masks a more serious problem. Over the last 3 years, our Department has awarded around 15 DTA EPSRC Studentships and Departmental Teaching Studentships – all but one to men. The female research students are largely international and funded by their own governments. Graduate School Committee (GSC) is fully aware of the problem; Dr Roux is already a member of GSC and Professor Gould will join in January 2014. One initiative is to compare the internal grades given to applicants by interview panels with previous academic attainment. If a discrepancy arises we can address the weight given at interviews to a confident presentation and examine whether this is gender related and/or an indicator of future research ability (Action 1.2).

**Case study** In Summer 2013 we received a late application from a female for a PhD place and Teaching Studentship. We felt her case was so strong that, following competitive interviews, GSC agreed to take money from next year's DTA to fund her through a PhD.

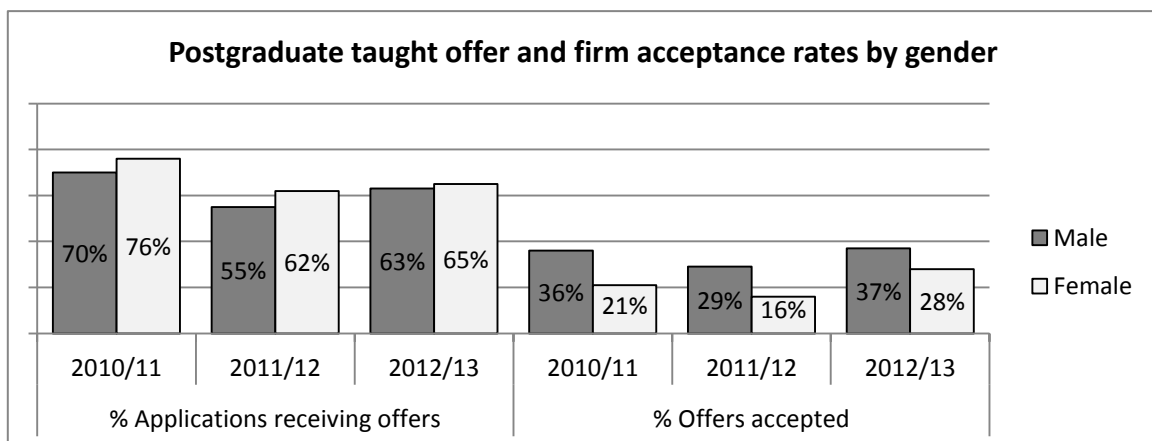
(v) **Ratio of course applications to offers and acceptances by gender for undergraduate, postgraduate taught and postgraduate research degrees:**

For undergraduates, the percentage of applicants receiving offers is slightly higher for females. Departmental admissions policy does not take gender into account, so this might indicate that applications from females are generally stronger and perhaps more 'self-selective' than males. The

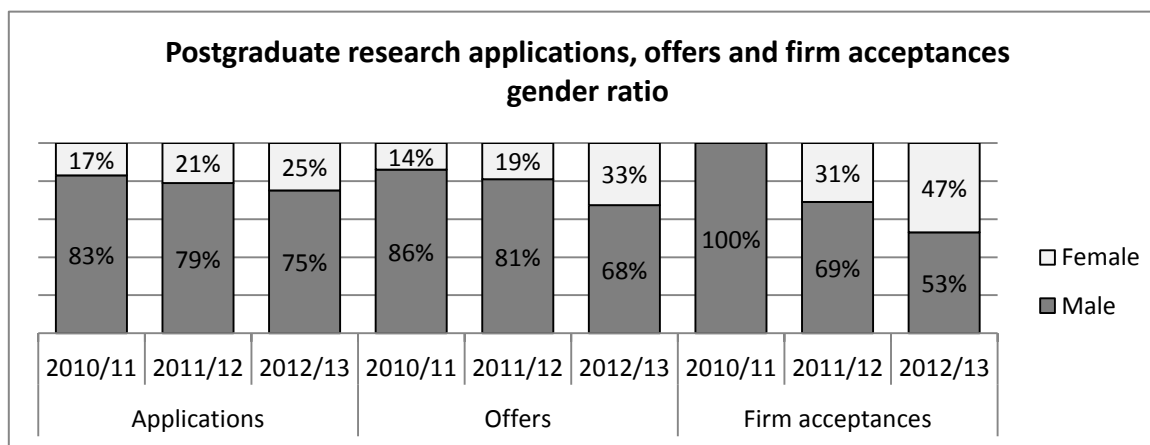
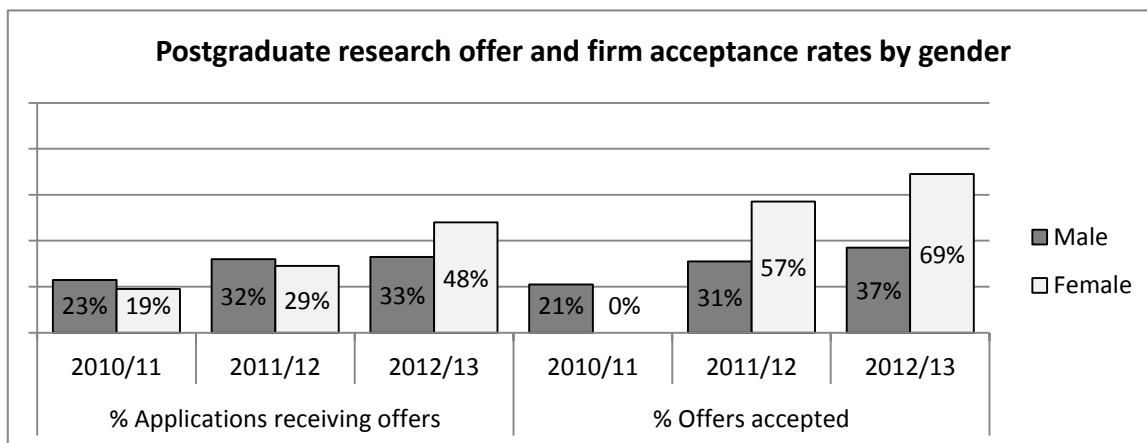
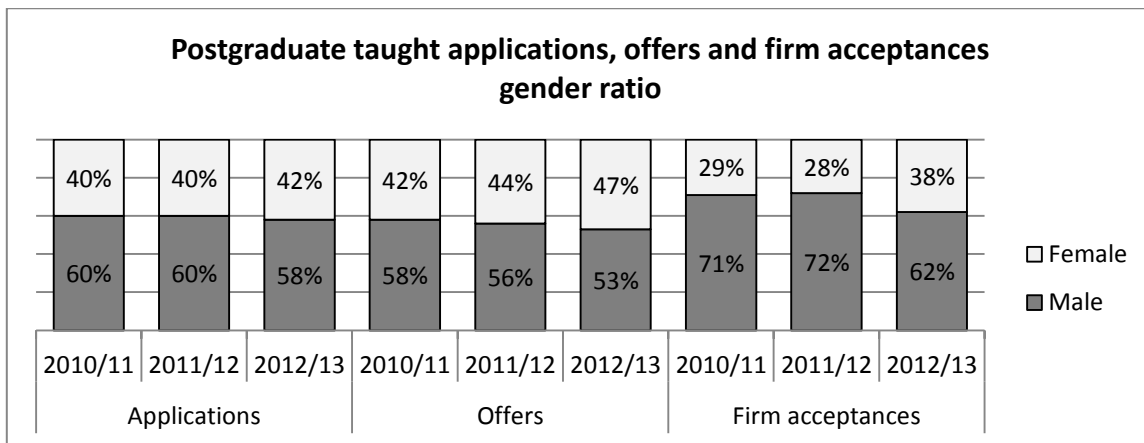
percentage of offers accepted is broadly comparable between males and females, with the offer acceptance rate for females being slightly lower.



The data for postgraduate students should be treated with caution, since postgraduate applicants often neglect to accept an offer but still attend the programme, or accept our offer but later withdraw. Moreover an *offer* is for an academic place to study for a PhD. As we have pointed out, the data for *funded* places is much less rosy. UK students normally only accept funded PhD places.





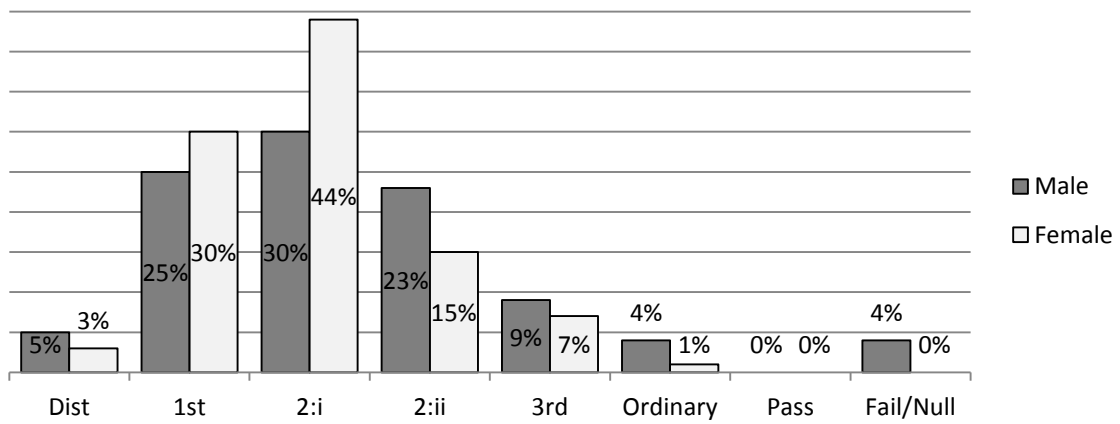


**(vi) Degree classification by gender:**

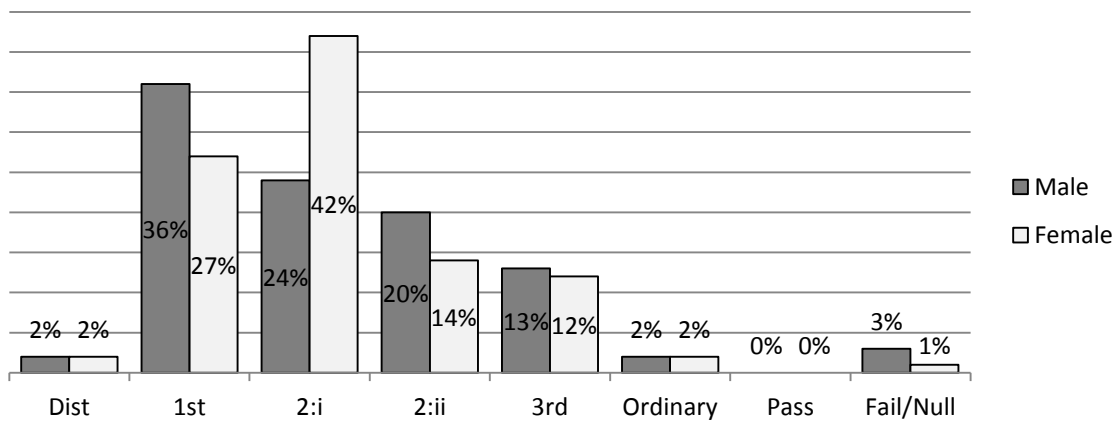
For undergraduates, the percentage of males with weak (fail, pass, ordinary) results is higher than the corresponding percentages for females. This may be due to the gender composition of our weak students or it may be there is something we can do to help male students at risk of failing.

The percentage of undergraduate males and females achieving the top grades is similar. There is however a significant difference in achievement around the 2:1/1st borderline: the data suggest that males are almost as likely to get a 1<sup>st</sup> than a 2:1, but females are much more likely to get a 2:1. We are also concerned that over the last 3 years 27% of our prize winners have been women, whereas they form around 40% of our student body. Is there something that we can do to level the playing field for students achieving at this level? Does our current examination system advantage one gender over the other? (Action 1.5)

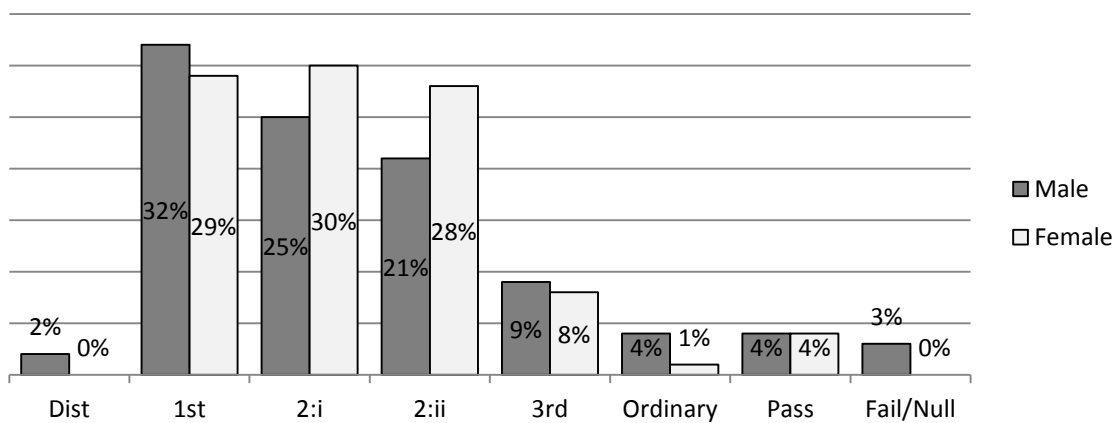
**Undergraduate degree classification profile by gender 2009/10**



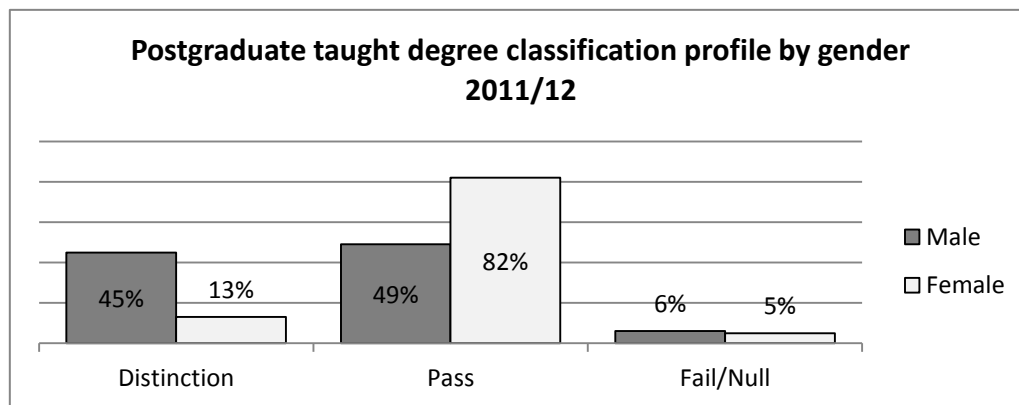
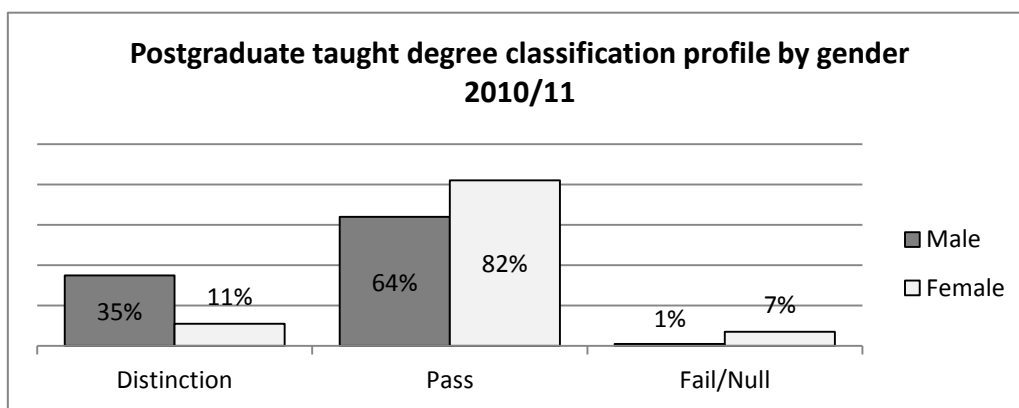
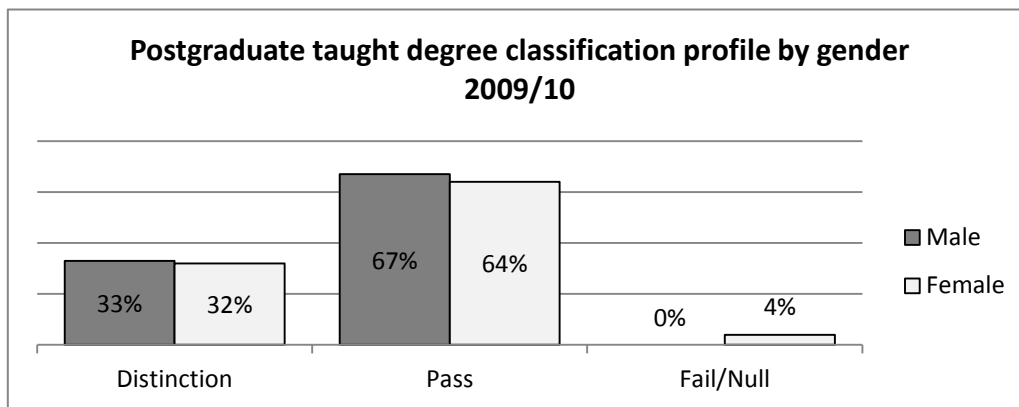
**Undergraduate degree classification profile by gender 2010/11**



**Undergraduate degree classification profile by gender 2011/12**



The picture for taught postgraduate students is similar in that females are less likely to fail than males, but also less likely to achieve a distinction. The pass rate for postgraduate research students is 100% over the period 2009-2012.



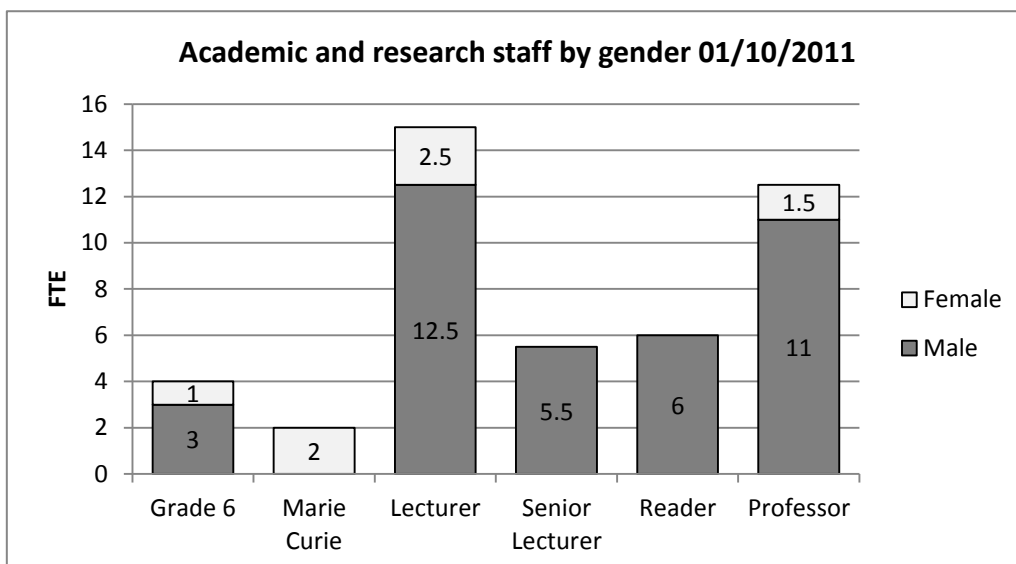
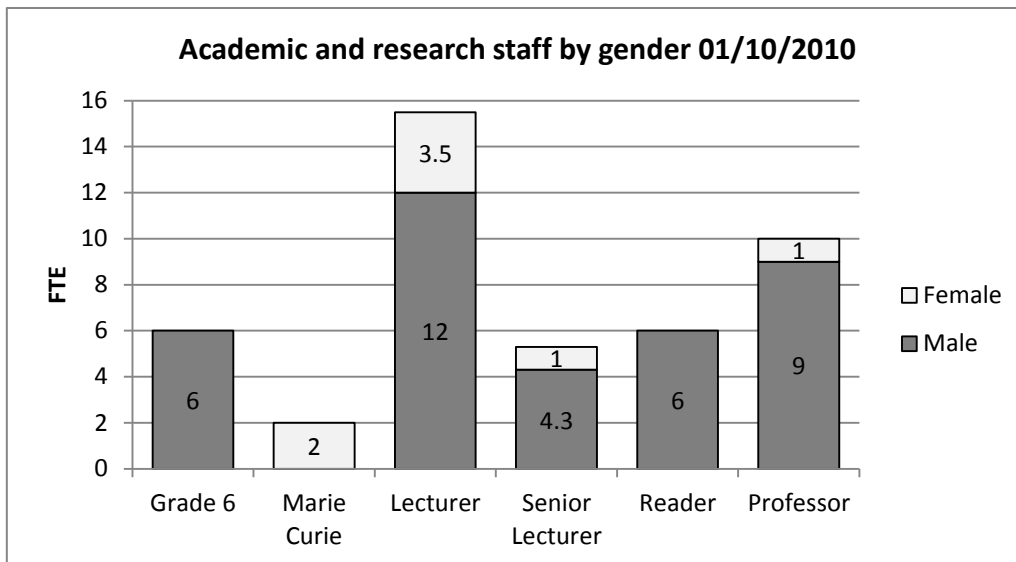
### Staff data

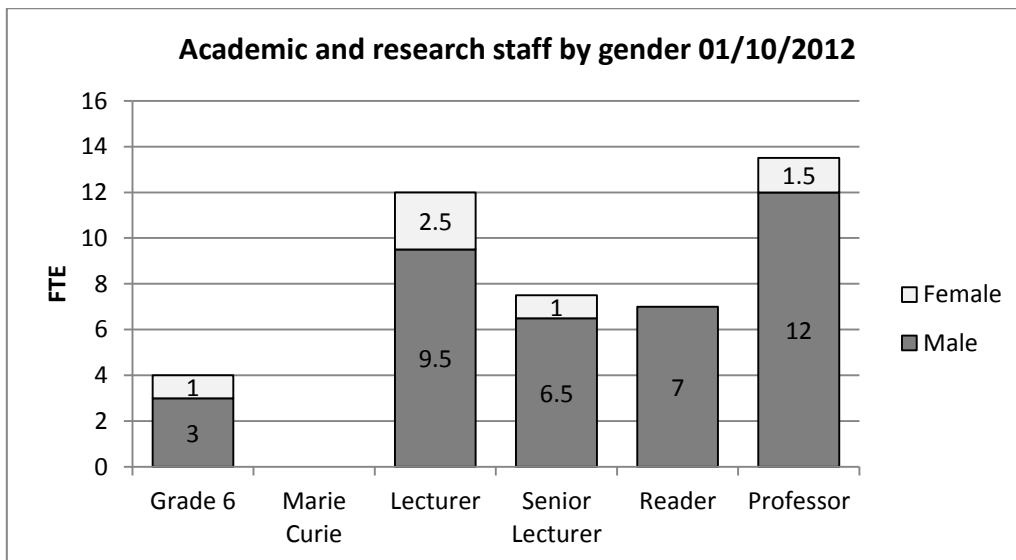
Women are under-represented at all grades. This is a common and unfortunate phenomenon in UK mathematics departments. The International Review of Mathematics commissioned by EPSRC in 2010 reports *'The Panel can state that, compared to other countries, the proportion of women is strikingly small .... Possibly more worrying than the numbers was that, with a few notable exceptions, the people with whom we spoke did not seem to be particularly concerned about this issue.'* The picture for 2013/14 is encouraging, but we cannot guarantee that this increase in women staff will continue without our making considerable effort.

(vii) **Female:male ratio of academic and research staff**

The possible exception in female under-representation is that of Grade 6 and Marie Curie, which together correspond almost exactly to our Researcher community. For this group the percentage of females at 01/10/2010, 01/10/2011 and 01/10/2012 was respectively 25%, 50% and 25%. The total numbers are very low, so large year on year fluctuations are to be expected. On the other hand, the percentage of females amongst all permanent staff for those dates is 15%, 10% and 13% and the percentage of females amongst professorial staff for those dates is 10%, 12% and 11%.

The numbers confirm that the most severe drop off is at the transition from Researcher (almost always a temporary position) to Lecturer (usually a permanent position).





There are major problems for both male and female mathematicians in moving from Researcher to Lecturer. A permanent academic job is very hard to obtain, resulting in fierce international competition; further, an academic career is hard to mix with family life. Undoubtedly the latter problem affects women more than men. We hope our procedures and initiatives will demonstrate we try to do whatever is in our power to help women pursue their careers. However, for as long as the standard academic career requires geographical mobility (often to different continents) at the exact age when women might think of permanent relationships and children, it is hard to see how the problem will not persist.

The lack of female representation at higher levels we believe to be largely due to (a) the pipeline – we are acutely aware of the need to appoint more women –, (b) possible reluctance in women to apply for promotion, and (c) the lack of external female applicants for chair appointments.

We are putting a number of initiatives in place that should eventually improve the recruitment, retention and promotion of women – see the relevant paragraphs in Section 4.

**Case study** In Spring of 2013 this Department advertised 3 lectureships: one each in Statistics, Mathematical Finance and ‘general’ Mathematics. There were 119 applications in total, of which 20 were women, two of whom were appointed. These have increased the proportion of female academic staff to 14%.

**(viii) Turnover by grade and gender:**

The turnover in staff is very low, in general, although higher amongst statistics staff (the demographic of statistics staff appears rather different from that of general mathematics). Over the last three years two permanent members of staff have left – both male statistics lecturers moving to other positions.

Historically, in this department, the attrition of female staff has been due to either temporary contracts ending or partners having positions in other locations (the ‘two-body problem’). The solution to the latter is out of reach of an individual department, beyond a real willingness (which we certainly do have) to make special arrangements where possible.

**Case study** Dr ██████████ partner held a job in Adelaide for a number of years. We allowed Dr ██████████ to take extended unpaid leave on two occasions so that he could work in Australia and return to York at times when his partner, in turn, could take unpaid leave.

#### 4. Supporting and advancing women's careers:

Academic careers are fundamentally different from those in many other professions, requiring half a lifetime of progression and development. The Athena Swan judging panel is of course fully aware of the general problems faced by female scientists in the UK. Beyond these, every subject area has its own particular problems (and therefore possible solutions). For an academic career in mathematics, the norm is to make a number of changes of institution. Post-doctoral positions almost always require extremely specialised skills, and it is unreasonable to expect to find these locally, for PhD numbers are typically lower in mathematics. We regard ourselves as successful if we see our PhD students (of either gender!) progressing to post-docs, and our post-docs to lectureships, elsewhere. This should be borne in mind when examining the data of any *individual* department.

A specific UK problem is the general absence of funding for postgraduate Master's degrees in Mathematics. Consequently, our young researchers are competing for post-docs with better qualified candidates from overseas, who have *both* MSc and PhD degrees. Another factor is the low pay of academics, particularly Researchers, compared to other professions. Typical destinations for mathematics graduates are more highly paid – accountancy, financial services including the City, actuarial work, and IT. The question of poor remuneration (compared to other professions) has real impact on women's academic careers – a higher earner, such as an accountant, can afford to fund substantial childcare out of earned income, thus preventing a career hiatus.

It is fair to say that UK culture is known to be a little biased against mathematics (it kills a party conversation stone-dead to admit you are a mathematician) – perhaps this is changing slowly, as are the views, at least expressed openly, that 'girls can't do maths'. However, an unconscious bias against female scientists certainly remains (see for example <http://news.harvard.edu/gazette/story/2013/02/peering-into-our-blind-spots/>) – we will invite Professor ██████████ (Chemistry, York) to speak to our Departmental Management Team on the subject of unconscious bias against women (Action 5.4). ██████████ was instrumental in Chemistry obtaining a Gold Athena SWAN award.

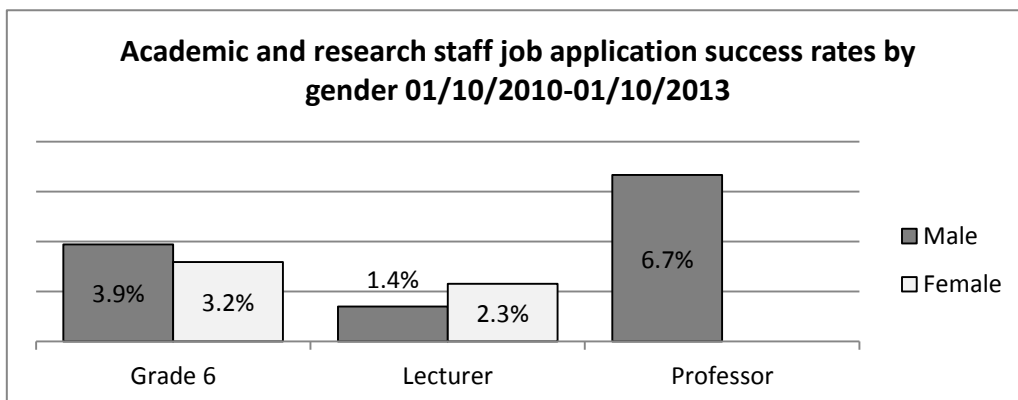
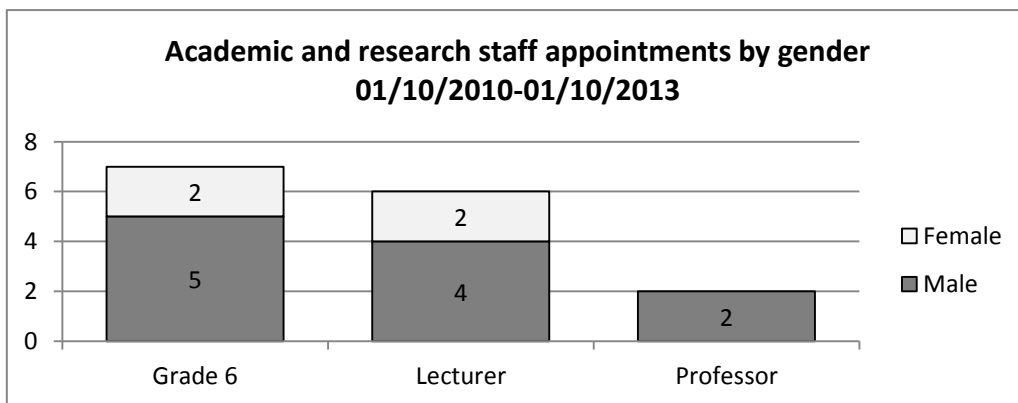
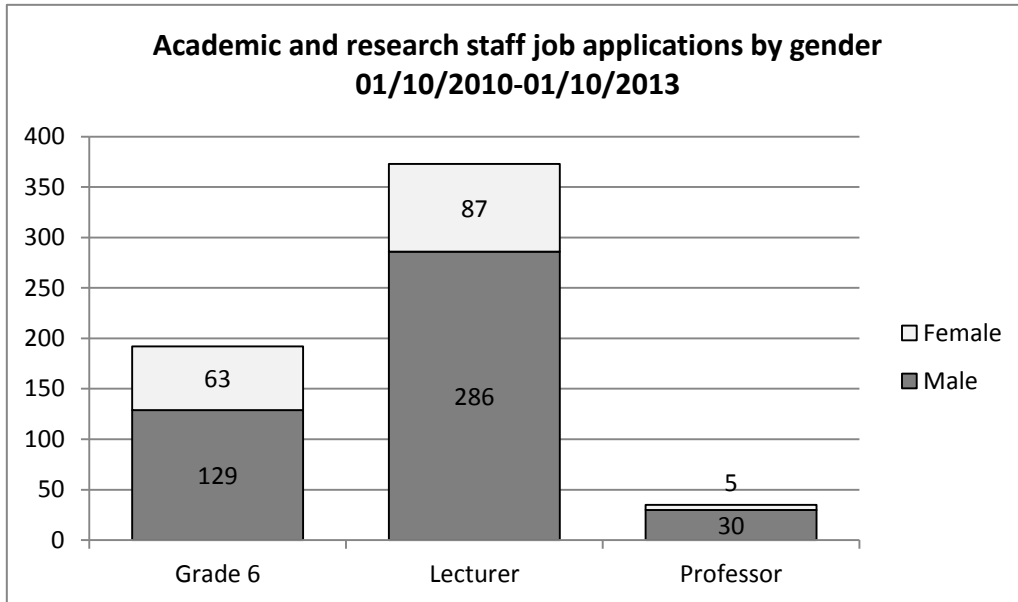
Clearly, any individual department, or even an individual country, cannot solve all the problems standing in the way of women in mathematics. What we can do, however, is to make positions in our department as appealing as possible to women applicants, and to remove as many barriers as we can to their progression. We are at the beginning of this process, and, as we indicated earlier, will constantly review whether our initiatives are helpful, and what else we can and should be doing. The hope is that if enough departments in the UK take part in the Athena SWAN process, then, eventually, there will be a substantial change.

**Key career transition points**

a)

**(i) Job application and success rates by gender and grade:**

The overall percentage of women applicants from 1 October 2010 to 1 October 2013 for all academic and research positions in the department is 26%, with women having a slightly higher overall success rate (2.6%) than men (2.5%).



For Researcher positions the percentage of women applicants is 33% with a success rate of 3.2%, and for academic positions the percentage of women applicants is 23% with a success rate of 2.2%.

We commented in Section 2.6 on the recent round of new lectureships. The picture for more senior positions is less rosy. Over the last 3 years the department has advertised and appointed a Chair in Statistics, an Anniversary Chair and a position as Head of Department. The successful candidates were men, but the proportion of women applicants was very low – 4 out of 18 for the Chair in Statistics and 1 out of 17 for the Head of Department. (We do not have the figures for the Anniversary Chair, as the process was administered in a non-standard way.)

Thus our largest problem is in attracting female applicants. We suspect there is a greater degree of 'self-selection' amongst women mathematicians, who perhaps are less likely to put themselves forward for a position they feel to be only just qualified to do, particularly at senior level. The Chair of the University Athena SWAN working group has arranged for our webpages to be reviewed with a regard to eliminating gender bias, and we will implement new ways of encouraging suitable women applicants (Action 3.4).

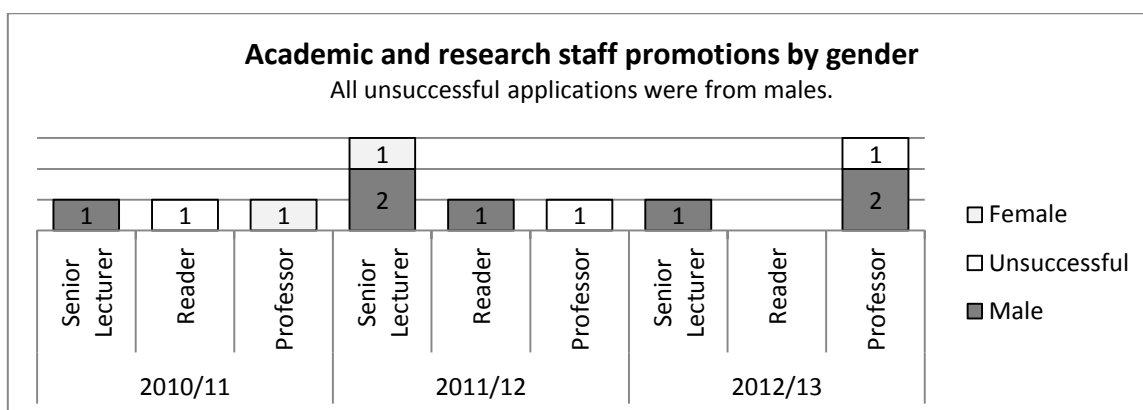
For senior positions there may be a pipeline problem, of low numbers of women experienced enough to apply. However, we are aware of the danger of complacency, and look for ways to encourage more senior women to consider us as a career destination. One possibility would be to offer extra incentives such as help with childcare – but this would be helping better salaried individuals over those in less well remunerated positions, which could be unjust. Internal applications for externally advertised Chairs are very rare – such positions are normally due to the University and Department wishing to attract new talent in particular strategic areas.

The University of York runs a successful Campus Nursery, for which colleagues can receive tax relief via a salary sacrifice scheme. However, places are limited – the nursery is accommodated in portacabins –, the waiting list is long, and there is little flexibility or possibility of occasional or temporary use (for visiting academics, for example). The University is aware of our concerns and we will continue to make representations on this matter to the University SAT. We feel that lack of affordable and flexible childcare is one of the biggest impediments to women's academic careers.

**(ii) Applications for promotion and success rates by gender and grade:**

As is standard in many UK universities, the promotion procedure at York is administered by the University, not departments. There are generic guidelines in place for candidates, and a panel reviews applications from science departments, commenting on them before they are passed to Promotions Committee. From the data, there is no evidence for bias against women in our promotion procedures. We feel that it would be useful to examine the number of years colleagues remain on each grade before 'moving up' and intend to start to gather and examine that data (Action 3.4).





**b)**

**(i) Recruitment of staff:**

All departmental positions are advertised on Departmental webpages and on jobs.ac.uk. Current staff are also asked to encourage suitable candidates to apply. Adverts contain information on the flexible working policies of the university and some colleagues actively encourage suitable women to apply. We always ensure there is a woman on the shortlisting panel and on the interview team, as recommended by the University’s equal opportunities policies. We have recently had success in employing two women, filling two of three lectureship vacancies. However, in some areas (particularly pure mathematics and mathematical physics) the number of suitable women applying is relatively low and the field aggressively strong. This is a continuing problem – we have not recruited a female pure mathematician to a full time lectureship in over 10 years, although one of our 2013 female appointees was a mathematical physicist.

Clearly, we have work to do. We will formalise the procedure whereby women candidates are encouraged to apply. When jobs are advertised in future, the Head of Department will ask a relevant senior member of staff to coordinate the identification, and invitation to apply, of suitable potential women applicants (Action 3.4). We envisage that the review of our webpages will ensure we have positive role models and information concerning flexible working prominently visible.

**(ii) Support for staff at key career transition points:**

The figures in Section 3, as well as discussions with current and former staff, indicate that the biggest problem is the transition from Researcher to Lecturer. We stress that this is not just in York, but a problem existing at least at European level. Nevertheless, this department does have a good record of Researchers moving on to further academic positions, in several cases at York. In the last ten years we have around an 80% success rate in this regard. Indeed, five professors in the department (██████████) started here as Researchers (some rather more than 10 years ago). We emphasise again that if our Researchers move to further positions elsewhere we regard this as a success – finding the right job at the right time in the right place in mathematics is very hard – and there is no particular expectation for Researchers that this will be at one’s current institution. This culture in itself presents difficulties for women.

The University of York was one of the first 10 institutions in the UK to be recognised by the European Commission for its “HR excellence in research.” It has an excellent programme of personal development training run by the Learning and Development Team, with many courses

aimed at junior staff, and a Researcher Development Team (RDT) focusing on training for Researchers. The courses offered include generic research skills and organisational training, grant applications, building and writing a CV, and building impact into research. The University also runs a Postgraduate Certificate in Academic Practice (PGCAP). This is a 60 credit Masters-level programme, designed to support and enhance the engagement of University of York staff with their academic responsibilities. Although PGCAP is primarily aimed at new, permanent, academic staff with less than three years' full-time teaching experience, it is also available to Researchers. A 20-credit slimmed down version of PGCAP will shortly be made available which should be more suitable for staff on one- or two-year research contracts, enabling them to better integrate training with their research. Researchers can also book an appointment with a Research Staff Developer.

In addition to a University induction programme, the Department runs such a programme for new staff. We are in the process of updating our staff webpages so that information concerning working practices, university policies on flexible working, research leave, travel money etc. are all easily accessible and clearly presented (Actions 5.2 and 5.3). To speed these efforts, we have applied to have a University-sponsored intern in the Spring term.

All new members of staff are assigned a mentor. This process has, however, been relatively low key, and we will make it formal (Action 4.1). Experience has shown that informal processes tend to get pushed aside by the tide of formal requirements of today's academic jobs. Researchers are invited to develop a Personal and Career Development Plan with their line manager (usually the PI on their research project).

Further up the scale, we have as yet no formal mechanisms for supporting staff at career transition points, other than the guidance given via our Performance Review mechanisms. Success in promotion relies on a number of factors, one being a demonstration of capability in departmental administration. The Head of Department bears this in mind when assigning administrative positions. The SAT will consider what, if any, formal procedures might help staff to advance, such as the possibility of leadership training (Action 3.2). We can look to initiatives implemented by other science departments in York, including Chemistry, which holds a Gold Athena SWAN award.

## **Career development**

### **a)**

#### **(i) Promotion and career development:**

The University of York runs a system of yearly Performance Review (PR) for all staff. Academic staff in Mathematics are normally reviewed by the relevant Head of Section, or (for Professors) by the Head of Department. Research staff are reviewed by their line manager, usually the Principal Investigator of the research project on which they are working; this process may be dovetailed into the probation meetings that take place during the first year of a contract. Non-professorial staff can request an alternative performance reviewer if they feel it would be appropriate (University procedures would make such a request very difficult for Professorial staff). The system of review is currently changing from Portfolio-Led (in which staff submit a resume of their year's activities) to one which is Objective-Led (objectives are defined for each year and the review identifies which have been achieved and any training which might be needed).

The majority of staff view the PR as an opportunity to discuss their progress with a sympathetic colleague in a position of enough experience to advise and help. In the past, performance reviewers have been asked to 'encourage' staff to apply for promotion where appropriate. The Head of Department has made it clear that all staff thinking of applying for promotion can approach him for advice.

To ensure greater consistency in approach, the SAT is proposing some formalisation of this mechanism. The intention will be that staff submit a CV each year as part of the PR, with a copy to the Head of Department. Discussion of the CV, with a view to the possibility of applying for promotion, must form part of the PR. A record must be kept that this discussion has taken place, (or of the reason why the member of staff has opted out of this process) (Action 3.1). The timing of our yearly PR is now at the end of each academic year, so that staff can receive advice and support in good time for the next round of promotions.

The promotion criteria are set by the University and cover all aspects of academic life: teaching, research, administration, pastoral work and outreach work. Both quality and quantity are emphasised, but the Head of Department in his or her supporting statement can stress which is most important in any one case. Staff have the opportunity, in a covering letter, to explain any career break or caring commitments that might have affected their research profile.

#### **(ii) Induction and training:**

The University provides central induction training for new staff, and specific induction training for staff taking on a managerial role. In addition, the Department runs an induction day, which contains information about training that the University provides. Of course, induction days form just the beginning of a process of integration. As already stated, we are reviewing our staff webpages to contain all necessary information for new (and old) staff, with links to the relevant pages on the HR website and summaries of policies where appropriate, including those on flexible working (Action 5.2). The webpage will contain information about and links to the University's Learning and Development team and an indication of the courses available (as in 4 b) (ii)). The necessity for training, and the suitability of certain courses, is also discussed at PR. Line managers of Researchers and supervisors of PhD students are kept up to date by a member of administrative staff on any relevant training for themselves (as managers of junior staff) and for the Researchers they supervise, and also of any opportunities they should pass on to the latter.

During the central induction sessions, staff are informed of an online Diversity in the Workplace training module, provided by HR, and HoDs remind staff to complete this training. Gender is incorporated, along with the other protected characteristics, into this module. Further information is provided by the Equality and Diversity team during induction training. We feel this is especially important to combat any inbuilt prejudices coming from the wide range of cultures (including British) represented in the Department.

#### **(iii) Support for female students:**

York is run on a collegiate system whereby all students are assigned a personal supervisor, who oversees all aspects of a students' progression, both personal and academic. Due to the small proportion of women on the academic staff in Mathematics, and the healthy proportion of women undergraduates, it would not be feasible to offer a female supervisor to all students who request it. One suggestion (to be further debated by SAT) is that there should be a Woman's Tutor with whom female students (both undergraduates and postgraduates) can make an appointment

if they wish. Of course, this has been happening informally and in an unrecognised way since the Department first had a woman on its staff. This would be acknowledged on the Workload Model (Action 4.4).

**Case study of Dr [REDACTED] supervisee:** A female student ranking among the top 5 in her cohort had completed her studies and had not made any career decisions. She put all her efforts in her exams and final project, but did not even inspect possibilities of a paid post-graduate position. Dr [REDACTED] encouraged her to consider PhD opportunities and prompted her to apply for them. Dr [REDACTED] proof-read a personal statement and CV, helped with interview preparation and gave personal support. The student is now a PhD student in a very prestigious university working on a cutting-edge research project.

## Organisation and culture

### (i) Male and female representation on committees:

*Departmental Management Team* – nine members of academic staff, one of whom is female, and the Departmental Manager, who is female; the meetings are also attended by University staff (a male academic and a female administrator).

*Board of Studies and Board of Examiners* – these are the main Departmental committees and all members of the academic staff (and those Researchers involved in teaching) are members.

*Graduate School Committee* – eight members of academic staff, of whom one is female (two after January 2014).

*Research Committee* – ten members of academic staff, of whom one is female.

*Teaching Committee* – six members of academic staff, one of whom is female.

*Mitigating Circumstances Committee* – five members of academic staff, one of whom is female.

*Assessment Committee* – previous to June 2013, this was a small committee composed of four male academics. It has been expanded to include a further male and two females.

*Note: The numbers do not include secretarial support, which in all cases except for the Graduate School Committee is by women.*

The representation of women on Departmental committees is in line with the proportion of women in the Department. We are aware of the problem of overburdening women with committee work (the above only represents Departmental committees, and does not include Departmental Working Groups, University committees, or external bodies). The de facto policy is that each committee should have at least one woman member, but to avoid the issue of overload, it usually remains as one. This does mean that women are slightly under or over-represented on individual committees. Potential members are usually identified by the Chair of the Committee, or by the Head of Department, who attempts to allocate administrative duties of this kind in a way that will both help the Department and help the promotion prospects of the individual.

It is to be noted that all the Chairs of committees, and all the Heads of Section, are males. This is partly a pipeline problem, and partly an issue that female members of staff tend to be on several committees (to ensure non-zero female representation) – to ask women to take on the role of Chair could result in overburdening them. This has consequences for the career development of women.

It is worryingly clear from the data presented that there is a significant drop-off in the ratio of females between temporary and permanent staff. Already in this document we have examined the support mechanisms, both Departmental and University, for Researchers, given some reasons behind the attrition above, and put forward some ideas for lessening this drop-off (Actions 4.1, 4.2).

On an individual level, members of staff actively mentor women from outside York in cognate areas, and, given that at the research level mentoring tends to work best within subject groups, this can be valuable when Researchers apply for academic positions. We do not see a mechanism, however, whereby this could be made formal.

As with all other aspects of our gender-specific data, we will continue to monitor the situation and search for remedial initiatives.

(ii) **Female:male ratio of academic and research staff on fixed-term contracts and open-ended (permanent) contracts** - see section 2(b)(vii) for details; the fixed-term contracts correspond to the research staff.

**b)**

**(i) Representation on decision-making committees:**

There is a balance to be achieved between adequate female representation on committees and not overloading female members of staff. The figures suggest that Departmental committee membership is in line with the gender profile of staff. Women are regularly put forward by the HoD to serve on University committees. However, committee work must be balanced with a strong performance in research and teaching when candidates apply for promotion, particularly at Reader and Chair level.

**(ii) Workload model:**

The Department introduced a preliminary Workload Model (WM) in 2011. This is currently under review by a team within the Department, to fine tune the system, give clarity to the process and to be more comprehensive within its remit. The model gives tariff points to all teaching and Departmental and University administrative duties (a point represents a unit of the size of teaching one undergraduate seminar).

It was felt that the previous WM underestimated the time given to administrative duties, and the review is intended to address this. The open-ended nature of these duties can militate against their being taken on by those whose hours are constrained by family obligations, and this can eventually hinder progression. This issue was recently highlighted in a report 'Promoting Positive Gender Outcomes in Higher Education through Active Workload Management' by the University of Salford, funded through the HEFCE Leadership, Governance and Management Fund, which looked at the gendered effect of academic workload allocation.

As part of the review the WM has been renamed the Contribution Model (CM). An important principle is that it should measure job size rather than incorporating possibly prejudiced (and prejudicial) measures of job 'importance'. A measure which makes disparate jobs commensurable is very important in ensuring both (1) that any gender bias in job assignment does not act against women's careers, and (2) that lack of uniformity in gender representation requirements, such as that there be a woman on every appointment panel, does not result in an increased workload for women. It has been agreed that previously-excluded duties such as sitting on Shortlisting and Interview panels, for which women carry a disproportionate burden, will be included.

We also need to ensure that jobs which are often seen as 'women's work', such as Equality and Diversity, Athena SWAN and Harassment Advisor, are weighted correctly and properly emphasized in departmental support for promotion applications.

As yet, the CM does not include external administration such as External Examining or sitting on Research Council panel meetings. Given that these duties are necessary for UK academic life to run smoothly, and contribute towards fulfilling promotion criteria, this is being addressed.

It is not reasonable to suppose that workload is evenly spread amongst staff in any one year, but we are aiming to equalise within 50 points over a 3 year period.

The Chairs of Committees normally have a 3-5 year rotation, as do the positions of Head of Department and Heads of Section.

**(iii) Timing of departmental meetings and social gatherings:**

We are already learning that a 'one size fits all' approach to networking opportunities is not appropriate. For example, a group of women in the department meet occasionally to make art and drink wine, but this is at a time when those with family responsibilities cannot attend. On the other hand we attempt to socialise Departmental events, such as days on which we are interviewing for positions, by organising buffet lunches to which all staff and often PhD students are invited. On a more informal level, the Campus has a number of good eateries where colleagues gather for lunch and coffee.

Departmental meetings (Boards of Studies and termly Staff Meetings) are being scheduled, where possible, to begin at 1pm so that with a 3pm finish those with family responsibilities can still attend. Some social activities tend to follow these meetings or to be at the end of the afternoon, running into early evening; to complement these, there are also staff lunches, at Christmas and at the annual research away-day.

The University has no 'Core Hours' policy but rather timetables all activities within 9am-6pm. The department, however, ensures that staff meetings, Boards of Studies, colloquia and similar events normally take place within the school day (typically beginning in the very early afternoon), and so can be attended by all. Beyond the official rules we try, as far as possible, to take family responsibilities into account, varying timings of other (e.g. social) events so that no one is systematically excluded (Action 5.5).

**Culture:**

As noted earlier, the first act of the Working Group was for members of the Group (other than the HoD) to conduct personal, informal interviews with all colleagues, with an explicit commitment to anonymity. We examined issues not only of gender but also of age, race and other diversity issues

– after all, our community brings together people who grew up in an enormous range of worldwide cultures and contexts, and have usually worked, at various career stages, in many more. The most positive, and heartening, outcome was the general perception of collegiality – that most colleagues will help and support each other, and are committed not only to the efficiency of the departmental team but to the creation of a pleasant working atmosphere. Both the departmental working atmosphere and the wider national culture within which it sits were viewed favourably in contrast to some others which colleagues had experienced.

However, there were exceptions, with some individuals being viewed as acting less collegially and in less of a 'volunteering' spirit. It was commented that some professors seem unwilling to take on larger administration and leadership roles. There was a view that the Departmental Management Team had been somewhat dysfunctional, and Heads of Section had provided rather variable careers advice. But the predominant view of the overall direction of the department, whose size has nearly doubled over the last decade, is that it is now working hard to create the right structures for its smooth running, and especially to be more transparent in all its workings, especially workload allocation.

First names are used throughout, as is common in most UK universities. There is a slight worrying trend amongst the students to be a little more abrasive in their correspondence. This does not seem to be gender related, but more a wider cultural issue, that we will continue to observe.

#### (iv) **Outreach activities:**

The Department has successfully engaged with outreach activities to young people for a number of years. These range from involvement in York Children's University Taster Week, the University of York STEM residential school, classes to help local school students prepare for STEP examinations and interview preparation, contributing to the *York Festival of Ideas*, and giving talks to the York Experience Summer School. The staff involved in these activities have been largely male, and to a great extent those with young children.

Five members of staff, including Dr [REDACTED], are STEM ambassadors. Two members of staff are the departmental contacts for the Further Mathematics Support programme, which aims to make Further Mathematics A-level available to students in schools where it is not normally taught.

Other than an allowance for being Schools Liaison Officer, as explained above, the Contribution Model does not account for external activities such as these, but it is addressing this deficiency.

We are considering outreach activities that might be particularly useful for girls (Action 2.1). The department now has several young women on its staff, who we hope will provide positive role models for girls.

At a higher level, in 2008 Professor [REDACTED] served as a LMS Public Lecturer, and has given public talks at the Bonner Wissenschaftsnacht (2008) and at the Cambridge Science Festival (2011). Her work was showcased at the Grand Science Tour in York (2012). She also gave a talk at the Florence Nightingale Day at Lancaster University (2013), an event to encourage girls to pursue a career in Mathematics. In 2013, the Department sponsored two students, one female, to audition for the TV Programme 'Hard Sums'.

## Flexibility and managing career breaks

The department has a policy of granting unpaid leave where requested and where possible. The case study of Dr [REDACTED] is not unique.

a)

### (i) Maternity return rate:

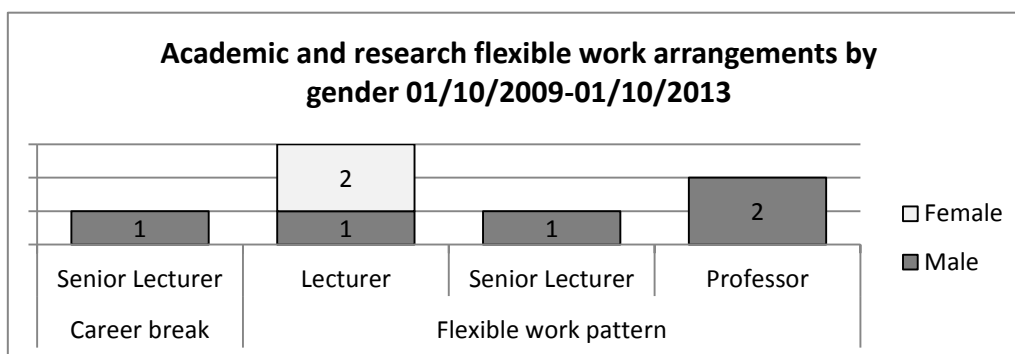
No academic or research staff have taken maternity leave.

### (ii) Paternity, adoption and parental leave uptake:

There have been three instances of paternity leave over the last three years, one at lecturer and two at senior lecturer level. This uptake reflects the age profile of staff – it would probably not be expected that many very senior people (who in mathematics tend to be in mid 40s at least) take paternity leave.

### (iii) Numbers of applications and success rates for flexible working by gender and grade

Seven applications for flexible working were made during the period 10/10/2009-01/10/2013, all citing caring commitments. They were all successful.



b)

### (i) Flexible working:

Most applications received relate to child care commitments, and are normally agreed where possible. For example, academic staff can request their teaching duties to be timetabled between approximately 1000-1600 hours to allow drop off/collection of children. The actual requirements are formally fed through to the Timetabling Office to ensure the member of staff's timetable is scheduled/amended accordingly. Flexible working requests are dealt with by the HoD and Department Manager, and processed via the formal system administered by the Human Resources (HR) Department. Informal arrangements are agreed where it is a temporary or ad hoc arrangement. Full details (policy and forms) of the formal system are available on the HR website. A record of the agreement (authorised by the HoD) is kept in the staff member's personal file. New staff are made aware of flexible working arrangements during the recruitment process and within their letter of appointment issued by the HR Department.

### (ii) Cover for maternity and adoption leave and support on return:

As indicated above, there have been no instances of maternity leave amongst academic staff. However, with a new influx of staff we will formalise a package that would keep colleagues in the



loop' whilst on leave, provide a 're-introduction' on return, and guarantee a reduced teaching load for the first year after that return (Action 6.2).

## **5. Any other comments:**

Having identified one of the critical 'drop off' points in female participation to be at the Master's to PhD transition, we surveyed our Master's students in early 2013. We asked students whether or not they had thought of taking a PhD in mathematics, what they perceived to be the barriers to doing so, what might encourage them in this direction, and whether there were any gender related issues that they perceived, whether at York or in the wider mathematical community.

Thirty students responded to the survey. The results were inconclusive, with no strong feeling that there were extra difficulties for women, nor that York was not 'female friendly'. What was striking that only two students were aware of the Athena SWAN process or of the University's Bronze Athena SWAN award. One or two students made comments concerning lack of mentors and role models, which is certainly a concern (Action 4.4).

The SAT considers that the survey was the first time that, in spite of the discussions at University level, students in this department were actually asked about the difficulties they might face. We will consider a redesign of the survey for the coming academic year, with a possibility of polling penultimate year Integrated Master's students, as well as those in their third year (Action 2.2). Certainly we will do more to advertise our LMS/GPS and Athena SWAN activities (Action 5.6).

## **Some final remarks:**

We would like to emphasise that we are at the beginning of a process which will take time and goodwill to come to maturity. Frankly speaking, the members of the SAT feel that, by and large, the Department is genuinely 'on board' for this ongoing process, with the Head of Department being strongly in favour and other senior figures championing it. We are proceeding via collegiate ownership of this process, without which it will not succeed. Athena SWAN/LMS GPS activities are a standing item at Staff Meetings and Department Management Team Meetings, the latter approving our activities and ensuring implementation of planned actions. The SAT perceives that the origin of some of those difficulties that affect all, but women in particular, lies in the extremely competitive environment in which UK academics are living. The demands of the REF (see Action 1.6) and the relatively new arrangements for undergraduate finances are changing the landscape in which we work to one that is ever more competitive and taxing. It is against this background that Universities and Departments are aiming to alter the landscape by tapping the potential of women scientists. We recognise that this will require dedication and time – but it is crucial for us to move forward as a 21<sup>st</sup> century department. The achievement of a Bronze Athena SWAN award will help us maintain momentum in this vital direction.

## **6. Action plan – attached.**

Action Plan for Athena Swan Bronze Submission - November 2013  
 University of York, Department of Mathematics

Action	Description of Action	Action taken already and Outcome at November 2013	Further Action planned at November 2013	Progress Log	Responsibility	Timescale	Start Date	Success Measure
<b>1.0</b>	<b>Baseline Data and Supporting Evidence</b>							
1.1	Regularly review taught student data (numbers, applications) by gender.  Submit Annual Report to Departmental Management Team.	Data for 3 years collated for application for Bronze Award.	Yearly monitoring		Departmental Undergraduate Administrators  Department Management Team	Yearly	01/12/2013	Maintain or increase proportion of female participation in taught programmes.
1.2	Regularly review research student data (numbers, applications) by gender.  Review application and selection process to understand reason(s) why fewer applications received from female students than male students, and ensure unconscious bias is not built into the process.  Review applications for and awards of DTA grants and Teaching Fellowships by gender, prior qualification and interview score.  Submit Annual Report to Departmental Management Team and Graduate School Committee.	Research student data (numbers and applications) for 3 years collated for application for Bronze Award.	Departmental LMS GPS/AS Working Group to discuss possible barriers to female candidates presenting themselves well at PhD interview.		Graduate Studies Administrator, SAT  Department Management Team	Yearly	Research data = 01/12/2013  Review of selection process = 01/05/2014	Increase proportion of funded female PhD students to match that of applicants.

Action	Description of Action	Action taken already and Outcome at November 2013	Further Action planned at November 2013	Progress Log	Responsibility	Timescale	Start Date	Success Measure
1.3	<p>Regularly review staff appointment data, including RA's and fellowships (number of applications and success rate) by gender.</p> <p>Review application and selection process to understand reason(s) for fewer applications received from female candidates than male candidates, and ensure unconscious bias is not built into the process.</p> <p>Submit Annual Report to Departmental Management Team.</p>	Data for 3 years collated for application for Bronze Award.	Yearly monitoring.		<p>SAT</p> <p>Department Manager</p> <p>Department Management Team</p>	Yearly	<p>Review staff appointment data = 01/12/2013</p> <p>Review application and selection processes = 01/05/2014</p>	<p>Three-year average proportion of women on shortlists should match proportion of women applicants; and proportion of women appointed should match proportion of women on shortlists. (See also Action 3.4)</p>
1.4	<p>Regularly review promotion applications and success rates by gender.</p> <p>Analyse average length of time in each grade by gender.</p> <p>Submit Annual Report to Head of Department.</p>	Data for 3 years (promotion applications and success rates) by gender collated for application for Bronze Award.	Collect data on average length of time in each grade by gender.		<p>Department Manager</p> <p>Head of Department</p>	Yearly	01/10/2013	<p>Maintain female success rates in promotion.</p> <p>Analysis of application and success rates by gender; the time it takes to progress between key grades.</p>

Action	Description of Action	Action taken already and Outcome at November 2013	Further Action planned at November 2013	Progress Log	Responsibility	Timescale	Start Date	Success Measure
1.5	Review student achievement, including prizes, by gender.  Submit Annual Report to Board of Studies.	Data for 3 years collated for application for Bronze Award.	Collect data for first class honours with distinction, by gender; understand female students' achievement relative to achievements at admission.		Departmental Undergraduate Administrators  Chair, Board of Studies	Yearly	01/10/2013	Increase number of women winning prizes to match number obtaining first class honours. Even out the 'tail' in poor achievement by males at undergraduate level.
1.6	Analyse REF internal grading and selection decisions by gender.				Head of Department	Once in REF cycle	01/07/2014	Future research evaluation preparation to eliminate any identified bias.

Action	Description of Action	Action taken already and Outcome at November 2013	Further Action planned at November 2013	Progress Log	Responsibility	Timescale	Start Date	Success Measure
<b>2.0</b>	<b>Undergraduate and Postgraduate Students</b>							
2.1	Development of outreach activities aimed at female school students.	Members of staff already involved in outreach, but not usually gender specific.	SAT to discuss activities and liaise with University SAT for connections; ensure appropriate involvement of women staff in outreach and public engagement activities.		SAT, Departmental Undergraduate Administrators	Rolling Programme	01/11/2013	Maintain or increase number of applications for undergraduate study from female school students; increase involvement of women staff in outreach.
2.2	Questionnaire for final year MMath and MSc students on research ambitions and suitability of department as place to study.	Questionnaire distributed for first time in March 2013.	SAT to discuss and tune format of questionnaire.  Extend to 3 <sup>rd</sup> year MMath students and to all final year students.  Identify and act on any barriers to progression which the department may unconsciously be putting into place.		SAT	Yearly	01/03/2013	Increased number of female Master's students applying and taking up PhD places.

Action	Description of Action	Action taken already and Outcome at November 2013	Further Action planned at November 2013	Progress Log	Responsibility	Timescale	Start Date	Success Measure
<b>3.0</b>	<b>Key Career Transition Points, Appointments and Promotions</b>							
3.1	Yearly review of eligibility for promotion.	At Performance Review, staff can discuss promotion prospects with reviewer.	Ask all staff to submit a CV as part of the Performance Review, and ask the HoD to oversee these with a view to applications for promotion.		Performance Reviewers: Heads of Section, HoD	Yearly	Performance Reviews at end of academic year 2013/14.	More consistent approach by Department to encouraging staff to apply for promotion.
3.2	<p>SAT to consider whether a formal structure is required to support staff at key career transition points.</p> <p>Review departmental Performance Review process to ensure career support is planned as part of annual development plan, ie: checklist that all areas have been addressed and signed by reviewer and reviewee.</p>		Ask advice of HR representatives from York's Gold and Silver Departments.		Currently, SAT. Eventually, HoD and Department Manager	Spring 2014	<p>SAT to discuss in Summer 2014.</p> <p>For promotion applications in 2014/15.</p>	<p>Greater clarity, as verified by Staff Survey, amongst staff in what is needed to be promoted and confidence to make the application; access to support such as leadership training.</p> <p>Target: average promotion success rates by grade and gender should match University-wide success rates.</p>

Action	Description of Action	Action taken already and Outcome at November 2013	Further Action planned at November 2013	Progress Log	Responsibility	Timescale	Start Date	Success Measure
3.3	Encourage culture of female seminar speakers.	The department has a number of research seminar series. Some staff members active in seeking female speakers.	All staff written to and asked to bear in mind gender balance of seminar programmes.		SAT	Yearly	01/01/2013	Overall, ensure overall proportion of female seminar speakers per annum matches the proportion of female mathematicians nationally.
3.4	Staff to identify suitable female potential applicants and encourage them to apply for positions within the department.  (See also Action 5.2)		SAT to discuss procedure involving Head of Department and Heads of Section inviting suitable female candidates to apply, on the recommendation of colleagues.  When positions are vacant, ask all staff to contact suitable candidates, with a particular view to encouraging female applications.		Currently, SAT. Eventually, HoD and Heads of Section	Rolling programme	SAT to discuss in Summer 2014	Maintain ratio of female applicants for junior positions; increase the ratio of female applicants for senior positions to match national proportions at the relevant grade.

Action	Description of Action	Action taken already and Outcome at November 2013	Further Action planned at November 2013	Progress Log	Responsibility	Timescale	Start Date	Success Measure
<b>4.0</b>	<b>Career Advice and Support</b>							
4.1	Review and monitor uptake of Mentoring Scheme for Staff and Researchers.	A mentoring scheme is in place, but not well used and advertised.	SAT or another Working Group will review mentoring scheme and disseminate information via departmental staff pages. Incorporate mentoring into Contributions Model.	Greater consistency in assigning mentors to new staff from 2013/14.	SAT or specific Working Group for the review; then Department Manager to monitor.	Mentoring scheme already in place.	Already in place.  To be reviewed 01/05/2014.	Scheme revised and information available by Summer 2014; increased uptake of mentoring opportunities.
4.2	Promote career development for Researchers: training for advisors (supervisors and mentors) and PIs.	The University has a range of training opportunities.	Researchers will be regularly informed of training opportunities.	Graduate Studies Administrator currently disseminates information to relevant staff.	Department Manager, Graduate Studies Administrator	Information disseminated whenever available.	01/03/2013	Establish baseline for current attendance at training events. Target: 50% increase in researchers' and PIs' attendance at training events.
4.3	Monitor completion of Performance Reviews by gender.	Process already in place to ensure Performance Reviews undertaken annually during Autumn Term.	Existing process to continue.	100% completion is standard.	Department Manager	Yearly	Already in place.	Maintain 100% compliance.



Action	Description of Action	Action taken already and Outcome at November 2013	Further action planned at November 2013	Progress Log	Responsibility	Timescale	Start Date	Success Measure
4.4	SAT to discuss the possibility of establishing a system of Woman Tutor(s) to provide personal and academic pastoral support to female students.	Informal mentoring of female students by female staff.	<p>To be raised at Spring 2014 meeting.</p> <p>Formal procedure to be implemented and publicised to students.</p> <p>Role to be included in Contributions Model.</p>		SAT; then Women Tutors and Chair of Board of Studies	SAT to review in Summer 2014.	Appointment to be made from 01/10/2014 if appropriate	Female tutor(s) to be available to advise female students; review participation in this initiative.

Action	Description of Action	Action taken already and Outcome at November 2013	Further Action planned at November 2013	Progress Log	Responsibility	Timescale	Start Date	Success Measure
<b>5.0</b>	<b>Culture, Communications and Departmental Organization</b>							
5.1	Written statements of role definition for departmental administrative positions to be drafted.	Preliminary work has been done on specific role descriptions.	Role definitions and responsibilities will be constructed and posted onto staff web pages.		Department Manager; Department Management Team	Continuous updates as roles evolve.	Completion of written statements by 31/03/2014	Clearer lines of communication and greater understanding of staff administrative roles and responsibilities, verified by Staff Survey.
5.2	New staff webpages with information on working practices, flexible working, research leave and departmental culture.	Re-design of website has been initiated. Two bids submitted and awaiting feedback: (1) Support for an intern in Spring 2014 to update website requested from Central funds, and (2) Additional funding to upgrade website has been requested from Senior Management Group in November 2013.	In progress.	SAT is compiling a list of information to be made available.	SAT, Departmental Administrators	Annual review	01/07/2014	New staff having clearer and readily accessible information, verified by Staff Survey.
5.3	Ensure clear guidance on procedures for applying for travel funds is available to staff.	Policy agreed. Record of staff attendance at conferences and invitation to speak already maintained by Research Administrator.	Policy to be clearly published on staff webpages.		Departmental Administrators	Updates as and when policy changes.	01/01/2014	Staff taking full advantage of opportunities to travel/speak at conferences.

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5.4	Address unconscious bias - invite Paul Walton (Head of Chemistry when it received Gold Athena SWAN award) to speak to DMT.		Departmental Manager to invite Paul Walton to give presentation at DMT meeting.		Department Manager		Spring 2014	
5.5	Continue to adhere and support University policies on flexible working.	We already adhere to University policies on flexible working.  Currently we attempt to organise Staff meetings and Colloquia between 1.00pm and 3.00pm.	SAT to consider developing a policy.		SAT and Department Management Team, and then Department Manager.	Spring 2014	01/10/2014	Departmental culture that promotes flexible working and supports a work-life balance, as measured by University Staff Survey.
5.6	Better promotion of Athena Swan and LMS GPS, eg: website, job adverts, departmental promotional material and communications.  If successful in Bronze Award Submission, display Athena Swan logo on departmental website.	LMS GPS logo displayed on our department website homepage.	SAT to consider how to promote awareness of Athena Swan and LMS GPS.		SAT	Summer 2014	01/01/2015	Increase in number of female students applications.  Increase in number of applications from female candidates for staff positions.  Awareness verified from Staff Survey.

Action	Description of Action	Action taken already and Outcome at November 2013	Further Action planned at November 2013	Progress Log	Responsibility	Timescale	Start Date	Success Measure
<b>6.0</b>	<b>Career Breaks/Flexible Working</b>							
6.1	Better access to information on Work-Life Balance: Staff webpage devoted to links to HR and outside webpages concerning flexible working, parental leave etc. (See Action 5.2).	Departmental Administrators already working on this. (See Action 5.2 re: request for support to upgrade website).	Webpage to be designed and produced during 2014.		Departmental Administrators	Yearly updates	01/10/2014	Maintain uptake of flexible working arrangements, leave etc; staff more comfortable with openness and access to information and use of policies. Verified by feedback from Staff Survey.
6.2	Develop a support programme for women on and returning to work after maternity leave.		SAT to design a support programme to facilitate the return to work of women following maternity leave, including a reduced overall expectation of contribution reflected in the department's Contribution Model.		SAT and Department Management Team	Autumn 2014	01/10/2015	Clear policy to support women returning to work and re-integrating into scholarship and research.

**Key to Acronyms and Abbreviations:**

1. AS = Athena Swan
2. DTA = Doctoral Training Allocation
3. HoD = Head of Department
4. LMS GPS = London Mathematical Society Good Practice Scheme
5. PI = Principal Investigator (of Research Project)
6. RA = Research Associate
7. SAT = Departmental Self-Assessment Team
8. L = Lecturer
9. SL = Senior Lecturer
10. R = Reader
11. P = Professor