The University Of Sheffield.

School Of Mathematics & Statistics.

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Athena SWAN Coordinator
Equality Challenge Unit
Queen's House
55/56 Lincoln's Inn Fields
London WC2A 3LJ

26th November 2013

Dear Athena SWAN Coordinator,

I want to explain my personal commitment to the project of making the School of Mathematics and Statistics (SoMaS) a pleasant and civilized place to work for both men and women. Nationally, mathematics was rather slow to confront the challenges, but the London Mathematical Society published its Good Practice Benchmarking Survey in February 2013, and I am pleased to have been a core member of the GPS Steering Group that organized this. This records the current context of mathematics departments in the country, and the really significant task is to improve the situation in individual departments.

SoMaS has only existed in its present form for about 5 years so the process of building a common identity and culture is ongoing. In Autumn 2012 we set up a Good Practice Group (GPG) with five members to champion good practice. A key goal for the GPG is to address the issues of gender equality across the School. The GPG began with three surveys of various categories of staff to identify good practice and to discover where things were not working well. The GPG formulated a series of recommendations, which were intended to be concrete proposals for changing

procedures and processes with a view to improving the situation. These were circulated, discussed, amended and finally formally adopted and posted on the School intranet. Since then an expanded GPG has been overseeing the initial implementation of the recommendations, and will continue to monitor how they work.

We have initiated discussions with HR about the provision of training courses that raise awareness amongst colleagues about issues such as unconscious bias. Some staff have already undertaken training, and our policy is that all staff involved in selection processes should do so. We have engaged with all levels of the Department – from students to professors – to discuss the issues around equality and diversity. We encourage general discussions about how we can improve our recruitment and retention of women staff, and we have attempted to capture the best ideas more formally. Our single biggest challenge is to attract more applications from women for academic posts, and we hope that an increased awareness of the progress we have made towards a family-friendly culture, flexible working and mentoring schemes will help.

The reflection of where we are now, where we want to be, and how we get there has been sobering, but constructive. It has given visibility, unity and momentum to a process that had begun spontaneously in a number of unconnected ways. The time is right for us to apply for Athena SWAN Silver. The process of applying has been informative and extremely challenging; it is easy to be daunted by the distance we have to travel, but on good days I am encouraged by the start we have made.

It has been a pleasure to play a part in working on our Athena SWAN Silver application and to put the ideals at the heart of the School' s continuing process of building a common identity and culture.

Yours sincerely,

Prof. John Greenlees

# Athena SWAN Silver department award application

**Name of university:** The University of Sheffield (TUoS)

**Department:** School of Mathematics and Statistics (SoMaS)

**Date of application**: November 2013

**Date of university Bronze and/or Silver Athena SWAN award:** Bronze April 2013

**Extra words agreed with Harri Weeks (by email 25 Nov 2013) as follows: 500 words to be used throughout the application and indicated where used (see Section 3).**

**Contact for application**: Professor John Greenlees, Head of School (HoS)

**Email:** J.Greenlees@sheffield.ac.uk

**Telephone**: 0114 2223786

**Departmental website address:** http://www.sheffield.ac.uk/maths

Athena SWAN **Silver Department** awards recognise that in addition to university-wide policies the department is working to promote gender equality and to address challenges particular to the discipline.

Not all institutions use the term 'department' and there are many equivalent academic groupings with different names, sizes and compositions. The definition of a 'department' for SWAN purposes can be found on the Athena SWAN website. If in doubt, contact the Athena SWAN Officer well in advance to check eligibility.

It is essential that the contact person for the application is based in the department.

## Sections to be included

At the end of each section state the number of words used. Click here for additional guidance on completing the template.

## 1. Letter of endorsement from the head of department: maximum 500 words

An accompanying letter of endorsement from the head of department should explain how the SWAN action plan and activities in the department contribute to the overall department strategy and academic mission.

The letter is an opportunity for the head of department to confirm their support for the application and to endorse and commend any women and STEMM activities that have made a significant contribution to the achievement of the departmental mission.

I want to explain my personal commitment to the project of making the School of Mathematics and Statistics (SoMaS) a pleasant and civilized place to work for both men and women. Nationally, mathematics was rather slow to confront the challenges, but the London Mathematical Society published its Good Practice Benchmarking Survey in February 2013, and I am pleased to have been a core member of the GPS Steering Group that organized this. This records the current context of mathematics departments in the country, and the really significant task is to improve the situation in individual departments.

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**John Greenlees** (Total words in Section 1: 500)

## 2. The self-assessment process: maximum 1000 words

Describe the self-assessment process. This should include:

a) A description of the self assessment team: members' roles (both within the department and as part of the team) and their experiences of work-life balance

The self-assessment team was established in October 2012, by the Head of the School (HoS) of Mathematics and Statistics (SoMaS). Within the School, the team refers itself as the Good Practice Group (GPG) and includes academic, support and research staff of both genders. In its initial form, the GPG consisted of 5 members (both academic and support staff). However, during its activities the GPG found that it needed to expand and now includes junior members of academic staff. The role of the GPG is not only to analyse the current culture within the School and propose improvements to current practices, but also to set out a plan of action to implement agreed changes. A principal focus of the GPG is to seek reasons for and begin to redress the current imbalance between the genders in the School.

The Athena Swan team is as follows.

**Professor Caitlin Buck** has a BSc in Archaeological Sciences (1987) and a PhD in Statistics (part-time, 1994). She joined the Department of Probability and Statistics in 2001 after seven years in the School of History and Archaeology at Cardiff University. She was promoted to Senior Lecturer in 2004 and Chair in 2007. Until 2013, she was SoMaS Director of Postgraduate Research and from Jan 2014 she will become the Undergraduate Admissions Tutor; she is also a member of Research Committee and a SoMaS Athena SWAN Champion. At University-level, she is co-founder of the Women Professors' Network and Vice-chair of the Women@TUoS NETwork. She is married with no children and her husband fits his (unpaid) work around hers.

**Dr Sam Dolan** joined SoMaS in 2012, following post-doctoral fellowships at University College Dublin (2007-09) and the University of Southampton (2009-12). He was appointed as a Lecturer in Sept 2013, and has recently taken on roles as Schools Liaison Officer and Learning & Teaching Advocate. He is working towards the Certificate in Learning & Teaching (CiLT) qualification, and is involved in a variety of Outreach activities. He is married and became a father in January 2013.

**Professor John Greenlees** (Head of School, HoS) joined the Department of Pure Mathematics as a Lecturer in 1990 after 3 years at NUS (Singapore) and a year in the University of Chicago. He was promoted to Reader in 1993 and to a Personal Chair in 1995. He has served as Head of Pure Mathematics (2004-08) and has been Head of School since 2010; he also is a SoMaS Athena SWAN Champion and is Co-chair of the London Mathematical Society Women in Maths Committee. John is married; his wife has fitted her career around his, and the care of their two daughters (now aged 26 and 21).

**Dr Paul Mitchener** joined SoMaS as a temporary Lecturer in 2007, and his position was made permanent in 2008. He came to SoMaS following post-doctoral positions in Goettingen, Paris and Odense. He is a member of the SoMaS admissions team, and is module leader for the Undergraduate Ambassadors Scheme, which sends SoMaS students

to local schools. He joined the GPG in October 2013. Paul is attached with no children. His partner has multiple sclerosis.

**Ms Stephanie Sharples** (Personal Assistant to HoS), joined the department in July 2012. She is active in promoting gender equality through attending and sharing information from the Women@TUoS NETwork events. Stephanie is attached with no children. She has personal experience of studying part-time whilst working full-time.

**Professor Carsten van de Bruck** joined the Department of Applied Mathematics as a lecturer in 2004 from Oxford University, where he was a postdoctoral researcher. He was promoted to Professor in 2013 (Senior Lecturer in 2008, Reader in 2011). He is the Admissions Tutor for SoMaS, was member of the SoMaS Research Committee until recently and is member of the Faculty of Science External Relations and Marketing Working Group. Carsten is married to a conservator of stone objects and wall paintings. The couple have no children.

**Dr Sarah Whitehouse** joined SoMaS as a Lecturer in 2002, from Lens, France. Previously she was a post-doctoral researcher in Paris. She was promoted to Reader in 2009 (Senior Lecturer 2005). She is currently our Coordinator of Support Teaching and previously was Assessment Coordinator. She is SoMaS representative on the Faculty of Science Equality and Diversity Committee. She and her partner have one daughter (4) and she took maternity leave in 2009-10.

(721 words)

b) an account of the self assessment process: details of the self assessment team meetings, including any consultation with staff or individuals outside of the university, and how these have fed into the submission

After GPG was formed in October 2012, a School Away Day was held (07.11.2012) at which academic and research staff had the opportunity to share their views and concerns about a) The Processes of Appointment and Promotion, b) Career Development, c) Organisation and Culture and d) Flexibility of Working Practices. The outcome of that meeting allowed GPG to prepare a set of recommendations to address the concerns identified. The recommendations were distributed to all members of academic and research staff to allow for possible feedback. Since then, the GPG meets on a monthly basis. An action plan was formed early in 2013 and the resulting recommendations adopted on 4th February 2013. In addition, a questionnaire was circulated to female members of academic staff, to which all but one responded. Alongside this, Prof Greenlees, Dr Whitehouse and Prof Buck have participated in implicit bias training offered by the university. All these activities helped in shaping our submission.

(156 words)

c) Plans for the future of the self assessment team, such as how often the team will continue to meet, any reporting mechanisms and in particular how the self assessment team intends to monitor implementation of the action plan.

We will encourage all SoMaS staff members to engage with the self-assessment as they have in the last year. Athena SWAN activities are an agenda item for our regular School meetings, with reports on progress and requests for feedback on the current

implementation from all members of staff. The GPG will continue to meet twice a semester to examine and discuss the progress of the implementations of the action plan and make sure that implemented recommendations are successful and maintained **(Action 1.9)**. We will share our good practice activities within the Faculty of Science and University by discussing our progress and experiences within the Faculty Equality and Diversity Committee (one GPG member is a member). **(Action 1.10)**

(117 words)

(Total words in Section 2: 994)

## 3. A picture of the department: maximum 2000 words (plus 459 of extra allowance)

a) Provide a pen-picture of the department to set the context for the application, outlining in particular any significant and relevant features.

The School of Mathematics and Statistics (SoMaS) of the University of Sheffield (TUoS) is one of the UK's largest departments of mathematics and statistics. We have research strengths in many areas of pure and applied maths and statistics, including internationally leading groups in Solar Physics, Statistics and Topology. Other research areas are Algebra and Algebraic Geometry, Category Theory, Differential Geometry, Fluid Dynamics, Mathematical Biology and Environment, Number Theory, Particle Astrophysics and Gravitation, and Probability. In RAE2008 our research was ranked 13th in the UK for pure mathematics, 13th for statistics and 28th for applied mathematics. We teach a broad undergraduate programme in mathematics and statistics, including various dual degrees and programmes with languages and study abroad. Our undergraduates include international students from around the world. Our teaching was ranked 29th for mathematics in the UK by The Complete University Guide 2013.

SoMaS has 53 academic staff, 11 research staff, around 85 postgraduate students and 27 technical and administrative staff. Our undergraduate intake is currently around 150 students per year and our postgraduate intake is approximately 20 students per year.

(179 words)

b) Provide data for the past three years (where possible with clearly labelled graphical illustrations) on the following with commentary on their significance and how they have affected action planning.

**Student data**

(i) **Numbers of males and females on access or foundation courses** – comment on the data and describe any initiatives taken to attract women to the courses.

We have a Mathematics with a Foundation Year programme, the numbers on which are very small. There was one student (female) registered in 2010-11, none in 2011-12 (but two students, both male, transferred in from other Foundation Year programmes and went on to the maths degree) and none in 2012-13.

(50 words)

(ii) **Undergraduate male and female numbers** – full and part-time – comment on the female:male ratio compared with the national picture for the discipline. Describe any initiatives taken to address any imbalance and the impact to date. Comment upon any plans for the future.

We have a three year full-time BSc in Mathematics and a four year full-time MMath programme. Other programmes include a BSc in Financial Mathematics, various dual degrees, MMath programmes with Study in Europe, with languages and with Study in Australia/North America. The four year MMath is the standard route for students wishing to continue Mathematics at postgraduate level. The total intake onto all programmes varies between around 150 and 250 students. The percentages of male and female students on these programmes in the last three years are shown in Figure 1 (integers on bars indicate the number of students in each category).

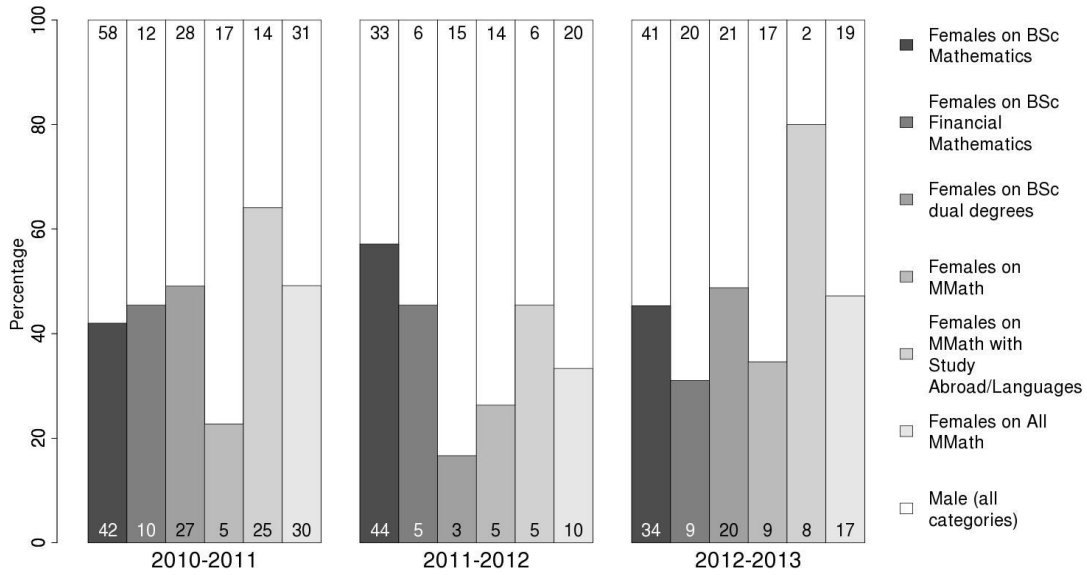


**Figure 1. Percentages of female and male registrations on various undergraduate programmes (integers on bars indicate the raw numbers of students in each category).**

The national picture for mathematics (LMS, 2010-11 figures) is that the percentage of female students is 44% at first degree level. On the BSc in Mathematics, our undergraduate profile is in line with this, with our percentage of women varying from 42% to 57% over the last three years. The BSc in Financial Mathematics has a similar profile. The figures are strikingly lower on the straight MMath, however, varying between 22% and 35%. This difference is potentially important given that the MMath is the usual route to postgraduate study, and action is planned from this academic year **(Actions 2.3, 2.4, 2.5).** On the other hand, there are high numbers of women on the MMath programmes with Study Abroad and with languages. On dual degree programmes there was a big drop in female representation in 2011-12, but this appears to be a one-year anomaly. It coincided with a big drop in overall numbers on these programmes.

During 2013-14, our Student Ambassadors for Learning and Teaching (SALT) are exploring career aspirations of both female and male students across the Faculty of

Science, including, stereotypes, perceptions, differences between life and physical sciences, and whether these are influenced by level of attainment. Once the survey is complete, GPG will work closely with the SALTs to learn what we can from their research and implement any appropriate recommendations they make.

(327 words)

(iii) **Postgraduate male and female numbers completing taught courses** – full and part-time – comment on the female:male ratio compared with the national picture for the discipline. Describe any initiatives taken to address any imbalance and the effect to date. Comment upon any plans for the future.

We have well-established MSc programmes in Statistics, Statistics with Medical Applications and Statistics with Financial Mathematics, which are offered in 1 year full-time (residential) and 2 or 3 year part-time (distance learning) modes. All three MSc courses in Statistics provide both a practically based professional statistical training and a foundation for those wishing to pursue further research. Altogether the annual in-take is around 30 students across all three statistics MSc programmes, with the break-down by gender in each of the last three years shown in Figure 2. A new MSc in Mathematics started in 2012-13. We also have a Graduate Certificate in Statistics (Figure 3). This is a nine month part-time distance learning course, intended as a preliminary course for entry to two of the MSc courses. Around 20 students complete each year.

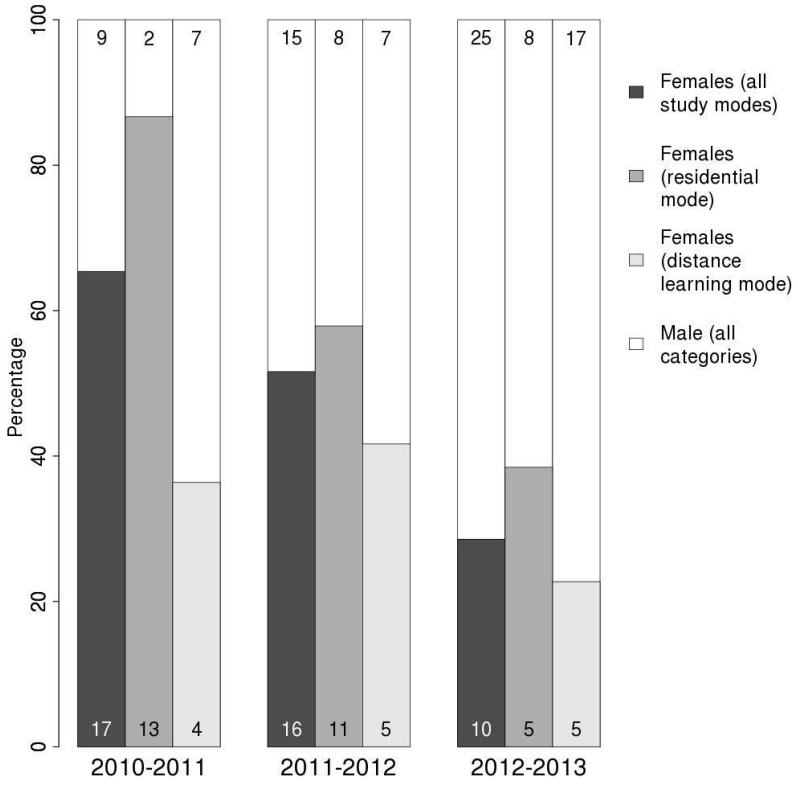


**Figure 2. Percentages of female and male students on all MSc Statistics programmes (integers on bars indicate the raw numbers in each group)**

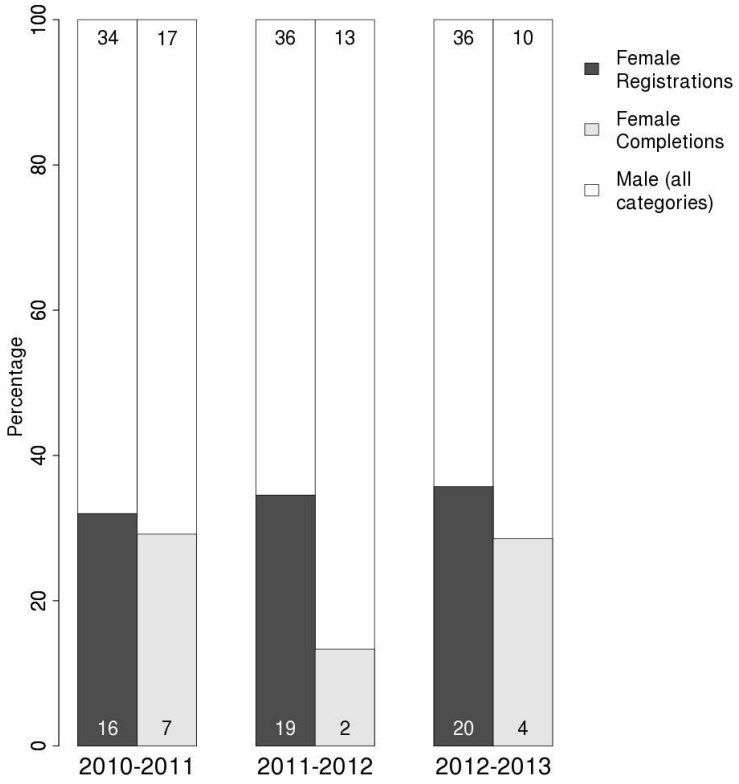


**Figure 3. Percentages of female and male registrations and completions on the Graduate Certificate in Statistics (integers on bars indicate the raw numbers in each group).**

On the statistics MSc programmes the percentage of women has varied between around 35% and 70% over the last three years. The mathematics MSc started in 2012-13, with just 2 students (1 male, 1 female) in the first cohort. The national picture for mathematics (LMS, 2010-11 figures) is that 34% of masters level students are female. For statistics, the national figure is 47% (Committee of Professors of Statistics, 2012).

Although the numbers on all our MSc programmes are relatively small, Figure 2 provides some evidence of a recent decline in the percentage of female applications and registrations on the Statistics MScs. GPG does not have particular concerns about this since the change is from values at or above the national average to ones that are just below. Nonetheless equivalent gender statistics will be reported annually to GPG and will be kept under review. GPG will work with the relevant MSc Admissions Tutors to rectify any clear differences from the national discipline averages **(Action 2.6)**.

(299 words)

(iv) **Postgraduate male and female numbers on research degrees** – full and part-time – comment on the female:male ratio compared with the national picture for the discipline. Describe any initiatives taken to address any imbalance and the effect to date. Comment upon any plans for the future.

We offer PhD programmes in Pure Mathematics, Applied Mathematics and Probability and Statistics. We have a total of around 85 PhD students with an intake of around 20 per year. The percentage of women among the PhD intake for each of the last four years is shown in Figure 4. The LMS 2010-11 national figure for all mathematics is 25%. Women are especially under-represented in pure mathematics and less so in statistics. Our figure was well above the LMS National figure in 2010-11, roughly in line in 2011-12, very low in 2012-13 and back up in 2013-14.

Our webpages for prospective postgraduate students have been carefully revised. They feature profiles of six PhD students, 3 male and 3 female, from different areas of mathematics and statistics.

The gender imbalance in 2012-13 registrations was a cause of concern: there was just 1 new female student in the intake, out of 20. Detailed analysis of our applications process and success rates by gender was carried out and acted upon – see the section on applications and offers for further details. The figures for 2013-14 are much improved; including those who have accepted offers but not yet registered, there are 8 female and 12 male students, that is 40% female **(see also Actions 2.3, 2.4)**. In order to ensure that we are offering our female PhD students the support they need to succeed, the newly appointed Early Career Support Officer **(Action 1.1)** and PGR Director will establish a Female PG Forum with a small budget to allow them to meet, to invite speakers and to discuss career development issues **(Action 3.5)**.

(267 words)

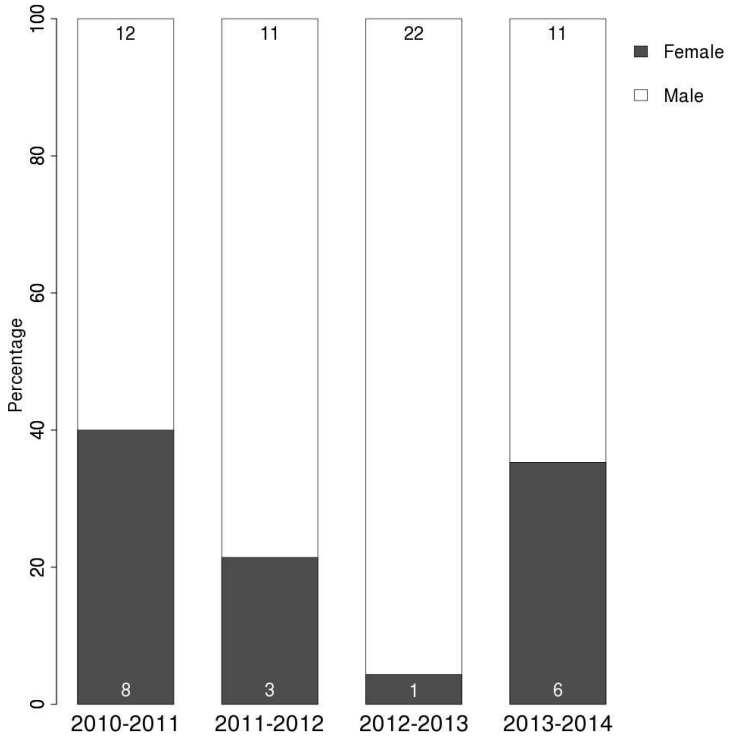


**Figure 4. Percentages of female and male registrations on postgraduate research programmes (integers on bars indicate the raw numbers of students in each category).**

(v) **Ratio of course applications to offers and acceptances by gender for undergraduate, postgraduate taught and postgraduate research degrees** – comment on the differences between male and female application and success rates and describe any initiatives taken to address any imbalance and their effect to date. Comment upon any plans for the future.

Figures 5 to 10 give data for undergraduate programmes. On the mathematics programmes (Figures 5 to 9) there appears to be no particular gender difference in success rates. As discussed above there are differences in female representation between programmes, but overall these reflect application numbers.

The picture for dual degrees taken alone, however, is rather unclear (Figure 10). In 2011-12 (only) there appears to be an issue with female acceptances not translating into registrations. The numbers involved are small though. There was a very significant drop in total registrations on our dual BSc programmes between 2010-11 and 2011-12 (55 to 18); the low percentage of women in 2011-12 corresponds to 3 out of 18 registrations.

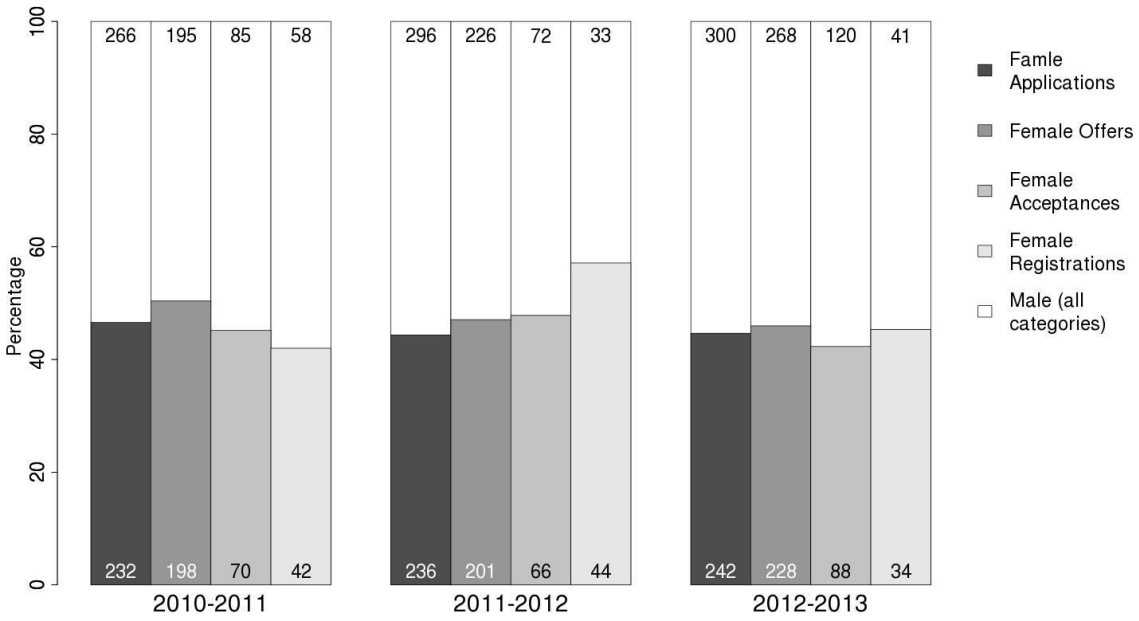


**Figure 5. Percentages of female and male applications, offers, acceptances and registrations on the BSc Mathematics (integers on bars indicate the raw numbers in each category). (Application cycle in stated year, for entry the following year.)**

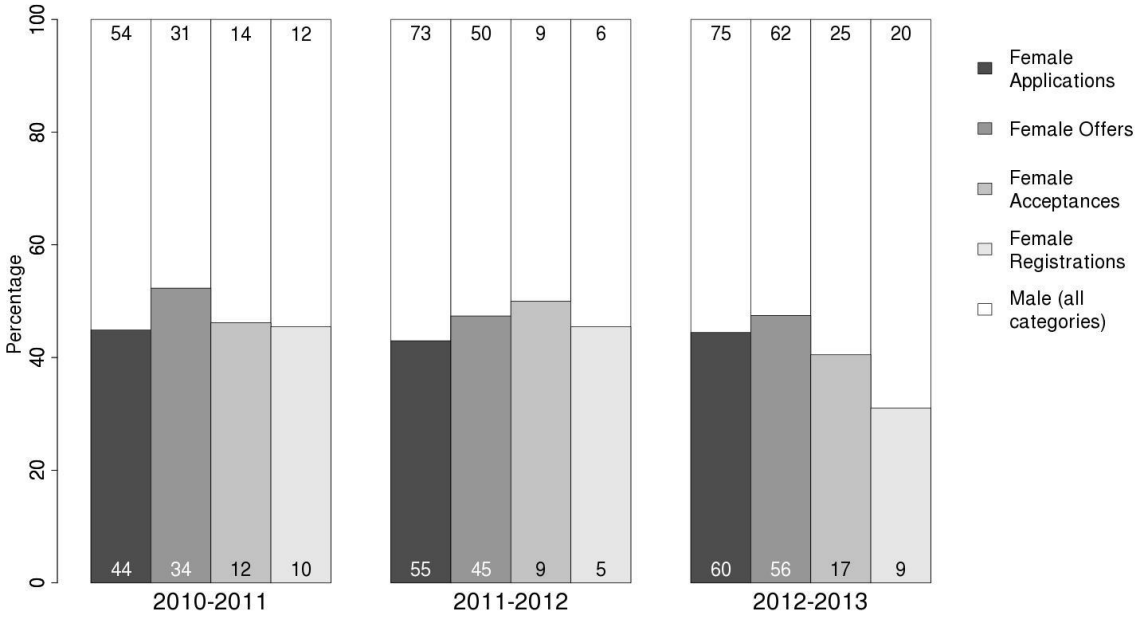


**Figure 6. Percentages female and male applications, offers, acceptances and registrations on the BSc Financial Mathematics (integers on bars indicate the raw numbers of students in each category). (Application cycle in stated year, for entry the following year.)**

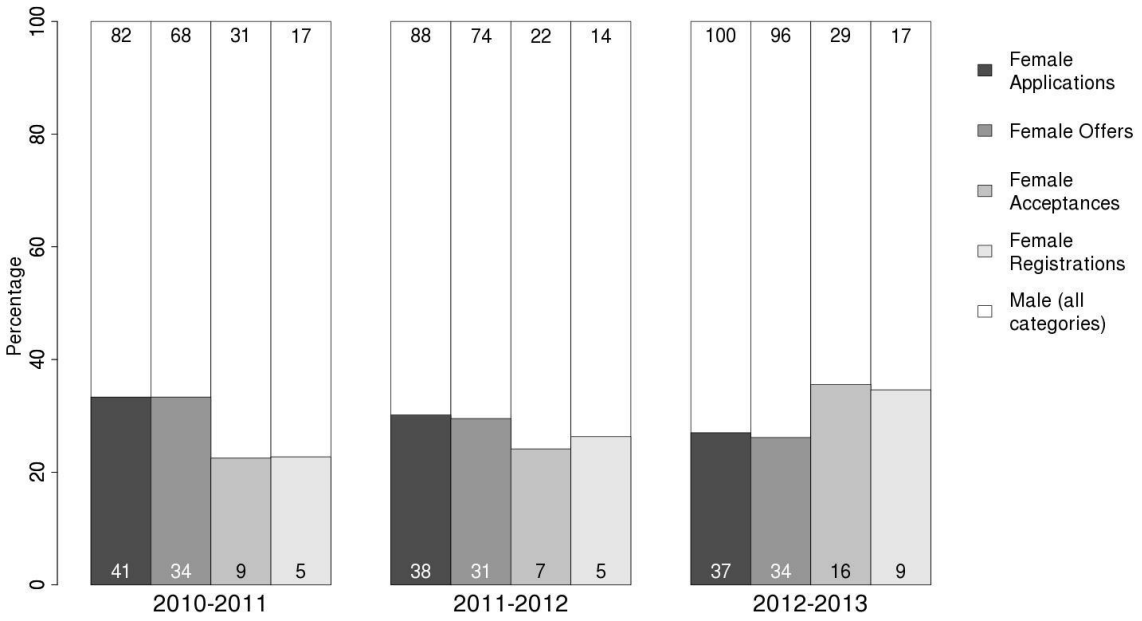


**Figure 7. Percentages of female and male applications, offers, acceptances and registrations on the MMath Mathematics (integers on bars indicate the raw numbers of students in each category). (Application cycle in stated year, for entry the following year.)**

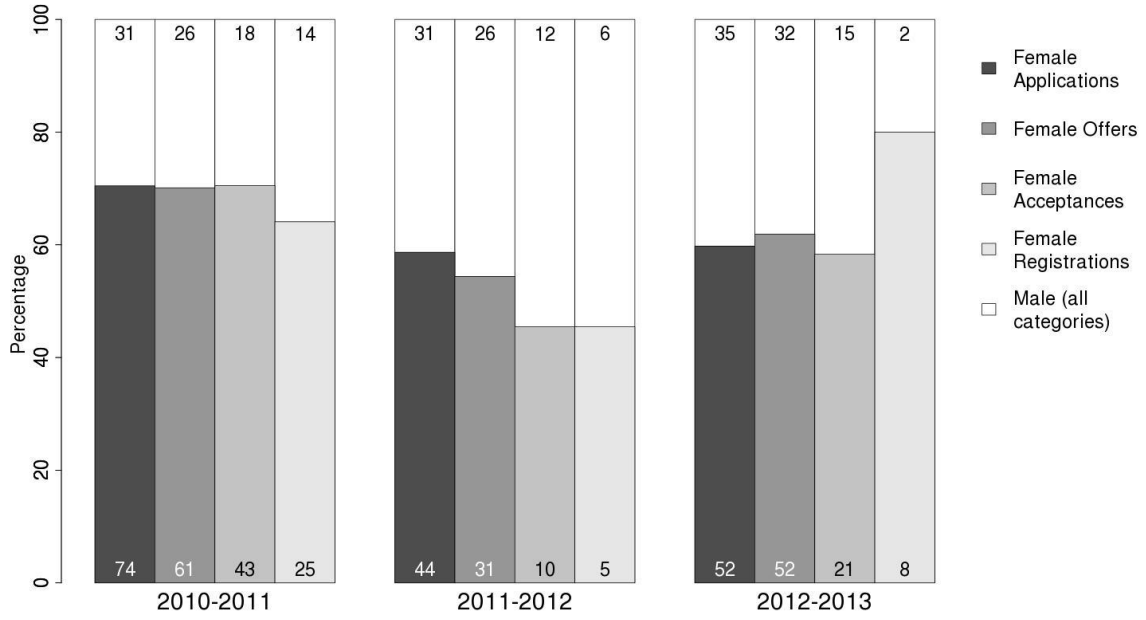


**Figure 8. Percentages of female and male applications, offers, acceptances and registrations on MMath Mathematics programmes with Study in Europe, Study Abroad or languages (integers on bars indicate the raw numbers of students in each category). (Application cycle in stated year, for entry the following year.)**

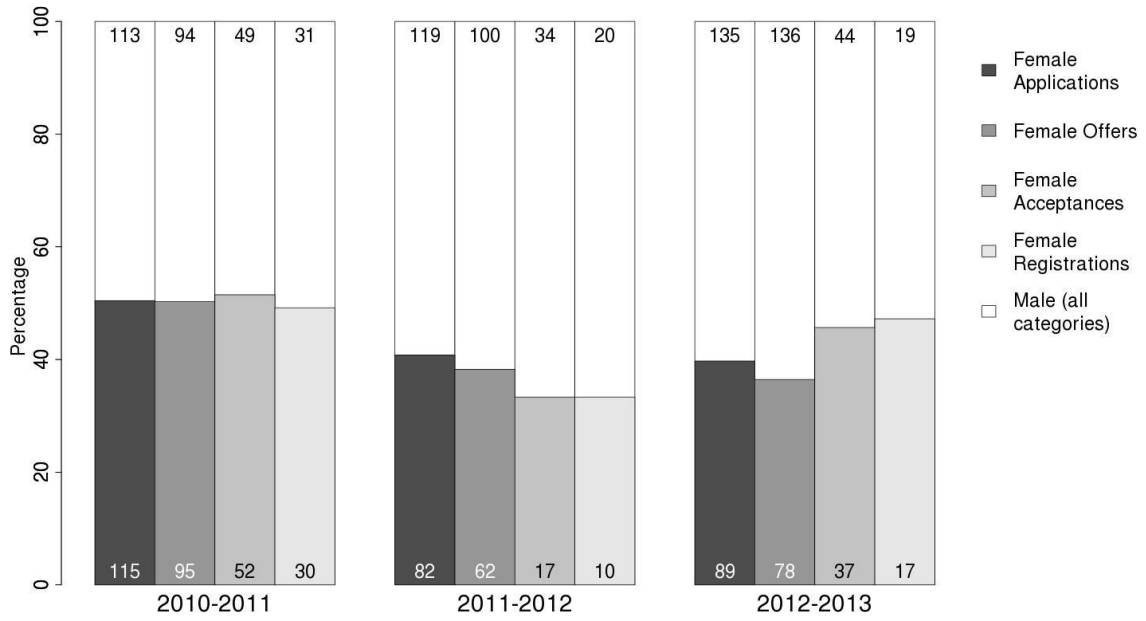


**Figure 9. Percentages of female and male applications, offers, acceptances and registrations on all the MMath Mathematics programmes combined (integers on bars indicate the raw numbers of students in each category).**

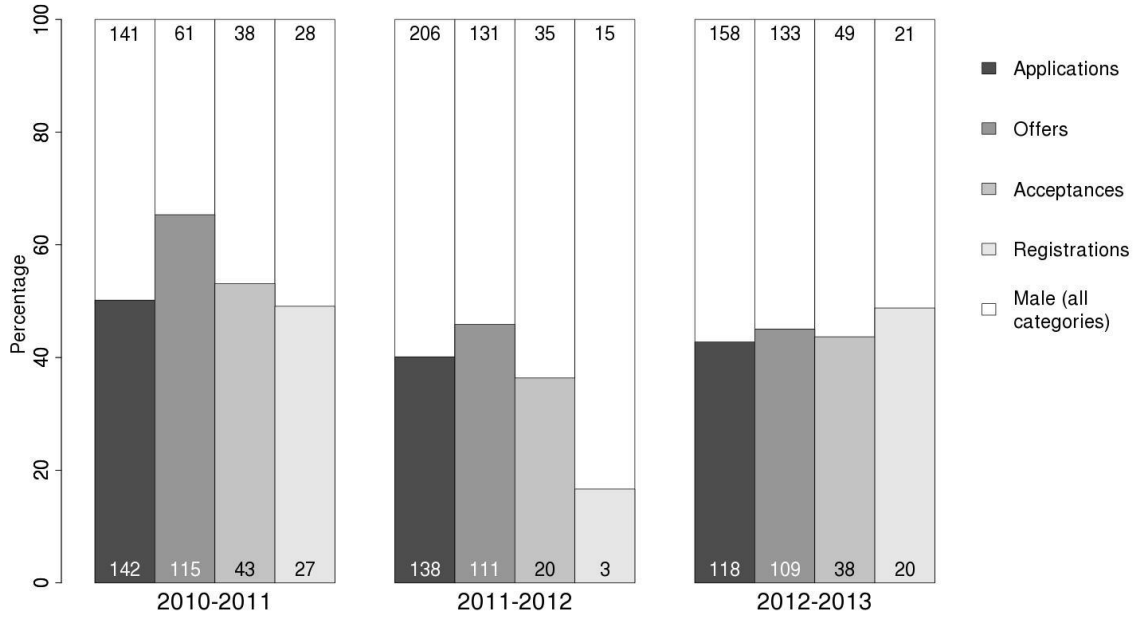


**Figure 10. Percentages of female and male applications, offers, acceptances and registrations on mathematics dual BSc degrees (integers on bars indicate the raw numbers of students in each category). (GG41 Computer Science and Mathematics, LG11 Economics and Mathematics, NG21 Business Management and Mathematics, NG41 Accountancy and Financial Management and Mathematics, VG51 Mathematics and Philosophy). (Application cycle in stated year, for entry the following year.)**

We have female representation on our undergraduate Admissions Team and we plan to increase visibility of female academics at our Open Days from January 2014 when the team will be led by a woman. Most academic staff members take part in interviewing prospective undergraduate students including several women. Female undergraduates are well-represented among the helpers at our Open Days. Our website includes positive images of current female undergraduates and postgraduates and we will regularly review this to ensure gender balance. The undergraduate profiles on our website feature one female and one male undergraduate. We run an active outreach programme for local school pupils and an Undergraduate Ambassador Scheme (UAS) where our undergraduates work in local schools. Currently our Chair of Schools Liaison is male, but this role was held by a woman until recently, and female students are well-represented among those on the UAS, thereby increasing visibility of female role models. We will continue to collect and monitor gender statistics for outreach activities, UG applications and registrations, with annual reporting to GPG **(Actions 2.1, 2.2)**.

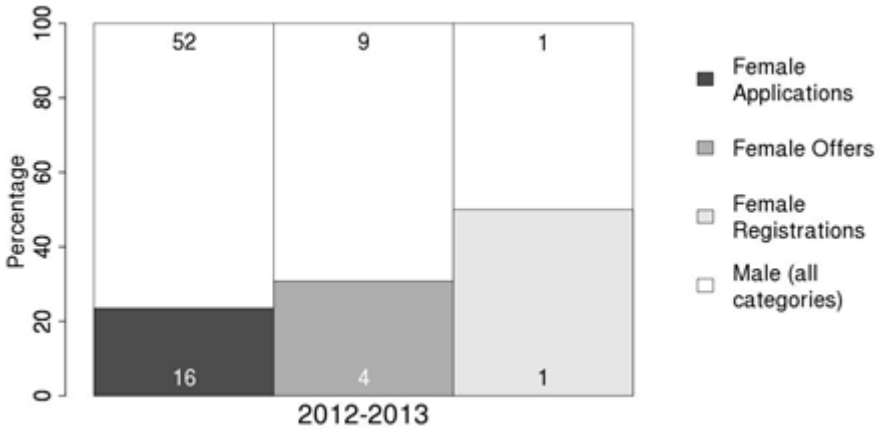


**Figure 11. Percentages of female and male applications, offers and registrations on (new) mathematics MSc (integers on bars indicate the raw numbers of students in each category).**

Women made up around a quarter of the 68 applications to the new MSc in mathematics (Figure 11) and were more likely than men to be offered a place. Just two students registered (1 male, 1 female). They make up more than half the applicants, offers and acceptances on the residential versions of our MScs in Statistics and 30-40% on the distance learning versions (Figure 12).

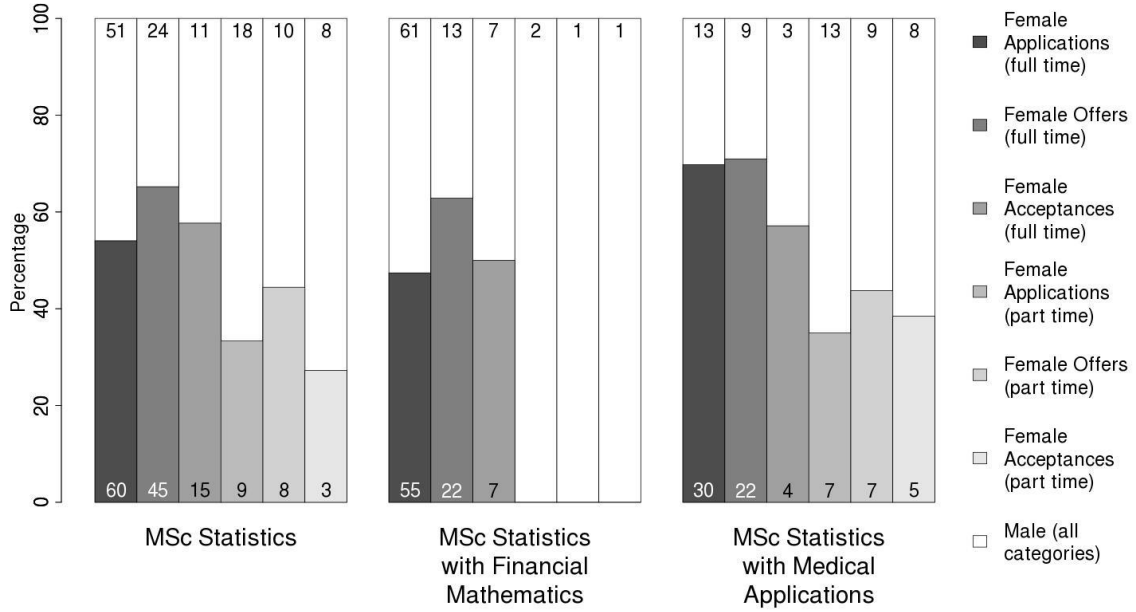


**Figure 12. Percentages of female and male applications, offers and acceptances on statistics MSc programmes (full time and part time) 2012-2013 (integers on bars indicate the raw numbers of students in each category). (Data unavailable for earlier years, due to changes in admissions systems.)**

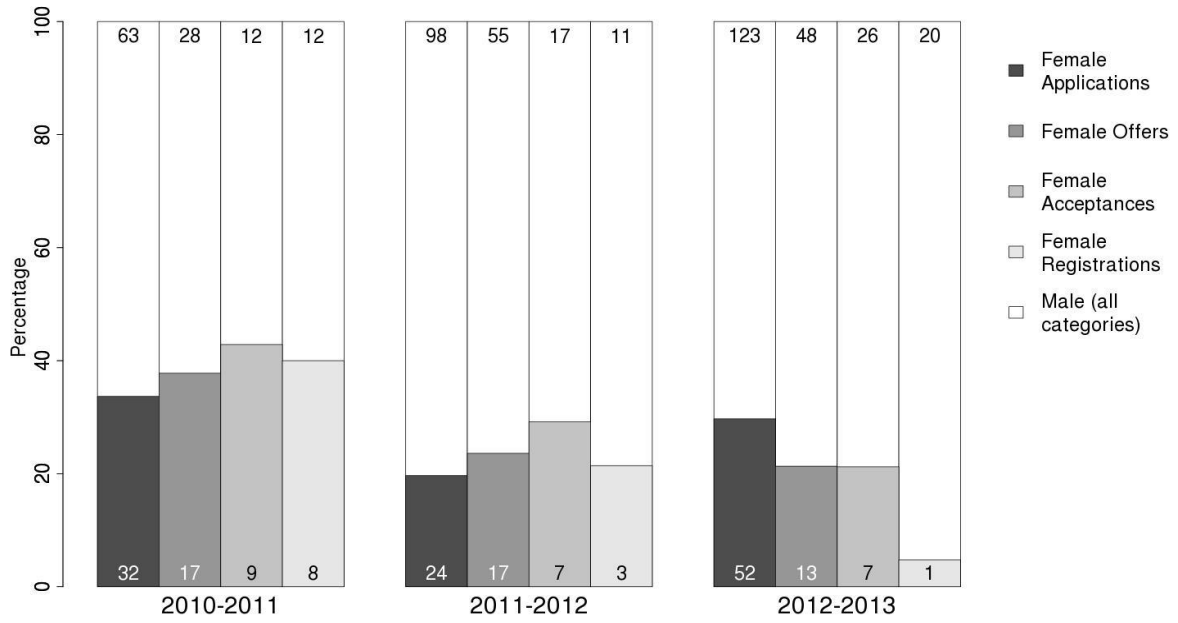


**Figure 13. Percentages of female of applications, offers, acceptances and registrations on SoMaS postgraduate research programmes (integers on bars indicate the raw numbers of students in each category).**

A detailed analysis of our applications and offers for PhD students was carried out in 2012, in response to concerns, in particular, about the gender imbalance of the postgraduate intake and as part of Athena SWAN activities (Figure 13). A detailed report was presented to Postgraduate Research Committee and all research group contacts were alerted to the statistics and encouraged to do all that they can to ensure that implicit bias does not impact on admissions decisions. As noted above, the situation is much improved for the 2013-14 in-take, with an entry that is 40% female.

(452 words)

(vi) **Degree classification by gender** – comment on any differences in degree attainment between males and females and describe what actions are being taken to address any imbalance.

Summative assessments and degree classification decisions are carried out by candidate number. As indicated by Figures 14 and 15, female students perform more strongly in terms of degree classification than men on the BSc. They appear (based on fairly small numbers) to perform less well on the MMath.

We plan to introduce an annual meeting for Level 2 students, to discuss the BSc and MMath programmes, explaining the possibility of switching programmes and the significance of the MMath as preparation for PhD **(Action 2.4)**. We also plan to investigate further gender statistics relating to BSc and MMath programme choice; in particular, we will look at level 3 performance by gender of MMath students **(Action 2.3)**.

(115 words)

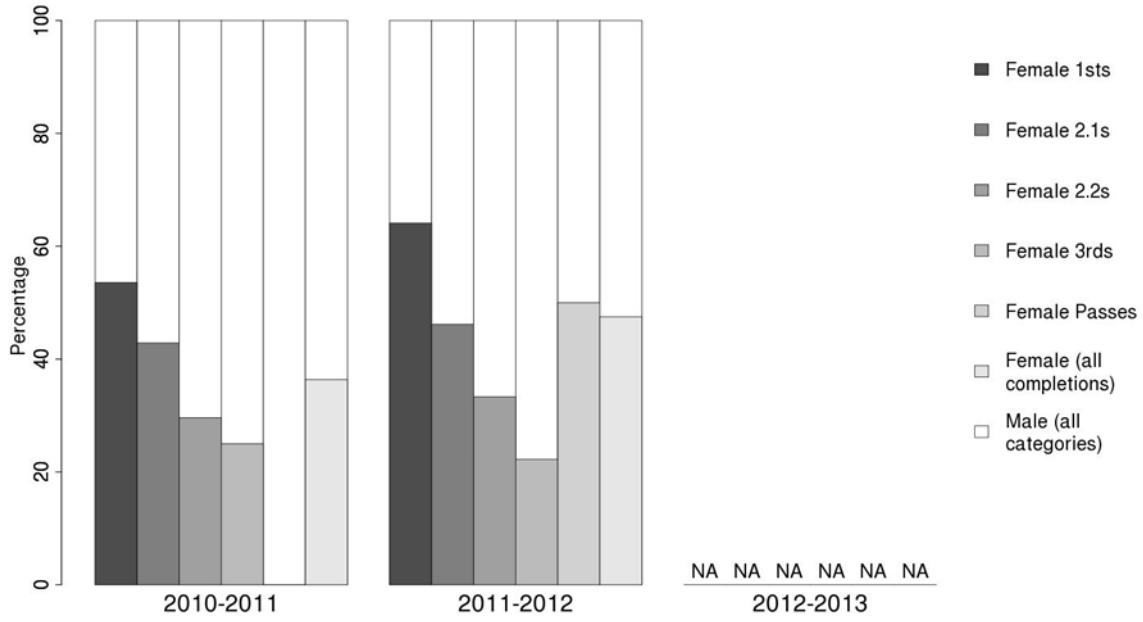


**Figure 14. Percentages of females and males in each degree class on the BSc Mathematics (raw data for all years and percentages for 2012-13 were not available).**

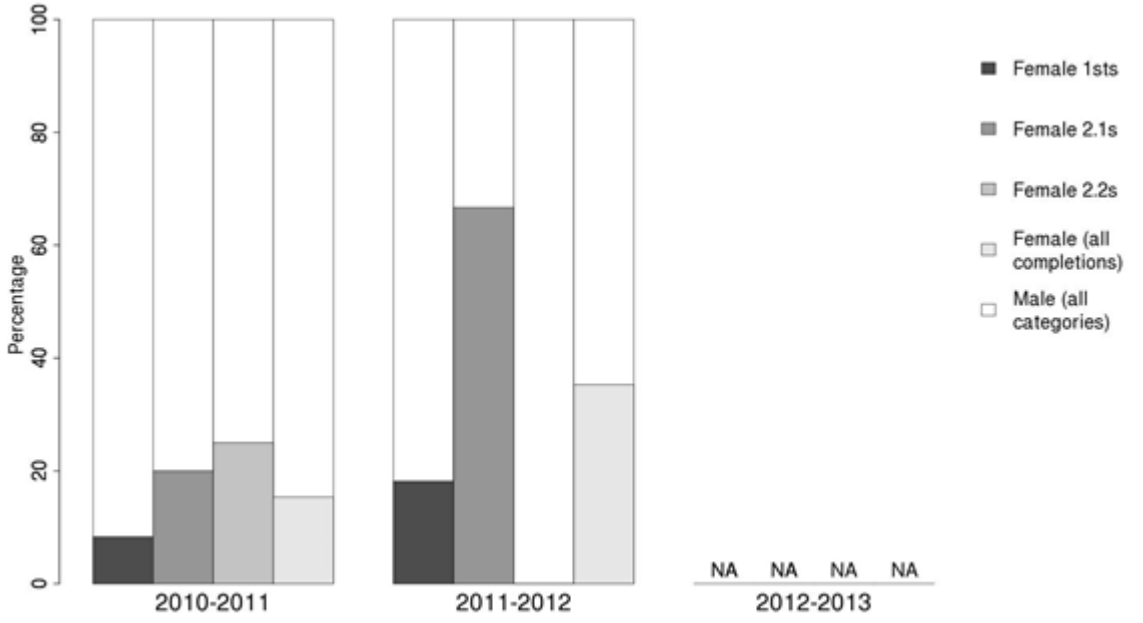


**Figure 15. Percentages of females and males in each degree class on the MMath Mathematics (raw data for all years and percentages for 2012-13 were not available).**

**Staff data**

(vii) **Female:male ratio of academic staff and research staff** – researcher, lecturer, senior lecturer, reader, professor (or equivalent). comment on any differences in numbers between males and females and say what action is being taken to address any underrepresentation at particular grades/levels

The SoMaS staff data are shown in Figure 16. Overall, 19% of the current staff are women, which is in-line with the national figure for mathematics (17.5% for 2010-11 in the LMS figures). The most notable feature of the SoMaS data, however, is the very low numbers of women at the researcher and lecturer stages. There is a small improvement in the 2012-13 figures for researchers, but the small proportion of females is still worrying. The reasons for the small proportion at lecturer level are unclear; there is some evidence (based on small numbers) that women have passed more quickly through this stage than men, but few women lecturers have been appointed. Nonetheless, there are concerns about the "pipeline". At grades of senior lecturer and above women are better represented in SoMaS than nationally in mathematics departments. There is a drop off from senior lecturer to reader and professor, but this is less marked than the national picture. None of the female professors in SoMaS have children, however (whereas almost all the male professors do).

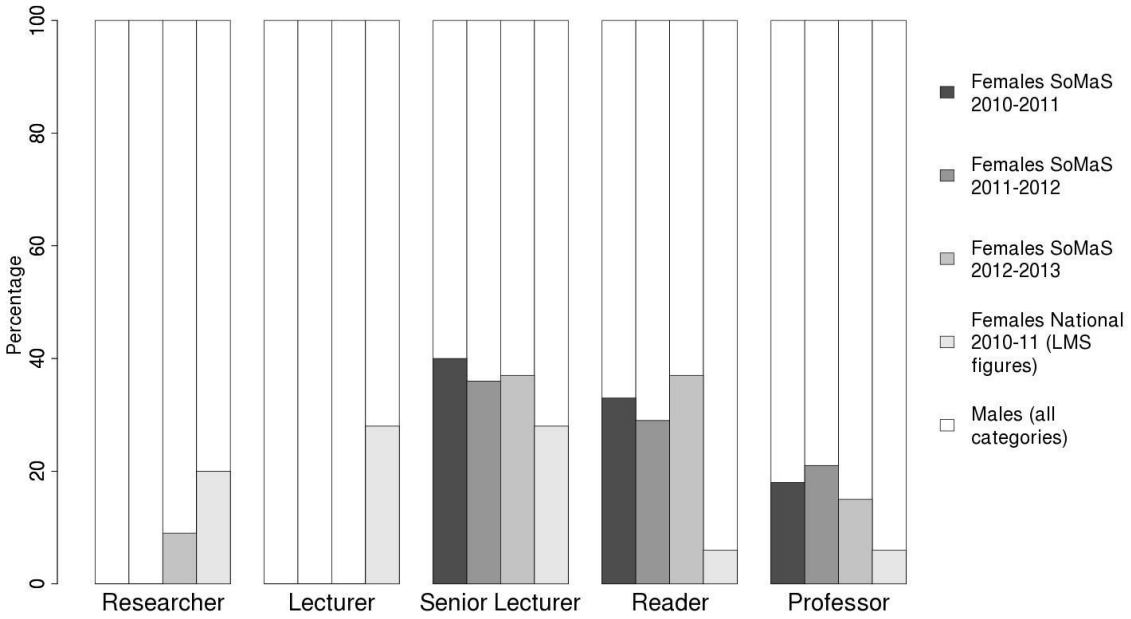


**Figure 16. Percentages of female and male SoMaS academic staff by grade for academic sessions 2010-11 to 2012-13, together with national statistics for mathematics for 2010-11 from the London Mathematical Society. Note that white bars indicate percentage male staff in each category and thus that in 2010-11 and 2011-12 there were no female Researchers in SoMaS and that there were no female Lecturers in SoMaS for the entire period under review.**

The Athena SWAN process has begun to address the pipeline issue. We are particularly aware of the need to attract more female applicants for advertised positions. Detailed analysis of job descriptions has been carried out, informed by

the comparison between academic posts in SoMaS and technical positions in the Applied Probability Trust, which have attracted a relatively even gender balance among candidates. A number of differences have been identified and action agreed for future recruitment **(Action 4.2)**. Some recent advertisements have included rather limited information about SoMaS. Improvements will be made in order to better represent all aspects of the school. Issues of unconscious bias have been recognised: several senior academics have received unconscious bias training. A recent presentation to SoMaS staff by Prof Jennifer Saul on unconscious bias and stereotype threat was well attended, well received and stimulated valuable debate. Following this, all staff have been encouraged to use the Harvard Implicit Project website to learn more and doing so is now required for members of selection and appointment panels. (See also the section on 'Key career transition points'.) **(Action 1.2)**

The promotion process has also been the subject of detailed work by GPG, leading to the introduction of an annual SoMaS Promotions Workshop designed to give an informal guide through the process (see Career Development below). An institution-wide issue of how to record career breaks on cases for promotion has been raised by the SoMaS member of Faculty of Science Equality and Diversity Committee and is consequently being considered by HR at university level **(Action 4.7)**. SoMaS supports the TUoS targets for the proportion of senior academic positions held by women to be 24% by 2015 and 30% by 2022 and supports the Faculty of Science Excellence through Inclusion Action Plan. (See the section on 'Career development' for further details.)

GPG has undertaken work on flexibility and career breaks. In particular, this has resulted in a detailed checklist for the management of maternity leave. (See the section on flexibility and career breaks for more details.) More recently, we have created the role of Early Career Support Officer (ECSO), which has been filled by a female member of staff, who will form a Mentoring Committee and determine and implement best practice in the support of early-career colleagues **(Action 1.1)**.

(555 words)

(viii) **Turnover by grade and gender** – comment on any differences between men and women in turnover and say what is being done to address this. Where the number of staff leaving is small, comment on the reasons why particular individuals left.

Turnover is largely as the result of research staff coming to the end of fixed term contracts. In 2010-11, there were 10 in this category (1 female and 9 male); in 2011-12 there were 6 (all male); in 2012-13 there were 7 (all male).

One female professor left in 2012-13 in order to take up appointment to a chair in another UK university. This was despite Sheffield's willingness to accommodate personal circumstances. Other academic staff turnover has been due to retirements (all male, two professors in 2010-11, a senior lecturer and a professor in 2012-13). Just before the period covered in this submission there were several more retirements of senior academic staff, all male. Retired academic staff members often continue some teaching duties for SoMaS. University policies have led to

several changes in contractual arrangements for these staff; this was unsettling for them, and added to the uncertainty due to late announcements of budgets.

Some staff take a Leave of Absence for a period before returning to TUoS. A female professor was granted a 3 year LoA in 2011 in order to take up a prestigious appointment as Director of the Australian Coastal Ocean Radar Network.

Generally SoMaS has good retention of academic staff and turnover appears to be proportional as far gender is concerned.

(215 words)

(Total words in Section 3: 2459)

## 4. Supporting and advancing women's careers: maximum 5000 words

### Key career transition points

a) Provide data for the past three years (where possible with clearly labelled graphical illustrations) on the following with commentary on their significance and how they have affected action planning.

(i) **Job application and success rates by gender and grade** – comment on any differences in recruitment between men and women at any level and say what action is being taken to address this.

In the academic year 2010/2011, 3 academic staff and 11 research staff were appointed to SoMaS, in 2011/2012 3 academic and 4 research staff and in 2012/2013 1 academic and 5 research staff were appointed. In 2010/11 one female academic was hired, but no female academics were hired in 2011/12 or 2012/13. The numbers for researchers are as follows: no female researchers were hired in 2010/11, 1 in 2011/12 and none in 2012/13. The percentages of female applications and success rates over the period 2009-2010 to 2011-2012 are shown in Figure 17.

We are concerned about the low number of applications from female academics. To mitigate this problem, we will, in collaboration with Human Resources, change SoMaS job advertisement by stating explicitly that we encourage applications from female mathematicians/statisticians **(Action 4.1, 4.2, 4.3)**. We also mention in job advertisements support available from the University, such as health care and the nursery owned by the University. We will furthermore introduce an Induction Document for new members of staff, in which we will provide examples of colleagues with flexible working hours and links to the Human Resources Equality and Diversity website (which includes their "Support for You" page) **(Action 1.4, 4.3)**.

(199 words)

(ii) **Applications for promotion and success rates by gender and grade** – comment on whether these differ for men and women and if they do explain what action may be taken. Where the number of women is small applicants may comment on specific

examples of where women have been through the promotion process. Explain how potential candidates are identified.

Eight academic staff were promoted over the period from 2010/2011 – 2012/2013. In 2010/11, two male academics were promoted from Senior Lecturer to Reader; two male academics were promoted from Lecturer to Senior Lecturer and one male academic from Senior Lecturer to Reader in 2011/2012; in 2012/2013 two (one female, one male) academics were promoted from Senior Lecturer to Reader and one male academic was promoted from Reader to Professor. (For details on the SoMaS and TUoS promotions process see section on Promotion and Career Development below.)

(86 words)

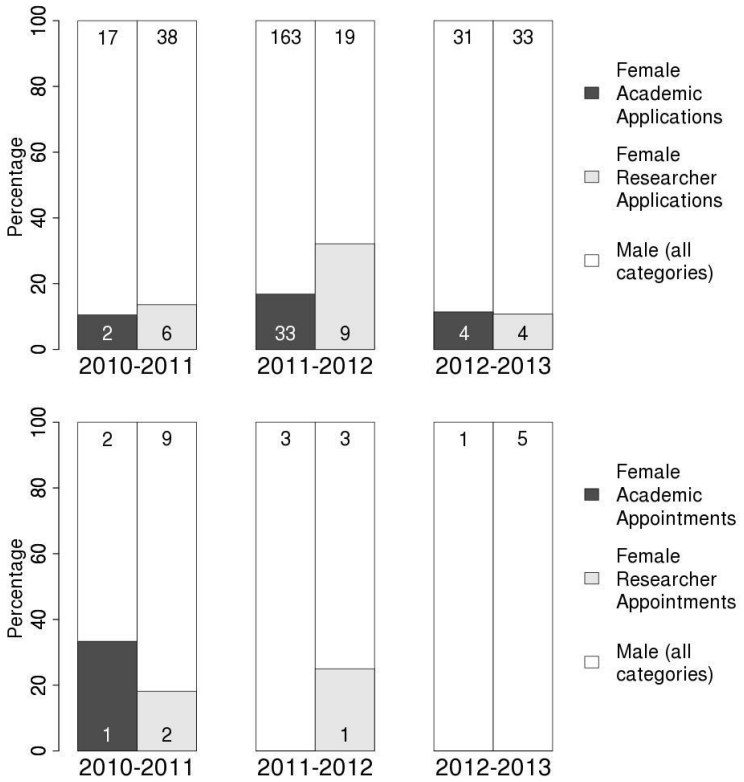


**Figure 17: Percentages of female and male job applicants (top) and appointees (bottom) over the period 2010-2011 to 2012-2013 (integers on bars indicate numbers per category, completely white bar indicates no females in that category).**

b) For each of the areas below, explain what the key issues are in the department, what steps have been taken to address any imbalances, what success/impact has been achieved so far and what additional steps may be needed.

(i) **Recruitment of staff** – comment on how the department's recruitment processes ensure that female candidates are attracted to apply, and how the department ensures its short listing, selection processes and criteria comply with the university's equal opportunities policies.

While Mathematics attracts a high proportion of female undergraduates, the ratio of female to male applicants for permanent academic jobs is much lower and therefore it is more likely that a male rather than a female mathematician is recruited. The SoMaS policy is to attract the best applicants and recruit the best candidate for the job, irrespective of gender.

Job opportunities are advertised on the TUoS website and websites such as jobs.ac.uk, statsjobs.com, the European Mathematical Society and hyperspace.aei.mpg.de. The selection panel consists of both male and female members of staff, usually at Reader-level or higher. All Chairs of Selection Panels have had Equal Opportunities training. All SoMaS staff will have the opportunity to participate in Unconscious Bias Training **(Action 1.2)**.

Applicants are shortlisted independently by members of the selection panel. A long-list of 15 to 20 applicants is formed and references are taken up. Afterwards, a shortlist of usually six applicants is formed. The candidates are invited over a period of two days, in which each of them gives a presentation on Day 1 and is interviewed on Day 2. Applicants are invited collectively for dinner in the evening of Day 1, with staff including non-members of the selection panel. Applicants are informed about the process well in advance so that travel arrangements can be made. If applicants are unable to attend the dinner due to other commitments, this does not have an influence on the appointment process. Applicants who are not able to travel to Sheffield will usually be interviewed via Skype or telephone.

(256 words)

(ii) **Support for staff at key career transition points** – having identified key areas of attrition of female staff in the department, comment on any interventions, programmes and activities that support women at the crucial stages, such as personal development training, opportunities for networking, mentoring programmes and leadership training. Identify which have been found to work best at the different career stages.

The first key transition is the move from PGR student to independent researcher. In mathematics, most begin this process by applying for advertised posts as post-doctoral research assistants, but the very best apply for and are awarded personal fellowships. TUoS and SoMaS have considerable experience of, and success at, supporting junior applicants through the fellowship application process, and are very proud of the successes we've had, but we would like to attract more. The Mentoring Committee will thus discuss our procedures and practices with a view to improving what we do **(Actions 1.1 and 3.3)**.

A second key transition is moving from a research position to a permanent academic position. To prepare for this, our postdoctoral researchers have an annual meeting with their supervisors, which is facilitated by HR, who send out a form which needs to be completed by supervisor and researcher. In this meeting, the previous academic year is reviewed but also future and career plans in general are discussed **(Action 3.1b)**. In addition, the Faculty of Science runs a workshop for postdocs ("Look ahead in your career") and our research staff are encouraged to participate. For female researchers, there are also time-management workshops

dealing specifically with circumstances affecting female colleagues. These workshops are announced via email from the University and will be repeated in the SoMaS Newsletter to encourage participation **(Action 3.6)**. The Faculty of Science runs workshops for writing grant proposals and SoMaS encourages researchers and academics to participate.

The Faculty of Science runs a personal and professional development programme called "Springboard" for female researchers. Apart from providing opportunities for networking, Springboard supports female researchers in building their confidence, discusses work-life balance issues and provides a network of female researchers within the University. While all researchers in SoMaS are made aware of the Springboard programme, the School will make this more visible by mentioning it explicitly in the Induction Document and in the newsletter **(Action 3.6)** and via the new mentoring scheme for female early career colleagues **(Action 1.1, 3.2, 3.4)**.

Once a researcher moves onto a permanent academic position, the extra responsibilities will affect work-life balance, in particular for those with caring responsibility. One problem identified is time-tabling of lectures and a systematic effort to accommodate caring responsibilities will be made **(Action 1.11)**. With the formation of SoMaS, a structure was established, which made it clearer to whom a female colleague could go in case of an emergency or difficult circumstances. Most importantly, for teaching matters, the Director of Teaching and the Teaching Committee are now in a position to react much more quickly than has been the case in the past. Every new junior academic staff member already has a probationary advisor (another member of staff at a higher grade), but we will also implement a mentoring programming for junior female staff by senior female academics (Reader-level and higher). (**Actions 1.1 and 3.4)**.

For the annual staff review (SRDS, see below) staff can request a change of reviewer, for example if a female academic wants to be reviewed by a female colleague.

(505 words)

**Career development**

a) For each of the areas below, explain what the key issues are in the department, what steps have been taken to address any imbalances, what success/impact has been achieved so far and what additional steps may be needed.

(i) **Promotion and career development** – comment on the appraisal and career development process, and promotion criteria and whether these take into consideration responsibilities for teaching, research, administration, pastoral work and outreach work; is quality of work emphasised over quantity of work?

The Staff Review and Development Scheme (SRDS) is an annual review where each staff member discusses their achievements over the previous year and plans for the year ahead with their Reviewer, who provides feedback. Based on discussion, the Reviewer sets objectives for the coming year. Reviewers for permanent academic staff in SoMaS are professors within the School; the reviewer for professors is the

HoS (and the HoS is reviewed by the Pro-VC for the Faculty). Research assistants are reviewed by the Director of Research in conjunction with the PI or a mentor. Generally academic staff will discuss achievements under the headings of teaching, research and administration, with suitable weight and consideration being given to each of these. The discussion of training needs, workload, career development and promotion are also part of this process. The input of SRDS reviewers is sought in considering cases for promotion.

Staff members are encouraged to apply for promotion by a) email from the HoS and b) as part of the Staff Review Development Scheme (SRDS). As part of good practice initiatives, we have introduced an annual SoMaS Promotions Workshop, led by the Head of School and another professor, ensuring both genders are represented. This took place for the first time in 2012-13 but will continue **(Action 4.6)**. The workshop provides detailed information about the promotion process, explains where to access official information and allows time for questions about the process to be answered. It is also an opportunity for promoted staff to share their personal experiences of SoMaS and TUoS promotions processes.

It is TUoS policy to consider for promotion all those eligible in every promotion round, unless individuals explicitly ask not to be considered. SoMaS was one of the first departments in the Faculty to adopt this opt-out policy which has been fully implemented for 3 years. This policy is explained at the start of the annual promotion round and is now being further communicated via the Promotions Workshop. The policy acts against potential bias in who puts themselves forward for promotion and allows everyone to gain valuable feedback from the process (whether or not they are successful in a given round). In the last year, we have come to appreciate the value of monitoring gender data for all our processes and so, from the next promotions cycle, we will monitor the gender balance of those opting out and actively offer support to those repeatedly opting out **(Action 4.6)**.

A School Promotions Panel looks at the cases of all those eligible (except those who have explicitly opted out). The panel comprises senior academic and administrative staff and a representative from HR. Female representation has recently been improved with two female out of six academic members. Cases supported by the School are then considered by the Faculty of Science Promotion Panel, chaired by the Faculty PVC (who is also chair of the University Equality and Diversity Board).

The relative value placed on teaching, research, administration, pastoral and outreach work in the promotion process and elsewhere has been the subject of much discussion within the School. This has been highlighted as a key issue at Good Practice Away Days and it was brought up in several of the survey responses of female staff. GPG has been working on ways to ensure that all contributions are recognised, valued and celebrated. The monthly SoMaS Newsletter is increasingly used to advertise achievements of all kinds across the school, including congratulations on excellent teaching from the Director of Teaching and Staff-Student Forum. Across TUoS there is increasing recognition of the value of a well-rounded academic portfolio and SoMaS supports this. At Faculty Promotion Panel, positive reference to well-rounded cases is now much more common and this has been communicated to SoMaS staff via the Promotions Workshop.

TUoS has provided specific support for women's career progression in recent years. This has included Resilience Training provided by the TUoS Women's network, 1-1 careers interviews with an expert consultant and Women's Staff Development Courses such as Get Noticed, Dealing with Difficult Situations and Networking for Women. Two new mentoring schemes for female academics were launched in July 2013. A female professor in SoMaS has participated in Sheffield Leader 4, the highest level of the Sheffield leadership development programme.

(705 words)

(ii) **Induction and training** – describe the support provided to new staff at all levels, as well as details of any gender equality training. To what extent are good employment practices in the institution, such as opportunities for networking, the flexible working policy, and professional and personal development opportunities promoted to staff from the outset?

TUoS has an online induction package, providing an overview of the University, its policies and procedures, and the range of roles undertaken at TUoS. The package includes a welcome pack and links to details of events for new staff members. As a result of a Good Practice Away Day it was agreed that we will have a SoMaS induction checklist, to complement the university package and to be communicated via the SoMaS wiki **(Action 1.3, 4.3, 4.4)**. New junior academic staff are usually required to undertake training leading to a Certificate in Learning and Teaching. Training needs and opportunities are discussed with all staff as part of the SRDS process, with particular attention given to this for probationary staff. Opportunities are also already advertised via email and at the weekly "Coffee" announcements, and in future we will also add a Training Opportunities section to the Newsletter **(Action 3.6)**. Some opportunities, such as the Sheffield Leader courses, require nomination by the HoS, or by the Faculty Pro-VC for Sheffield Leader 4. Opportunities that are targeted specifically at women, or that might be particularly relevant for women, are also promoted via the TUoS Women's network. There have been many such opportunities recently (see the section on Career Development). Work has begun on unconscious bias training across SoMaS (see the section on Staff Data).

(221 words)

(iii) **Support for female students** – describe the support (formal and informal) provided for female students to enable them to make the transition to a sustainable academic career, particularly from postgraduate to researcher, such as mentoring, seminars and pastoral support and the right to request a female personal tutor. Comment on whether these activities are run by female staff and how this work is formally recognised by the department.

In addition to a personal tutor system for all undergraduates, SoMaS has a female Tutor for Women Students and a male Tutor for Men Students. Students have the right to request a change of personal tutor and any request for a female personal tutor is treated sympathetically. As a result of Athena SWAN activities, SoMaS has made the importance it places on the personal tutor system more visible, with students now asked to nominate excellent personal tutors, who are publicly

congratulated. All staff with particular pastoral support roles for students have some time allocated within the workload model and GPG are currently in discussions with the Deputy Head of School about whether or not the tariffs involved are appropriate in all cases.

Each postgraduate student is supported by a supervisory team, made up of the primary supervisor and an advisor backed up by the PGR Director. Postgraduate research students all take part in a Graduate Personal Development Programme. This consists of specific subject and generic skills training, following a detailed training needs analysis at the start of studies. Participation in relevant seminars and conferences is addressed as part of this and opportunities are identified with the supervisor. At the end of the first and second year of PhD studies, a panel meeting is held for each student, consisting of the student, the supervisory team and the Director of Postgraduate Research, providing an opportunity to review progress and future plans. Postgraduate students are encouraged to attend suitable TUoS Career Management Skills courses. A very wide range of these is available, including Job-seeking Strategies, Marketing Yourself Effectively, Planning Your Academic Career and 1:1 careers consultations with specialist careers advisors. Opportunities such as the "Springboard for Women Researchers" Programmes and events such as the London Mathematical Society's Women in Mathematics Days are advertised across the School. We intend to more systematically encourage female PhD students to attend these in the future via the new Mentoring Committee **(Action 1.1, 3.2)**. Informal mentoring and support arrangements have been discussed at GPG, including whether this kind of informal work falls disproportionately on female staff **(Actions 3.1a and 4.5)**.

(351 words)

**Organisation and culture**

SoMaS was formed in 2007, from three separate departments (Applied Mathematics, Probability and Statistics, Pure Mathematics), with their own settled and rather different cultures. The imperative for the amalgamation was external, and it has been a challenge from the beginning to build a common sense of purpose and identity that would bring the School together. Each of the three departments strongly valued its own sense of community and highly valued its subject and its students. However, the three departments were at different stages of development in terms of gender balance and inclusiveness of their policies and culture. The strength of this is that there was a range of good practice to share, but this has to be balanced by the protectiveness of long-standing traditions.

In a sense, 2007 marked the new beginning, but a second significant step took place in 2010, when residual organizational structures from the old departments were removed. This was a difficult step since valuable support networks were broken up, but it was necessary so that we could build new networks aligned to the new reality. We have continued to work hard to create an environment that nurtures and attracts excellent staff, men and women, at all levels and it is our ambition to improve that environment and create a workplace with equality at its core. Central to achieving that is to recruit and mentor staff in a manner that not only values equality and diversity, but has these principles as corner-stones of our culture.

(248 words)

a) Provide data for the past three years (where possible with clearly labelled graphical illustrations) on the following with commentary on their significance and how they have affected action planning.

(i) **Male and female representation on committees** – provide a breakdown by committee and explain any differences between male and female representation. Explain how potential members are identified.

Table 1 provides summaries of the academic staff and student membership of key SoMaS committees over the last four years. The titles of most committees are self-explanatory, however Advisory Group and Departmental Review Panel probably need some explanation. The former was created by the current Head of School (who is its Chair) with the aim of increasing the range of staff who have input into policy, procedure and the day-to-day running of the School. The latter is part of the University's Staff Review and Development Scheme (SRDS). The Panel considers all of the completed paperwork from the Scheme and provides an Assessment of Contribution for each member of staff.

Staff membership of committees is decided by the Head of School as part of the workload allocation process (in consultation with the committee chairs). Student membership is decided by requesting volunteers from the student body and nominations from the staff.

| Nos. F/M and % of F staff on SoMaS Committees | 2010-2011 | | | 2011-2012 | | | 2012-2013 | | | 2013-2014 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | F | M | F% | F | M | F% | F | M | F% | F | M | F% |
| Staff on Staff-student Forum | 0 | 5 | 0% | 0 | 5 | 0% | 0 | 5 | 0% | 1 | 5 | 17% |
| Admissions Team | 1 | 5 | 17% | 1 | 6 | 14% | 1 | 7 | 13% | 2 | 7 | 22% |
| PGR Committee | 3 | 2 | 60% | 3 | 3 | 50% | 1 | 6 | 14% | 1 | 5 | 14% |
| Research Committee | 2 | 8 | 20% | 3 | 7 | 30% | 1 | 8 | 11% | 4 | 5 | 44% |
| Teaching Committee | 3 | 6 | 33% | 3 | 7 | 30% | 3 | 6 | 33% | 3 | 9 | 25% |
| Advisory Group | 0 | 10 | 0% | 1 | 9 | 10% | 1 | 9 | 10% | 2 | 7 | 22% |
| Departmental Review Panel | 1 | 5 | 17% | 1 | 5 | 17% | 1 | 7 | 13% | 2 | 7 | 22% |
| Promotions Panel | 1 | 5 | 17% | 1 | 6 | 14% | 1 | 6 | 14% | 2 | 4 | 33% |
| Executive Group | 0 | 3 | 0% | 0 | 4 | 0% | 0 | 4 | 0% | 2 | 4 | 33% |
| **Grand Totals** | **11** | **49** | **18%** | **13** | **52** | **20%** | **9** | **58** | **13%** | 19 | 53 | **26%** |

**Table 1: Numbers of male and female (and percentages of female) committee members on key SoMaS committees in the last four years.**

As a result of our first School-wide Good Practice Away Day, in Nov 2012, we adopted a policy whereby GPG will review committee membership in the spring of each year and prepare a document to feed into the workload allocation process for the following academic session. The first such document was prepared in April 2013 and highlighted the fact that the percentage of female staff with seats on key committees had dropped to 13%. It also provided a more detailed break-down by job title and contract type and led to the observation that only 25% (2 of 8) of all female staff and 20% (1 of 5) of the part-time staff had seats on one or more of the committees listed above, as compared to 50% (23 of 46) of the male staff and 47% (24 of 51) of the full-time staff).

Since the numbers of female and part-time staff are small, moving individual staff into or out of roles can have quite a major impact on the percentages. Thus, the drop in female membership of committees in 2012-13 is largely explained by decisions made about individual committee membership (e.g. which students were willing to join the PGR and Teaching Committees) and by the role of PGR Director passing from a female to a male member of staff, but is also impacted by the recruitment of extra male members of staff to the Departmental Review Panel and the Promotions Panel.

That said, drawing attention to the statistics for the period 2010-11 – 2012-13 encouraged committee chairs and line managers to consider appointing women to vacant or new positions on committees and that led to some important changes for 2013-14 such that female committee membership is now at 25% which is much closer to the percentage of women in senior posts in SoMaS. GPG will now review committee membership annually **(Action 1.8)**.

(459 words)

(ii) **Female:male ratio of academic and research staff on fixed-term contracts and open-ended (permanent) contracts** – comment on any differences between male and female staff representation on fixed-term contracts and say what is being done to address them.

| Nos. F/M and % of F staff | 2010-2011 | | | 2011-2012 | | | 2012-2013 | | |
|---|---|---|---|---|---|---|---|---|---|
| by contract type | F | M | F% | F | M | F% | F | M | F% |
| **Fixed-term Contract** | **0** | **12** | **0%** | **0** | **12** | **0%** | **2** | **12** | **14%** |
| Academic | 0 | 0 | 0% | 0 | 0 | 0% | 0 | 1 | 0% |
| Research | 0 | 12 | 0% | 0 | 11 | 0% | 1 | 8 | 11% |
| Teaching | 0 | 0 | 0% | 0 | 1 | 0% | 1 | 3 | 25% |
| **Open-ended Contract** | **10** | **36** | **22%** | **11** | **39** | **22%** | **8** | **40** | **17%** |
| Academic | 9 | 35 | 20% | 10 | 36 | 22% | 7 | 36 | 16% |
| Research | 0 | 0 | 0% | 0 | 2 | 0% | 0 | 3 | 0% |
| Teaching | 1 | 1 | 50% | 1 | 1 | 50% | 1 | 1 | 50% |
| **Grand Total** | **10** | **48** | **17%** | **11** | **51** | **18%** | **10** | **52** | **16%** |

**Table 2: Numbers of male and female staff (and percentages of female staff) in SoMaS on fixed-term and open-ended contracts.**

The majority of SoMaS staff on fixed-term contracts are men. Such contracts are used mostly for Early-career Researchers employed on research grants, but we also use them for Teaching Fellows who are covering the work of colleagues on open-ended contracts (for example due to Special Leave or research grants). The lack of female early career staff (in both research and teaching roles) is something we aim to address via changes to our recruitment processes (see Section 3b (vii) above, **Actions 4.1 and 4.2**).

(83 words)

b) For each of the areas below, explain what the key issues are in the department, what steps have been taken to address any imbalances, what success/impact has been achieved so far and what additional steps may be needed.

(i) **Representation on decision-making committees** – comment on evidence of gender equality in the mechanism for selecting representatives. What evidence is there that women are encouraged to sit on a range of influential committees inside and outside the department? How is the issue of 'committee overload' addressed where there are small numbers of female staff?

Our aim is to have both female and part-time staff represented on key committees, but to have in mind that the numbers in each group of staff are small and thus we need to have a care to avoid overburdening members of these groups. The potential for overburdening is high since not all staff are equally willing or suited to serve on committees and we actively encourage all staff to take periods of study leave (thus reducing the staff in these groups still further in some years). We are particularly conscious that the amount of time that part-time staff are able or willing to offer for committee work is reduced pro rata. As a result, in some years the pool of female or part-time staff available to serve on committees may well be as low as two or three in each group.

In 2010-11 and 2011-12, the gender ratio on committees was close to that in the staff overall, but in 2012-13 it was not and part-time staff have been under-represented for some time (Table 1). Following the 2012-13 review of committee membership (see above), we now have somewhat better representation of both female and part-time staff on committees, but annual review of membership is a continuing role for our Good Practice Group **(Action 1.8)**.

(215 words)

(ii) **Workload model** – describe the systems in place to ensure that workload allocations, including pastoral and administrative responsibilities (including the responsibility for work on women and science) are taken into account at appraisal and in promotion criteria. Comment on the rotation of responsibilities e.g. responsibilities with a heavy workload and those that are seen as good for an individual's career.

Teaching, pastoral and administrative duties for academic staff are allocated by the Head of School in consultation with the Deputy Head of School, the Director of Teaching and chairs of appropriate committees. Most major administrative duties rotate approximately every three or four years, but some specialist roles (like Director of the MScs in Statistics and MSc Admissions Tutors) may not since the pool of suitable staff is smaller and knowledge accrued over several years is a major benefit.

Issues relating to workload allocation have been agenda items on several recent meetings of the GPG. In consultation with the Deputy Head of School, who has day-to-day responsibility for personnel issues, the group has agreed a statement of principles for workload allocation. The group is now in the process of reviewing all duties in the School in an attempt to identify workload that can easily be moved from one member of staff to another, with minimal extra overhead, in order that we might be able to redistribute load more readily and more rapidly in future than we can at present **(Action 1.7)**.

There is an annual call for expressions of interest in future duties and each staff member's current duties and future plans are also discussed in one-to-one meetings as part of the University's Staff Review and Development Scheme.

(217 words)

(iii) **Timing of departmental meetings and social gatherings** – provide evidence of consideration for those with family responsibilities, for example what the department considers to be core hours and whether there is a more flexible system in place.

School meetings take place once a semester in slots selected because they are free of teaching and other regular commitments for most of the academic staff and are during the normal working day for all staff (including those on part-time contracts). Times of other meetings are selected to accommodate the majority of those involved, by collation of diary information. Accommodating the diaries of female staff is not prioritised above those of others, but our policy is that dates of routine meetings should be set at least four weeks in advance during core office hours (9.30-16.00) to allow as many colleagues as possible to attend.

Centrally organised School-wide social events are rare. There is typically only one annually, in the Christmas season. This event is advertised well in advance and held in the early evening so that most staff who want to can attend for at least the early part. Informal social events, organised by subsets of the staff and students, are much more common. No attempt is made to centrally manage any aspect of these. Anecdotally, however, these seem to be as popular with female staff and students as they are with their male colleagues.

We also hold weekly mid-morning “Coffee” meetings. These are very informal opportunities for those who wish to meet, share news and hear announcements from the Head of School. The announcements are also disseminated via email and some colleagues either choose not to attend or find it hard to do so because of teaching or other diary commitments, but around a third of the academic staff attend regularly and women and part-time staff are well represented.

A review of our arrangements for meetings and social events is overdue and GPG has undertaken to conduct one during the early part of 2014 **(Action 1.6)**.

(297 words)

(iv) **Culture** –demonstrate how the department is female-friendly and inclusive. 'Culture' refers to the language, behaviours and other informal interactions that characterise the atmosphere of the department, and includes all staff and students.

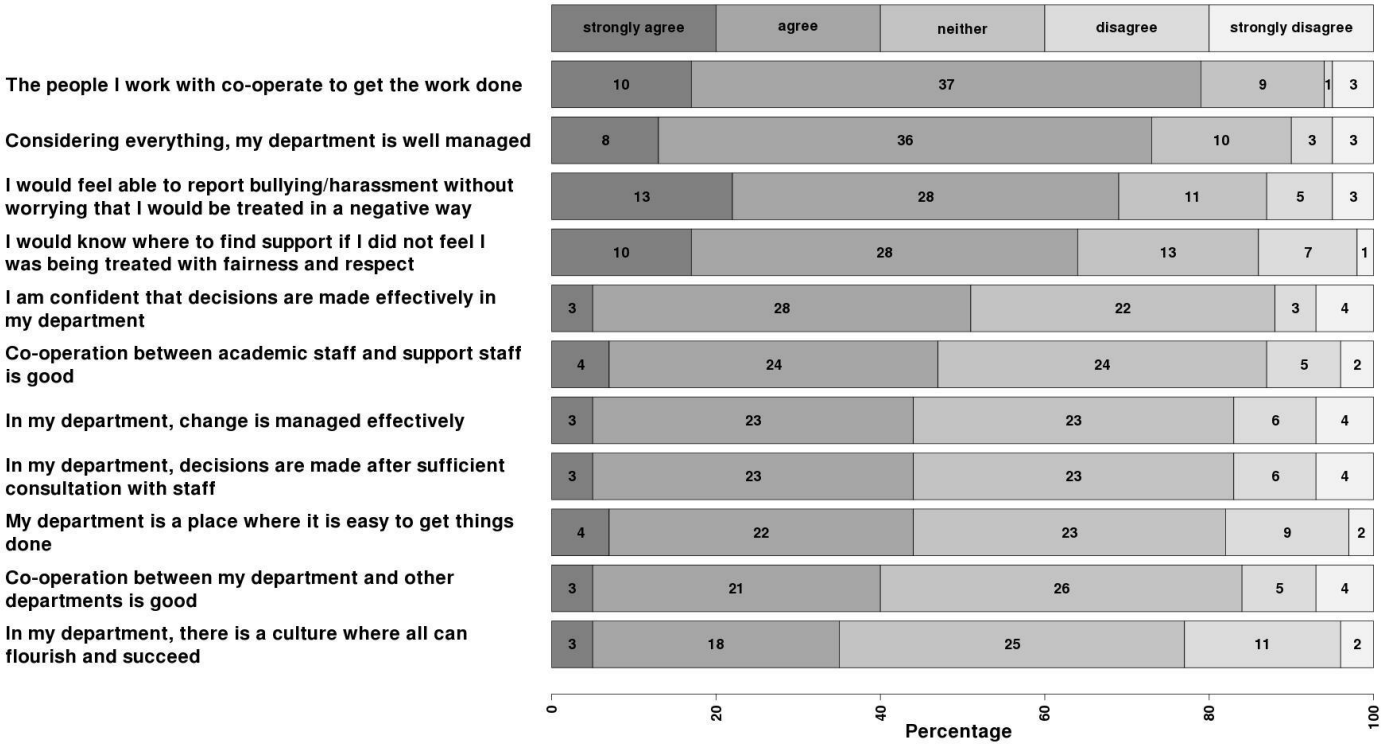


**Figure 18: Summary of the SoMaS responses to questions relating to "My Department" in the 2012 University-wide Staff Survey (integers on bars indicate numbers per category).**

Figure 18 provides a summary of SoMaS responses to questions relating to "My Department" in the 2012 University-wide Staff Survey. Some of these responses suggest that aspects of culture are working well, for example, 79% of SoMaS staff agreed that "the people I work with co-operate to get things done". However, only 35% agreed with "in my department there is a culture where all can flourish and succeed". This statistic is of considerable concern and was part of our motivation for creating the Good Practice Group, for holding our 2012 Away Day and for committing to the Athena SWAN process. Following advice from GPG, SoMaS will now conduct an annual staff survey (with a focus on gender equity issues) to supplement the occasional University-wide ones **(Action 1.12)**. The first of these has just been conducted and, once fully analysed, the results will feed into many of our Athena SWAN Actions.

(150 words)

(v) **Outreach activities** – comment on the level of participation by female and male staff in outreach activities with schools and colleges and other centres. Describe who the programmes are aimed at, and how this activity is formally recognised as part of the workload model and in appraisal and promotion processes.

SoMaS staff are committed to engaging with local schools, seeking to inspire children and showing them that maths is exciting. To accomplish this staff and students visit local schools and children also visit us. We run an Undergraduate Ambassador Scheme in which 3rd year undergraduate students work with local schools to gain experience of teaching under the supervision of both SoMaS staff (whose work is credited in the workload model) and classroom teachers. In 2012/13 62% of students on this module were female. This module is currently led by a male member of staff, but was led by a female member of staff from its inception in 2005 until 2012.

Other outreach work is supported by a male administrative Outreach Officer and coordinated by an academic School Liaison Officer both of whom have credit in the workload allocation model (WAM). The activities they organise, e.g. classes for local A Level students are given by a representative sample of the staff (by age and gender) and credited in the WAM. Other activities such as public lectures, master classes and competitions/challenges for school children are undertaken by individuals as a result of personal invitations/initiatives and are not credited in the WAM. We do not systematically collect data on such activities but, in the last year, both men and women members of staff have undertaken them. **(Action 2.1)**

(225 words)

**Flexibility and managing career breaks**

a) Provide data for the past three years (where possible with clearly labelled graphical illustrations) on the following with commentary on their significance and how they have affected action planning.

(i) **Maternity return rate** – comment on whether maternity return rate in the department has improved or deteriorated and any plans for further improvement. If the department is unable to provide a maternity return rate, please explain why.

In 2010-11, two members of staff, one teaching and one clerical/secretarial, took maternity leave. In 2011-12, no-one took maternity leave. In 2012-13, two members of non-academic staff took maternity leave. The last member of academic staff to take maternity leave was in 2009-10. We have a 100% return.

(48 words)

(ii) **Paternity, adoption and parental leave uptake** – comment on the uptake of paternity leave by grade and parental and adoption leave by gender and grade. Has this improved or deteriorated and what plans are there to improve further.

One member of academic staff took paternity leave in 2010-11, one researcher did so in 2012-13 and in 2013-14, one academic is on maternity leave and one on paternity leave.

(30 words)

(iii) **Numbers of applications and success rates for flexible working by gender and grade** – comment on any disparities. Where the number of women in the department is small applicants may wish to comment on specific examples.

Over the last three years, 3 researchers (1 female, 2 male), 1 member of teaching staff (male) and 1 professor (female) have applied for flexible working arrangements and all applications were successful. Many members of academic staff make use of the inherent flexibility of academic roles to accommodate child care, other caring responsibilities and other commitments, without making a formal application for flexible working. A figure for the overall number of staff working flexibly was not available.

(77 words)

b) For each of the areas below, explain what the key issues are in the department, what steps have been taken to address any imbalances, what success/impact has been achieved so far and what additional steps may be needed.

(i) **Flexible working** – comment on the numbers of staff working flexibly and their grades and gender, whether there is a formal or informal system, the support and training provided for managers in promoting and managing flexible working arrangements, and how the department raises awareness of the options available.

The number of academics with formal arrangements to work flexibly or part-time is small, but this group constitutes both male and female colleagues, including two male professors. TUoS website has clear guidance on flexible working for parents and carers. This issue has been discussed as part of Athena SWAN activities, including at a SoMaS Good Practice Away Day. In the recent SoMaS staff survey, 75% of academic staff responded positively to a question about the opportunity to work flexibly.

As part of Athena SWAN activities, SoMaS has recently begun recording part-time and flexible working arrangements in our SoMaS database. The information is available to all academic staff (unless there is some specific reason why not). It is also displayed on the web pages where seminars and committee meetings are scheduled and the system tries to identify individuals affected by scheduling decisions. These changes are significantly raising awareness of existing flexible working arrangements and of the options available. They also improve scheduling decisions, so that more people can participate.

(168 words)

(ii) **Cover for maternity and adoption leave and support on return** – explain what the department does, beyond the university maternity policy package, to support female staff before they go on maternity leave, arrangements for covering work during absence, and to help them achieve a suitable work-life balance on their return.

As part of Athena SWAN activities, we have developed a SoMaS checklist to help with management of maternity, paternity and adoption leave for academic staff. The checklist is designed to facilitate meetings with HoS before a period of leave

and on return afterwards. This complements related institutional initiatives (which have been greatly developed and improved recently) and provides a checklist which is adapted to our departmental circumstances. It is assumed that there are no teaching and administrative commitments during leave, these being covered by standard leave procedures, so the list is focused on research-related matters. Where academics wish to continue to supervise PhD students during leave, the School recognizes that everyone gains by this and works flexibly to facilitate it. The checklist also highlights institutional procedures and support, including Keeping in Touch days, the Parent-to-Parent buddy system, the Parents in Academia network and the Women Academic Returners Programme.

(148 words)

(Total words in Section 4: 4603)

## 5. Any other comments: maximum 500 words

Please comment here on any other elements which are relevant to the application, e.g. other STEMM-specific initiatives of special interest that have not been covered in the previous sections. Include any other relevant data (e.g. results from staff surveys), provide a commentary on it and indicate how it is planned to address any gender disparities identified.

Given the dual concerns of implicit gender bias and gender stereotype threat we believe it is important to provide highly visible and inspirational role models for our PGR students and early career colleagues **(see Action 1.5)**.

(Total words in Section 5: 36)

## 6. Action plan

Provide an action plan as an appendix. An action plan template is available on the Athena SWAN website.

The Action Plan should be a table or a spreadsheet comprising actions to address the priorities identified by the analysis of relevant data presented in this application, success/outcome measures, the post holder responsible for each action and a timeline for completion. The plan should cover current initiatives and your aspirations **for the next three years**.

## 7. Case study: impacting on individuals: maximum 1000 words

Describe how the department's SWAN activities have benefitted **two** individuals working in the department. One of these case studies should be a member of the self assessment team, the other someone else in the department. More information on case studies is available in the guidance.

### Case Study 1: Dr Sarah Whitehouse (Reader and Member of the Self-Assessment Team)

I joined TUoS as a Lecturer in the Department of Pure Mathematics in 2002, from a junior faculty position at Lens, France. I was promoted to Senior Lecturer in 2005 and to Reader in 2009. My research area is algebraic topology.

My long-term partner joined TUoS in 2008, after many years of long-distance relationship. Our daughter was born in 2009 and I had one year of maternity leave. I continued with many research-related aspects of academic work while on leave, including writing papers and, to a lesser extent, new mathematics. One PhD student successfully submitted soon after I went on leave and I continued to supervise two others. Early in the leave period I had PhD supervision meetings at my home; later on I would bring my daughter with me to my office. I also attended seminars in order to remain in contact with developments in my subject. I gave a talk at an international conference in Norway when my daughter was about a month old and later in the leave period I made a research visit to Barcelona, giving two seminars there. All this was only possible with the support and help of my partner.

I returned to work full time after maternity leave. My return from leave was near the end of the teaching period of 2009-10 and I was assigned few non-research duties before the start of the next session, giving a period of a few months to concentrate on research. While there was no formal reduction in teaching or administrative load thereafter, it was very helpful that my teaching in the first semester after return from leave was a module I had previously taught. My daughter attends school full time and I work normal office hours.

I have had two post-doctoral research assistants (1 male, 1 female), both of whom went on to permanent academic positions. The female RA started directly after finishing her thesis and I acted as her mentor, including advising on publication strategy, job and grant applications and other aspects of career strategy. I have also acted as a mentor for the European Women in Mathematics Mentoring Scheme. I have had 4 PhD students in the past (1 male, 3 female); I currently have 3 PhD students (2 male, 1 female).

I am strongly committed to excellent undergraduate teaching, with experience at all levels. I have had several substantial administrative roles, including SoMaS Assessment Coordinator and, currently, SoMaS Coordinator of Support Teaching. I am the SoMaS representative on the Faculty of Science Equality and Diversity Committee and I have been a member of the SoMaS Good Practice Group since its inception. My experiences of maternity leave and return have informed the group's work on these issues, particularly the SoMaS checklist for maternity leave. Consequently, various aspects of the process will be significantly better managed in the future. I have recently benefitted from a 1-1 Career Development Meeting as part of the EPSRC-funded Developing Leaders Scheme; at TUoS this funding was largely used for supporting Athena SWAN activities.

(504 words)

**Case Study 2: Dr Sam Marsh (Teaching Fellow)**

I have worked as a Teaching Fellow in the School of Mathematics and Statistics since April 2009, but my association with the School goes back further, having completed both undergraduate and postgraduate degrees in the same department. I began lecturing during my PhD; funded by one of the university's Graduate Teaching Assistantships I was able to build up teaching experience through running problem classes, and I expressed an interest in lecturing opportunities should they arise. Maternity leave for a member of the academic staff allowed me to take on some lecturing on the Science and Engineering Foundation Year, and this experience put me in a strong position to apply for my current role on completion of my PhD, initially on a one-year fixed-term contract. The job suited my circumstances perfectly: I had found teaching much more rewarding

than research, and being settled in Sheffield with my long-term partner, Lucy, I was keen to stay in the city.

My role as a full-time Teaching Fellow was unique to the School when I started, with other non-research focused academic staff contracted only for the teaching they undertook. Alongside a substantial role as the School's Assessment Coordinator, I was encouraged to develop my programming skills in order to contribute to the design and development of the School's online administration/examination database, something which has since become a major part of my job.

In April 2010 I married Lucy and in April 2011 we had a baby girl, Doris. The subsequent period was a difficult one as Lucy suffered from severe postnatal depression, spending time in hospital in Nottingham. I received considerable support from the School, including frequent discussions with the Deputy Head of School on managing my workload, and while my work was certainly affected I was able to carry out the vast majority of my duties. My position was made permanent in June 2011.

Lucy was well enough to return to work at the end of her maternity leave in April 2012, and did so on a 0.6fte basis, with Doris spending three days in nursery. In October 2012 I applied for flexible working, reducing my employment contract to 0.8fte so that I stay at home to care for Doris on Mondays. This has worked well, with the School supportive of my request and able to make adjustments to keep Mondays free from teaching. I usually manage to keep Mondays totally work free, although occasionally (but not frequently) I find a gap to check my email.

With home life now much more settled I have been able to put more energy back into my work and, in particular, my teaching. I recently helped devise and subsequently led a new non-standard first-year undergraduate module Mathematical Investigation Skills, and have just taken on the role of Engineering Service Teaching Coordinator. I have continued to develop my programming skills, and have introduced numerous improvements to the usability and efficiency of the School's online database, which I have found very satisfying.

(494 words)

(Total words in Section 7: 998)

# University of Sheffield School of Mathematics and Statistics
# Athena SWAN Action Plan Nov 2013

| Action | Description of action | Action taken already and outcome at October 2013 | Further action planned at October 2013 | Responsibility | Timescale | Success Measure |
|---|---|---|---|---|---|---|
| **1.** | **Transforming culture** | | | | | |
| 1.1<br><br>p9, 18, 21, 22, 25 | Engagement with training, networking and mentoring opportunities. | TUoS-run mentoring schemes are available and open to participation by all women.<br><br>Women-specific programmes such as Springboard for Women and Women@TUoS NETwork provides additional mentoring opportunities.<br><br>SoMaS staff provided with a mentor when hired; the process is largely informal with little oversight. Creation of role of SoMaS Early Career Support Officer (1/10/13). | Extend the role of the Early Career Support Officer (ECSO) to form a Mentoring Committee that determines and implements best practice relevant for the department. | Good Practice Group | 1/11/13- onwards | Increased satisfaction with SoMaS and TUoS mentoring for research and academic staff, determined via our survey and HR feedback. |

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| 1.2<br><br>p18, 21 | Unconscious bias training for all staff members. | Focused discussion on unconscious bias for all SoMaS staff (October 2013). Formal training (currently only 6% of SoMaS staff). | Encourage use of Implicit Website for awareness. Require this for members of all selection panels. Make more formal training available to all staff. | Good Practice Group, HoS, HR | Beginning 1/11/13, with goal of all current staff engaging with the dangers of unconscious bias by Summer 2014. | Increased awareness of gender bias issues in all staff, but particularly those making policy/recruitment decisions.<br><br>Consequently, increased recruitment and retention, within SoMaS of women across all hierarchical levels. |
| 1.3<br><br>p24 | Improved induction document for researchers and staff. | New staff are provided with an induction, assigned a mentor and meet with the ECSO. | Induction handbook to reflect SoMaS culture on the well-rounded academic, including flexible working arrangements, University policy on gender, equality and diversity, parental/carer leave, and mentoring and networking opportunities within SoMaS and the University. | GPG, HR | 1/10/13 – to be completed by Summer 2014, and subsequent annual updates and review. | Increased awareness of the positive actions SoMaS takes to encourage female staff at all levels as measured by staff survey. |
| 1.4<br><br>p19 | Creation of SoMaS "Support for You" web page (linked to the equivalent central TUoS page) reflecting SoMaS female-friendly culture. | Family-friendly culture embedded through<br>(1) SoMaS Facebook page regularly highlighting success stories of female staff and students, | Make family-friendly culture more externally visible and internally accessible, including case studies of flexible working, continuing to celebrate success, particularly of female staff, and to link with improved | Departmental Web Support Team | Autumn 2014 and updated as required | Web page serves as a reference resource to support managers and staff in understanding, providing guidance, and implementing family friendly policies, advice on promotions, |

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| | | (2) continual evaluation that SoMaS web sites use many female images. | induction material emphasizing policies that positively impact female researchers. Displaying images of successful female staff. | | | etc. Measured internally by increased awareness of such policies on staff survey.<br><br>Indirect positive effects on other external facing actions, including increased numbers of applications from females**.** |
| 1.5<br><br>p33 | Increase the visibility of female role models for PGR students and early career staff. | Seminars in which the seminar and colloquium organisers manage the invitation process to include successful female academics and creation of a checklist for seminar organisers to remind them to keep gender balance, amongst other things, under review. | Approach female speakers earlier in the invitation cycle.<br><br>Annual reporting to GPG<br><br>Monitor numbers of female speakers invited. | Seminar organisers. | Speakers generally approached three months in advance continued every semester. | Increase the proportion and visibility of female speakers in departmental seminars. |
| 1.6<br><br>p29 | Review timing of meetings, social gatherings and teaching. | Most SoMaS meetings held 9.30-4.00. | Consult with staff to determine best solution. | GPG | 1/1/14 – 1/3/14 | Greater staff satisfaction as evidenced by improved survey scores. |
| 1.7 | Align workload allocation model (WAM) to SoMaS | Our long standing WAM reimplemented | Scrutinize alignment to departmental values (i.e., | HoS, DHoS, GPG | Ongoing | Transparent and timely WAM information. Fair |

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| p28 | values. | using Faculty of Engineering software in 2012. Populated at a better stage in the annual cycle in 2013. Draft document enunciating principles written. | investment in the well-rounded academic) contribute appropriately to WAM calculations. | | | allocation of work. |
| 1.8<br><br>p27, 28 | Balance of representation in committee membership. | Monitor gender balance in committee membership.<br>Annual call for expressions of interest. | GPG suggest members to HoS | HoS, GPG | 1/3/14 | Staff gender balance in committee membership in line with that in academic staff. Similarly for student membership. |
| 1.9<br>p5 | Athena SWAN accreditation. | Good Practice Group has met regularly since 2012. Four of these meetings have been to gather, process, and interpret data relevant to application process, and discuss action plans.<br><br>Supported by HR. | Ensure responsive and progressive action plans are implemented.<br><br>Self-assessment process embedded in SoMaS culture.<br><br>Ongoing programme of improvement. | GPG Committee | GPG to meet twice every semester commencing January 2014. | Athena Swan award (and its renewal).<br><br>Improved staff satisfaction in survey. |
| 1.10<br><br>p5 | Sharing of Athena SWAN best practice. | Reporting to TUoS Faculty of Science Equality and Diversity Committee. GPG member on Faculty | Two way sharing.<br><br>Service on advice and assessment panels for other departments. | GPG Member @ Equality and Diversity Board meetings<br><br>APS Athena SWAN | Ongoing | Contributions to successful Athena SWAN awards from other TUoS STEM departments. |

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| | | Equality and Diversity Committee. | | champion disseminates information at other opportunities organized by TUoS (see TUoS Bronze renewal application) | | |
| 1.11<br><br>p22 | Timetabling to respect caring responsibilities and part time working. | Part time working recorded on School database (June 2013). | Caring responsibilities and Part Time working used as an input to the assignment of timetable slots. | Timetabler, Deputy DoT, Demonstrator and Marking Officer | Semester 2 of 2013-14 | Reduced need for special arrangements for both staff and SoMaS. |
| 1.12<br><br>p30 | Survey staff attitudes and satisfaction (especially as regard gender equality issues). | Occasional University-wide surveys, survey of SoMaS women staff by GPG as part of Athena SWAN process and a very recently conducted SoMaS Gender Equality Survey. | Cooperate with and make use of data from University-level surveys and conduct annual surveys within SoMaS.<br><br>GPG to interpret the results of such surveys and use them to inform our recommendations on Good Practice within SoMaS, feeding up ideas as appropriate via the Faculty Equality and Diversity Committee. | GPG | On-going – next SoMaS survey to be conducted in Semester 1 of 2014 | GPG and HoS better informed about staff satisfaction and attitudes and thus able to amend policies and procedures accordingly, leading to improved satisfaction at subsequent surveys. |
| 2. | **Gender balance and student performance** | | | | | |

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| 2.1<br><br>p13, 31 | Monitor gender of applications, offers, acceptances and registrations for UG programmes. | Statistics collected and discussed in this application. | Monitor annual statistics in applications and Open Days. Investigate potential Trends. Review Decliner's Survey to identify any patterns. Ensure female staff have prominent roles at Open Days. | Director of Admissions and GPG | Annually after receipt of full admissions statistics | Proportion of females on SoMaS degrees at or above equivalent HEI average. |
| 2.2<br><br>p13 | Monitor gender on Open Days and in Outreach activities. | Mathematics Academy and other Outreach statistics collected. | Form time series of statistics, analyse. | Outreach activity organizers | Ongoing | Proportion of female UGs close to 50%. |
| 2.3<br><br>p6, 9, 15 | Monitor gender balance of Home/EU PGR students. | Monitor gender balance in PGR admissions (figures vary wildly). | Monitor gender balance in applications and visits. Investigate potential causes by conducting a Decliner's Survey.<br><br>Meeting for Level 2 UGs to discuss the option of doing a PhD. | Postgraduate Committee | June 2014 following end of admissions process | Proportion of female acceptances similar to or greater than proportion of female applications.<br><br>Increased proportion of applications from women. |
| 2.4<br><br>p6, 9, 15 | Investigate discrepancy between the genders in UG performance. | Female UG students outperformed male students in BSc, but it seems the opposite is the case in the straight MMath. | Determine whether gender discrepancies exist, and if so, investigate why and seek to address. | Teaching Committee, GPG | Data analysis by May 2014 following next set of exam marks. | Statistics for male and female students should be similar. |

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| 2.5<br><br>p6 | Improve gender balance in MMath. | Statistics gathered and discussed by GPG. | Annual presentation to Level 2 students about PGR opportunities, and importance of decision about Masters, see also Action 2.3. | PGR Director | Spring 2014 | Move closer to our aspiration of having MMath gender balance close to BSc gender balance. |
| 2.6<br><br>p8 | Monitor gender balance of applications, offers, acceptances and registrations on MSc programmes. | Statistics collected and discussed by GPG. No immediate cause for concern, but some evidence of decline in proportions of female applications and registrations on Statistics MScs. | GPG to review statistics again early in 2014-15 and work with Statistics MSc Admissions Tutor to explore reasons and seek to rectify if decline appears to be a trend. | GPG and MSc Admissions Tutors | Autumn 2014 | MSc gender balance close to national averages for discipline. |
| 3. | **Female researcher and PG career development and progression** | | | | | |
| 3.1a<br><br>p25 | Identify effective mechanisms for discussing career progression, especially for women (Postdocs). | Career progression discussion currently responsibility of PI and DoR as part of SRDS. | See Action 1.1.<br><br>Make confidence and resilience training available through Women@TUoS NETwork. | Mentors, Women@TUoS NETwork | 1/1/14- onwards | Increased retention of female researchers in STEM as measured by exit/alumni survey. |
| 3.1b<br><br>p21 | As above for PGRs | Career progression discussion currently informal with supervisor. | Include PhD advisor and PGR director in discussions. | PhD supervisor, PhD advisor and PGR director | 1/1/14 onwards | Increased retention of female researchers in STEM as measured by exit/alumni survey. |

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| 3.2<br><br>p22, 25 | Enhance career prospects by increasing opportunities to engage in professional activities. | Springboard personal development offered to all EC staff. | Encourage staff to create research-led teaching opportunities with appropriate support.<br><br>Review committee membership to include researchers in relevant committee participation.<br><br>Advertise professional development opportunities around School (ECSO). | HoS, Departmental Committees, Director of Teaching and ECSO | Academic yr 2014 onwards | Increased involvement of researchers on departmental committees and research-led teaching. Increased confidence of ECRs. |
| 3.3<br><br>p21 | Encourage, support and monitor fellowship applications. | University-wide fellowship application guidance courses and mentoring schemes available to all researchers.<br><br>SoMaS and Faculty internal review system for fellowships ensures feedback is provided prior to submission. | see Action 1.1 | Mentoring Committee | 1/6/14-onwards | Greater proportion of SoMaS trained women researchers applying for research council fellowships with ambition to exceed national application proportions.<br><br>Increased attendance at relevant TUoS-wide courses and schemes. |
| 3.4<br><br>p22 | Mentoring | Informal mentoring process and probationary advisors. | Postdoctoral mentors | ECSO in consultation with GPG | 1/10/14 | Improved retention of SoMaS trained female researchers in STEM measured by exit/alumni surveys. |

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| 3.5<br><br>p9 | Establish female PG Forum. | | Establish a forum for female PGs to discuss career development and progression, including inviting role model speakers. | PGR Committee and ECSO | Spring 2014 | Raised awareness of issues affecting career development and progression as evidenced by survey. |
| 3.6<br><br>p21, 24 | Increase awareness of training opportunities. | Occasional advertisement via email. | Add Training Opportunities section to Newsletter. | Newsletter editor, ECSO | Immediate | Increased uptake of training opportunities |
| 4 | **Recruitment and promotion of female academic staff** | | | | | |
| 4.1<br><br>p19, 27 | Increase job applications from women. | Advertisements designed to be gender neutral.<br><br>LMS Good Practice Supporter logo on webpage.<br><br>Review of gender balance on webpages. | Improve wording on advertisements to encourage women applicants.<br><br>Supporting material on job adverts to encourage applications from women.<br><br>Encourage additional advertisement via appropriate networks (European Women in Maths, AMS).<br><br>Make female researchers aware of recruitment opportunities and provide career support/confidence training where appropriate. | HoS, HR and policy committee. | 1/1/113-onwards | Increase in the proportion of female applicants. See also Actions 1.4, 4.2. |
| 4.2<br><br>p18, 19, 27 | Recruit academic staff in ambient gender balance. | We ensure there are females on recruitment and | Continued use of monitoring and assessment of all methods used. | HoS, HR, Job panels, Policy committee | Ongoing | Proportion of female appointments similar or greater than female |

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| | | appointment panels. | Highlight in advertising that we welcome female applicants, and the availability of support for staff with children.<br><br>Unconscious bias training (see Action 1.1). | | | applicants. |
| 4.3<br><br>p19, 24 | Raise awareness of the department's family-friendly and supportive culture. | These aspects of our culture are currently internally visible during formal SRDS and informally evident during professional and social events. | Formalize induction process (see Action 1.3) particularly with respect to retention and promotion.<br><br>Externally visible family-friendly policies via Action 1.4. | HoS, line managers | 1/1/13-onwards | Increased agreement with current staff that department offers visible and effective provision in all aspects of this issue. |
| 4.4<br><br>p24 | Integration of new staff. | Appointment of Early Career Support Officer (1/10/13). | Formulate SoMaS specific induction checklist and post it on the internal wiki. | DHoS, ECSO | 1/4/14 | Greater sense of community and belonging, as evidenced by University staff survey. |
| 4.5<br><br>p25 | Establish informal support networks | Experienced staff willing to lend a listening ear named | Launch of internal support network. | HoS, GPG | 1/4/14 | Greater sense of community and belonging, as evidenced by University staff survey. |
| 4.6<br><br>p23 | Raise awareness of promotion criteria and their interpretation, recognising mixed | Reviewers discuss promotion cases during annual SRDS and feedback | Publicize promotion criteria.<br><br>Confidence/Resilience training through | HoS, Women@ TUoS NETwork | See Actions 1.3, 1.4<br><br>Annual SRDS completed each July | Promotion applications and awards reflect gender balance of eligible staff. |

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| | contribution portfolio | provided by the Departmental Promotion Panel.<br><br>Annual promotions workshop conducted by pair including both genders and the HoS. | Women@TUoS NETwork, offered to encourage females to put themselves forward.<br><br>Monitor gender balance of those opting out. Actively offer support to those repeatedly opting out (via SRDS or mentoring). | | | |
| 4.7<br><br>p18 | Ensure career breaks are adequately considered during promotion. | SoMaS Promotions Committee ensures that adequate account is taken of career breaks when discussing promotion cases and when writing cases for support. | Remain vigilant that career breaks are adequately considered during promotion at the Faculty level and continue to monitor the impact of this policy. | HoS | 1/7/13 – 31/9/13 (next promotion cycle); Continued annually | Proportion of successful promotion applications and awards do not differ between staff with and without career breaks. |