Athena SWAN Bronze department award application

Name of university: **University of Oxford**

Department: **Statistics**

Date of application: **25th April 2014**

Date of university Bronze and/or Silver SWAN award: November 2013

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We have been awarded an additional 500 words, to describe the Oxford career structure. These are used in Section 3.

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GLOSSARY	
CDR	Career Development Review
CDT	Centre for Doctoral Training
COPS	Committee of Professors of Statistics
DL	Departmental Lecturer (a fixed term contract)
ECR	Early Career Researcher
EDU	Equality and Diversity Unit
EPSRC SAN/SAT	Engineering and Physical Sciences Research Council Strategic Advisory Network/Team
GPSG	Good Practice Steering Group
HoD	Head of Department
IMS	Institute of Mathematical Statistics (international learned society)
JACS	Joint academic coding system (to code provision of Higher Education across the UK)
LMS	London Mathematical Society (UK's major learned society for mathematics)
MPLS	Mathematical, Physical and Life Sciences Division (one of four academic divisions of the University of Oxford)
OCGF	Oxford Centre for Gene Function (one of the department's four buildings)
OLI	Oxford Learning Institute
OUSU	Oxford University Student Union
OxWaSP	Oxford-Warwick Statistics Programme
PGR/T	Postgraduate research/taught student
RA	Postdoctoral Research Assistant
RoD	Recognition of Distinction (internal promotion)
SABS-IDC	Systems Approaches to Biomedical Sciences Centre for Doctoral Training
UL(TF/NTF)	University lecturer (Tutorial Fellow/Non-Tutorial Fellow)

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

DEPARTMENT OF STATISTICS
UNIVERSITY OF OXFORD

UNIVERSITY OF OXFORD

25th April 2014

Dear Athena SWAN panel,

As Head of Department, I am delighted to give the Oxford Statistics Department's application for a Bronze Athena SWAN award my full support. The application has been put together by a team of individuals drawn from across the department, including myself, research students, early career researchers, established academics and support staff. This has generated a huge sense of engagement. A senior female academic chaired the meetings which took place over lunch with lively discussions and a constant flow of ideas. It has been a privilege and a pleasure to listen to the constructive and creative ideas of everyone concerned, especially the research students who set an extremely positive tone. The Panel is now embedded as a Department committee called the Good Practice Steering Group.

As our Action Plan shows, we have a lot of work to do. We now have a real and timely opportunity to put these changes in place. We move into a new building in 2015, and we are planning lots of new senior appointments, including three statutory professors and three associate professors over the next few years. In October we are launching a new EPSRC Centre for Doctoral Training with Warwick. This time of growth and change is our moment to set in place structures (physical and organisational) promoting an inclusive and flexible culture. The physical layout of our new home is important; we want to encourage as much interaction as possible and include family friendly spaces. Our management structure will be reviewed, but sitting at the heart of it will be the Good Practice Steering Group.

I am obviously proud to have three female professors, but am concerned that they should not be overburdened. The University of Oxford is a very complex organisation, in which many academic staff have more than one role, often as lecturer and college tutor. It is clear from the responses to our survey that we must find a way to take a holistic view of each individual's activities. In particular, we must recognise the burden's placed on our female academics by the demands of being role models to the younger generation.

Our Athena SWAN application has identified a sequence of actions which have the potential to improve the work-life balance of our entire departmental community. We were fortunate that one of our support staff was eager to extend her hours in order to help drive forward our application. We are even more fortunate that she would like to continue to support the Good Practice Steering Group. We are very happy to provide the resource for this as well as specialised support that will be needed to take forward some of the actions, such as those related to the new website.

We look forward to continuing to work with Athena SWAN groups from across the University to put effective plans in place to train, recruit and realise the full potential of women statisticians of the future.

Yours sincerely

G. K. Nicholls.

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Head of Department

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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.

Table 1: The self-assessment team.

Name	Role in Department	Description and experience of work/life challenge
Jan Boylan	Deputy & Academic Administrator	Closely involved with student admin and welfare. Leading project to update website. OU Degree completed in 2012.
Charlotte Deane	Professor of Structural Bioinformatics (Joint with Doctoral Training Centre)	Director of SABS-IDC Centre for Doctoral Training: runs admissions/outreach, designs/delivers course, co-ordinates industry partnerships.
Alison Etheridge	Professor of Probability (Joint with Mathematics)	Extensive involvement in wider University. Service on councils of learned societies, RAE2008/REF2014 subpanels, EPSRC SAT/SAN. 2 children (10 and 12).
Robin Evans	University Lecturer (Fixed Term)	ECR. New to Oxford. International perspective from doctoral studies in Seattle (where saw much higher female representation in Statistics at all levels).
Anna Frangou	DPhil student	Involvement motivated by recognition of the gender disparity. Active feminist, recently asked to write on feminist issues for Huffington Post UK Students blog.
Beverley Lane	Administrative Team, Secretary to Good Practice Steering Group	With the Department part-time for six years. Increased hours to provide extra support for the Athena Swan application/ embedding Good Practice. 4 daughters (aged 15 – 25).
Neil Laws	Director of Studies	Lecturer 1992-2006, Director of Studies 2008-. Coordinates department's teaching. 2 children (19 and 17).
Sofia Massa	Departmental Lecturer	In Oxford since September 2010. Previously worked in Italy. MSc Course coordinator. Expecting first child.
Geoff Nicholls	Head of Department (HoD)	Moved to Oxford in 2005, from Auckland, NZ. Previously in Particle Physics in Cambridge, Electrical Engineering in Surrey. 2 children (9 and 12).
George Nicholson	Research Assistant	In department as MSc/DPhil student/RA/part-time for consultancy service. Has worked in all 4 of Department's buildings. Represents RAs on Departmental Committee. Shortly taking paternity leave.
Aimee Taylor	DPhil student	Member of the WorldWide Antimalarial resistance network. Offices in OCGF/Centre for Clinical Vaccinology and Tropical Medicine. Stark contrast in gender balance between 2 departments.

The self-assessment team (see Table 1) were advised and supported by Adrienne Hopkins from the University's equality and diversity unit (EDU) and Professor Stuart West (Zoology), who has been instrumental in promoting Athena Swan and the sharing of good practice across the Mathematical, Physical and Life Sciences (MPLS) Division in Oxford.

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.

The department established a self-assessment team in December 2011. In 2012, we conducted an initial staff survey. The most immediate concern of almost all respondents related to the physical estate, currently spread across four different buildings, which constrains our ability to work and communicate effectively across the department. A preliminary version of our self-assessment data was supplemented by a detailed analysis of our student numbers and satisfaction data, gathered as part of the evidence for the External Review of the Department organised by the University in 2012/13. In 2012 we became supporters of the London Mathematical Society (LMS) Good Practice Scheme and the Head of Department attended an LMS workshop on Athena Swan and the Good Practice Scheme.

The self-assessment team is made up of academic and support staff and graduate students. All academic career stages are represented, from those with long experience of balancing teaching, administration and research to early career researchers on fixed term contracts. There is considerable experience of the challenges posed by childcare and other caring responsibilities and the benefits of flexible working. From the outset it was recognised that the principles promoted by Athena Swan and the Good Practice Scheme would be relevant for the whole community and it was resolved to review both academic and non-academic activity in the department. Partly in response to the results of our first staff survey, members of the self-assessment team are drawn from groups based across the physical estate, in recognition of the different conditions that prevail in our different buildings (which range from two Victorian villas to shared space in modern laboratory buildings). The team is refreshed regularly, to share the burden of the work and to ensure a constant supply of fresh ideas.

During 2013, the department focussed on its response to the recommendations of the external review, but in December 2013 Alison Etheridge took over as convenor of the self-assessment team and was asked to take a lead in preparing this application. At this point we first met with Adrienne Hopkins and Stuart West who provided us with key data and examples of good practice. We work closely with the Mathematical Institute (Bronze award, November 2013), sharing information and activities. In January 2014, the Head of the Mathematical Physical and Life Sciences Division (MPLS) came to an open lunchtime meeting in the department at which he gave a presentation on the Athena Swan process and the benefits that it has brought to departments in the division. At that meeting, we launched a second, much more detailed, survey of staff (including research and support staff) and graduate students. This online survey was based on a template developed by the division, and already used by six other MPLS departments. The response rate of staff was 74%. That of students was a more disappointing 32%. Partly because of this, a second research student, based in a different building, was asked to join the team. This proved to be extremely successful. Our two student members contribute far more than their share of ideas and challenging questions. The survey was followed up in February and early March by a series of focus groups, teasing out particular concerns of graduate students, early career researchers and lecturing staff. Between January and April 2014, the team met every four weeks.

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.

In January 2014, the *Good Practice Steering Group* (GPSG) was set up within the formal governance structure of the department (see section 4) in order that its activities would be fully embedded within those of the department. It meets once a term and sends its reports to the Departmental Committee (the department's main committee, chaired by the HoD). The group takes forward initiatives in relation to the principles of the LMS Good Practice Scheme as well as the Athena Swan Charter and promotes collaboration and sharing of good practice with other departments. Part of its remit is to monitor progress against our action plan, which it will renew annually, and it can direct other committees to consider particular elements. The 2014 staff/student survey will be the first of a triennial sequence. In 2012, the Mathematical Institute introduced an annual survey of third year undergraduates which also captures our undergraduate students. The results will be passed to the GPSG.

A major theme running through the responses to our staff survey was a lack of effective communication of information across the department. A key tool in addressing this, referred to in many of our action points below, is the departmental website. This is currently undergoing a major review and an overarching aim is to ensure that it is attractive and accessible, presenting information in a `female friendly' way, and that it reflects the supportive and inclusive culture of the department.

ACTION POINTS 1.1:

i. **Introduce triennial staff and research student survey;**
ii. **GPSG to revise the action plan annually and report changes (and the rationale for them) to departmental committee;**
iii. **Guided by the UK Research Councils Report `Making Women Visible Online', use the new website to promote female role models, to facilitate communication and information flow and to promote the principles of the LMS Good Practice Scheme and the Athena Swan Charter.**

[836 WORDS]

3. A picture of the department: maximum 2000 words

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

The Department of Statistics, ranked top in the UK in RAE2008, celebrated its 25th anniversary in 2013. In March 2014, it has 26 academic staff (6 women, 20 men) from ten different countries, 15 postdoctoral researchers (all men) and 75 research students (22 women, 53 men), supported by 4 IT (2 women, 2 men) and 6 administrative staff (all women), a (male) Director of Studies and a (female) schools liaison and outreach officer. Twenty of our academic staff hold permanent posts (4 women, 16 men). Two faculty and two emeritus professors (all men) are Fellows of the Royal Society. Of 10 Professors, 3 are women. Each of the three main research groups runs a seminar series and there is a steady stream of visitors. Although we are currently spread over four sites, a new home has been identified, which will undergo extensive renovation in readiness for occupation in 2015.

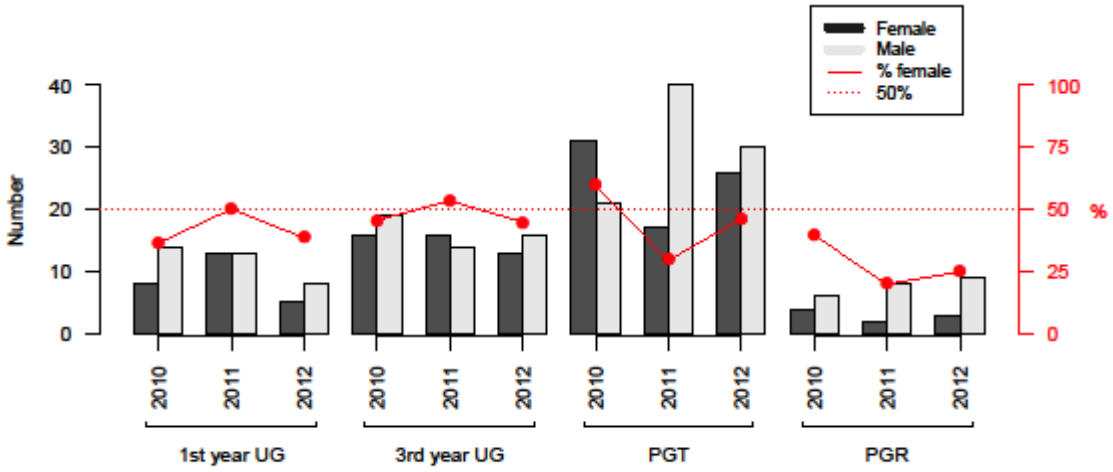
Training the next generation of statistical scientists is a key part of our mission. In addition to the BA and MMath degrees in Mathematics and Statistics, we run an MSc in Applied Statistics and provide leadership for two centres for doctoral training (CDTs): the SABS-IDC, a joint venture involving 12 departments and 15 companies, has just been renewed; the Oxford-Warwick Statistics Programme, OxWaSP, run jointly with Warwick, welcomes its first students in October 2014. The Unistats website reports that 95% of our undergraduate students are happy with the quality of their course.

The department is greatly enriched by its interactions with other disciplines. Some staff (academic and administrative) hold joint appointments with other departments, e.g. Alison Etheridge (Mathematics), Tom Snjiders (Politics). Others are seconded full or part time, e.g. Peter Donnelly (Wellcome Trust Centre for Human Genetics), Chris Holmes (Oxford Man Institute).

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

Figure 1. The people pipeline 1: students *(In this Figure, PGT refers to 4th year undergraduate and MSc.)*



(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.

The Department does not run access or foundation courses.

(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.

Table 2: First-year Mathematics and Statistics student numbers for the past five years.

	08/09	09/10	10/11	11/12	12/13
Female	12	10	8	13	5
Male	13	13	14	13	8

Table 3: Third-year Mathematics and Statistics student numbers for the past five years.

	08/09	09/10	10/11	11/12	12/13
Female	10	25	16	16	13
Male	20	22	19	14	16

Table 4: Fourth-year Mathematics and Statistics student numbers for the past five years.

	08/09	09/10	10/11	11/12	12/13
Female	9	2	15	6	10
Male	11	10	9	14	12

The entrance requirements and first year of study for the Mathematics and Statistics Degree are identical to those for Mathematics, making it easy for students to transfer from Maths to the joint degree once at Oxford. Although our first-year intake is typically 20-25 students per year, the average number of third year students over the last five years was 34. Around 40% of students graduate with a BA after three years; the remainder leave after four years with an MMath in Mathematics and Statistics. The percentage of female students in the first-, third- and fourth-years was 45%, 47% and 43%, but numbers fluctuate considerably. The sector average is 39% in mathematical sciences[1] or 43% for courses categorised under JACS code G3-statistics.

Although at first sight encouraging, the data show that we have consistently admitted more men than women onto the first year of our degree. Moreover, of the 23 Home/EU students who left with a BA in the period, 9 (39%) were women; of the 37 Home/EU students who left with an MMath, 12 (32%) were women. This latter figure is in line with the proportion of women taking Further Maths at `A' level (29% in 2013).

Since almost all of our UK applicants are expected to have Further Maths, it is a challenge to find sufficient female applicants with the aptitude and motivation to flourish as undergraduates. This is exacerbated by the huge difference between school and university statistics and mathematics. We work closely with the Mathematical Institute to provide enrichment activities through our (jointly appointed) schools liaison and outreach officer, e.g. collaborating on a new UNIQ summer school[2], `*Mathematics: What are the Chances?*'. However, the number transferring into our degree suggests that we could do more to convey the attraction of statistics, even to applicants who have decided on mathematical sciences. Of the 24 students originally accepted to read Mathematics in our 2010-2 third year cohorts, 15 were women.

[1] Source: Equality in Higher Education Report 2012

[2] UNIQ is a programme of free residential courses for year 12 students currently studying in UK state schools

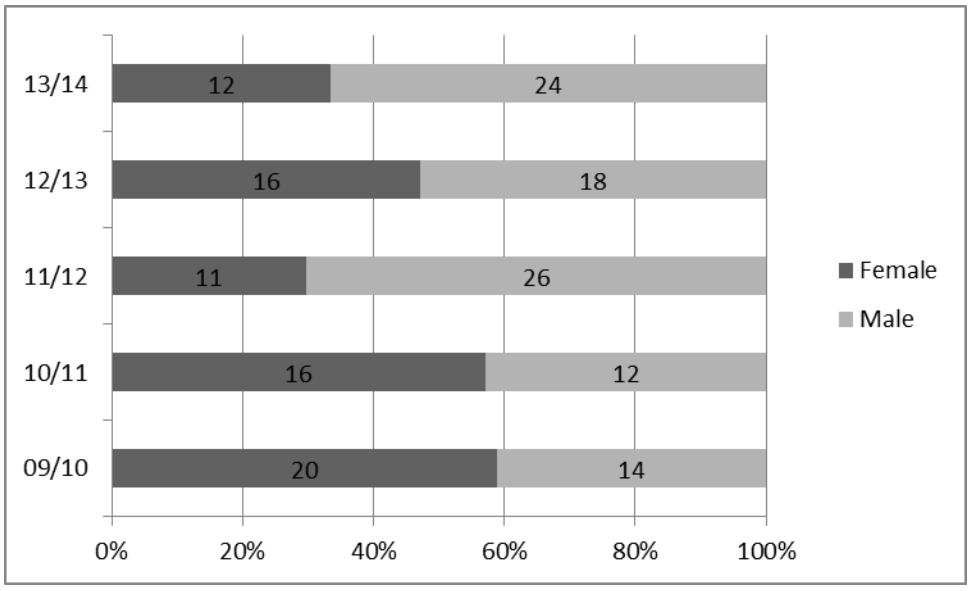
Open days, run jointly with mathematics, are held in the Mathematical Institute. The `statistics lecture' is, where possible, given by a woman. We display posters featuring previous students (of both genders). We plan more permanent displays, promoting the achievements of female role models, in the entrance to our new building. By hosting open day events in our new home, we hope to improve both applicant numbers and gender balance.

ACTION POINTS 2.1:

i. **Promote statistics to years 10-13, particularly girls, via outreach activities described in section 4;**
ii. **Interview students transferring into our degree from Mathematics to better understand their motivation and thus to inform design of our promotional material and outreach activities;**
iii. **Explain Oxford stats clearly and attractively in promotional materials/website/open days;**
iv. **Ensure prominent displays featuring female role models at all stages of their careers in the new building.**

(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.

Figure 2: MSc in Applied Statistics student intake for the past five years.



The MSc in Applied Statistics is a full-time 12-month MSc by coursework. The intake is around 35 students per year with an average of 48% women over the last five years, although numbers fluctuate considerably. The Committee of Professors of Statistics (COPS) annual survey reports that nationally, the proportions of women completing Masters in statistics in 2010, 2011, 2012, were 53%, 52%, 46%, respectively. Although not directly comparable, this suggests that our intake is close to the national average. Of the 61 Home/EU students admitted during the period, 21 (34%) were women, in line with our fourth year undergraduate numbers.

The MSc syllabus is under review. Evidence from further down the people pipeline (see below) suggests that some areas of our research are more susceptible to gender imbalance than others. As the course changes we will monitor our student data carefully. We will refresh our publicity material, ensuring that it includes female role models at all career stages.

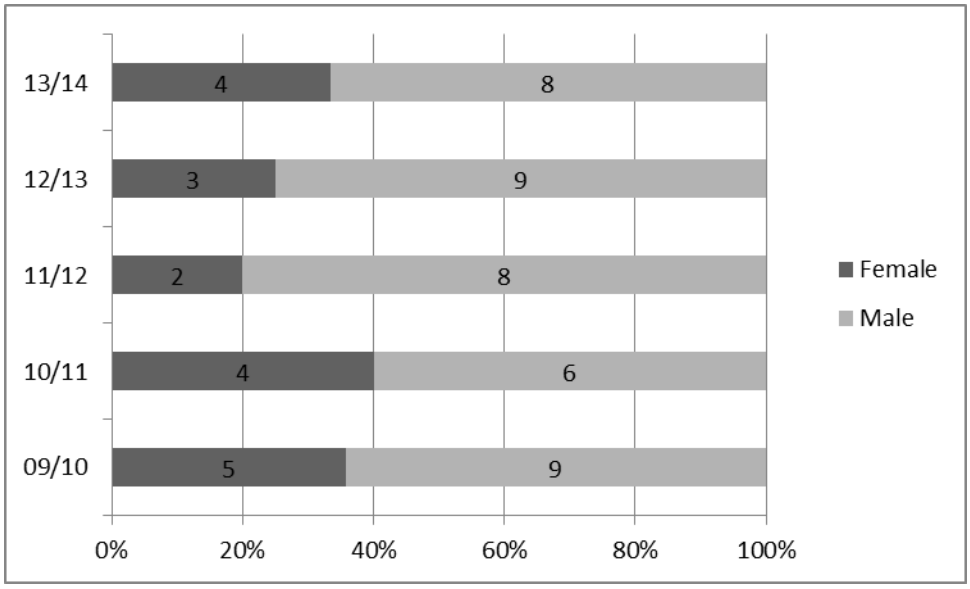
Actions points 2.3 are also relevant to MSc students.

ACTION POINTS 2.2:

i. **Carefully monitor MSc student data as the syllabus changes;**
ii. **Refresh the publicity material for the MSc, ensuring in particular that it features female role models at all career stages, drawn from current students, alumni and staff.**

(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.

Figure 3: First-year PGR student intake for the past five years.



The five-year average postgraduate research student (PGR) intake is 32% female. This does not include students admitted to the Life Sciences Interface, Systems Biology or SABS-IDC CDTs who transfer to the department after one year. With these students (an average of 6 per year), the figure becomes 30%. Unlike our taught courses, these numbers do not change if we restrict to Home/EU students. The COPS survey does not collect this data, but reports that 40% of full-time students (across all years) registered for a PhD at January 2013 are women. The sector average for first-year PGR students across Mathematical Sciences is 29%[3] (around a quarter of our supervisors are mathematicians).

[3] Equality in Higher Education Report 2012

Most of our PGR students receive external funding, but with the first cohort of students to have been subject to the £9K fee entering their third year in October, we are concerned about possible impact on graduate applications. Although we recruit largely from outside Oxford, we can gain some insight by interviewing current undergraduate/MSc students. Meanwhile funding for graduate students is a top priority of the University's development campaign.

OxWaSP is a new EPSRC funded CDT. It will admit approximately 10 students per year, 5 of whom will move to Warwick after a first year in Oxford. Our total PGR numbers disguise the uneven distribution of women across research areas. Certain subfields, including two that lie at the heart of OxWaSP, are particularly male-dominated. Indeed the supervisor pool has no female Oxford faculty and, of the applications received by March 2014, 85% are from men. As an immediate measure, we will urgently review our publicity material and we will target resources to ensure a good balance of students is maintained across the department.

To better understand differences in gender balance across areas we will use focus groups of current undergraduate/MSc students. Hand in hand with this, we will monitor data closely to see whether the apparent fall in the proportion of female PGRs over the last two years reflects the changing research emphasis in the department.

A major recruiting ground for both MSc and PGR students is the annual graduate open day, run jointly with Maths. At least one talk is from a female Professor, and at least one Statistics representative is a woman. Only about a third of the graduates we admit are Home/EU, so online publicity material is extremely important. The new website will present information in an accessible format, e.g. with the help of current/recent students we shall produce `leaflets' in the spirit of `10 things I wish I had known before starting my Stats DPhil' and `… writing my thesis'.

The best way to find out about life as a research student is to take a summer internship in the department. We will be proactive in promoting these to our best undergraduates, especially women, as well as seeking applicants from outside Oxford.

ACTIONS 2.3:

i. **Survey/interview current 3rd and 4th year undergraduate and MSc students to understand what influences choice about pursuing further study/effects of the £9K fee;**
ii. **Urgently review the approach to attracting applicants to OxWaSP with a view to attracting more women;**
iii. **Investigate gender balance in 4th year/MSc options courses and use focus groups of current students to understand what influences any differences (do role models and working patterns influence choice as well as subject matter?);**
iv. **Produce a series of `10 things I wish I'd known before...' sheets for the website;**
v. **Proactively encourage our best undergraduates, especially women, to apply for summer internships that give `tasters' for university research.**

(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.

Figure 4: Applications and offer rates by gender.

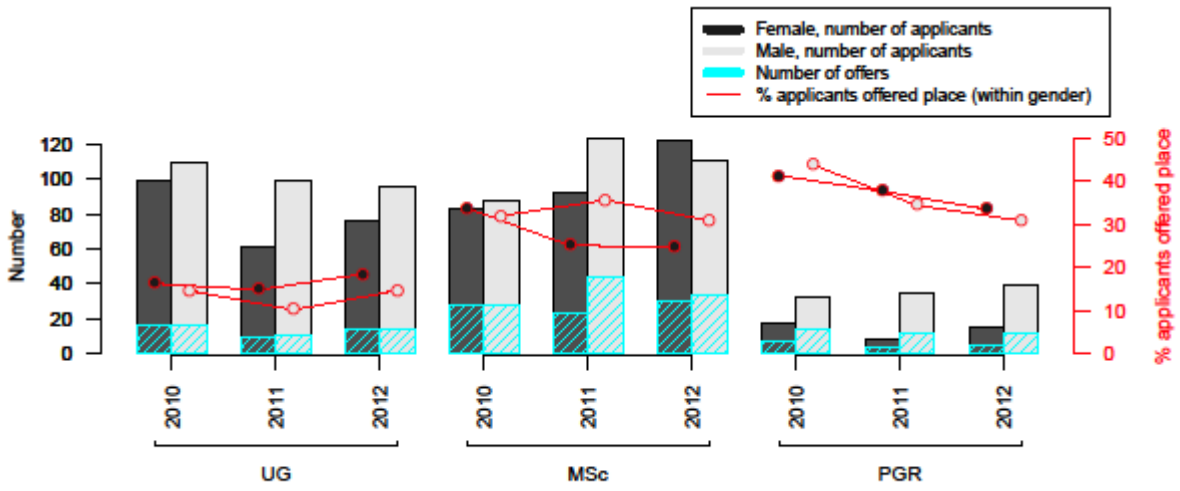
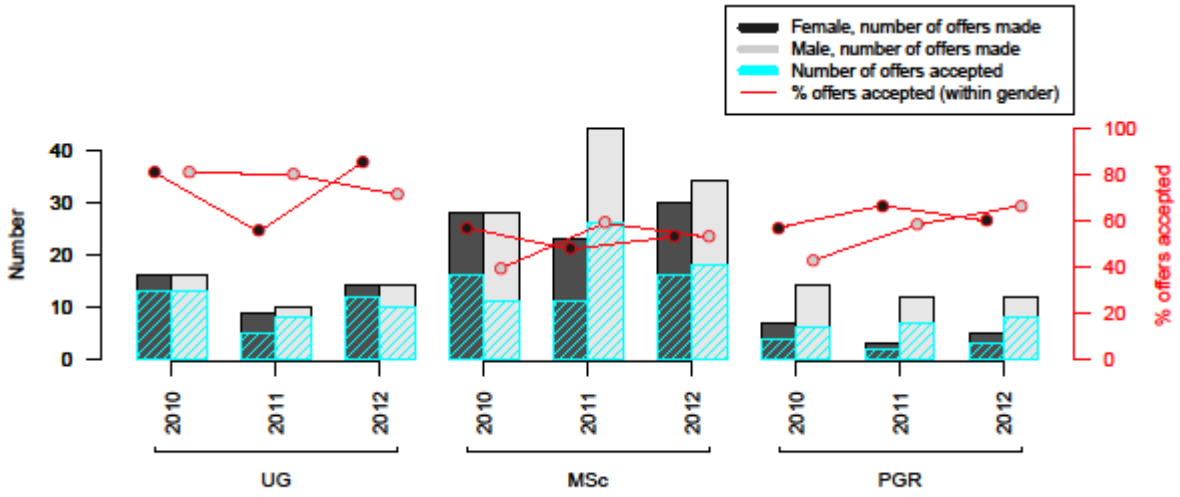


Figure 5: Acceptance rates by gender.



Over the past five years, 12% of female and 11% of male applicants for the BA/MMath in Mathematics and Statistics were offered a place. The acceptance rate is 77% for both men and women. The intake for the MSc has remained roughly constant, but the number of applications has increased and so offer rates have gone down. For PGRs, the number of applicants has been steady, the offer rate has declined (for both men and women), but the acceptance rate has increased to offset this.

Neither offer nor acceptance rates show significant gender differences, underlining the fact that our main challenge is to attract more female applicants.

(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.

Figure 6: Degree classification by gender.

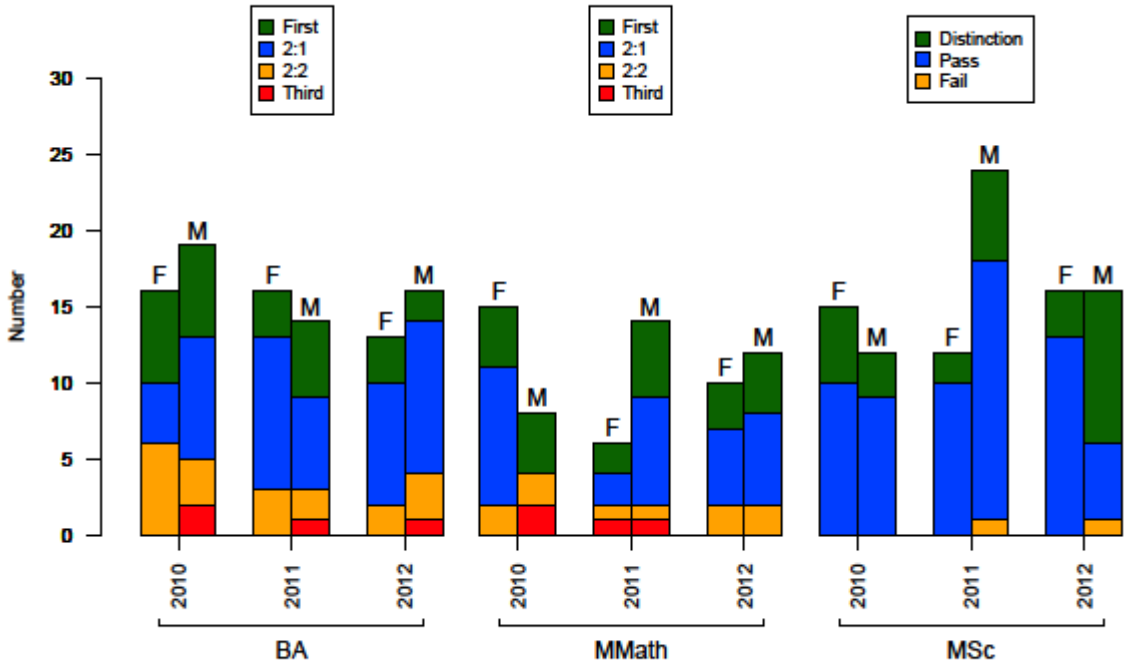
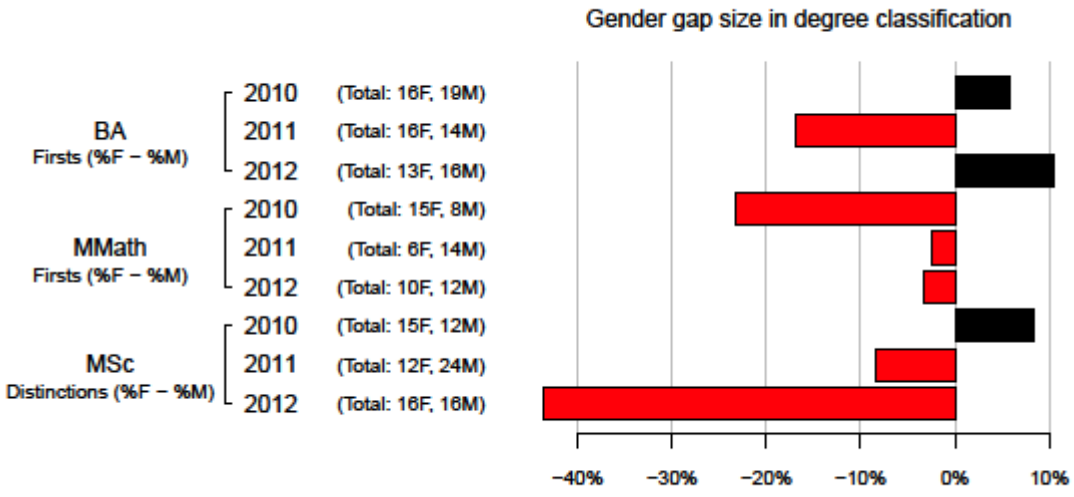


Figure 7: The gender gap in degree classification.



BA and MMath

Undergraduate students are classified at BA (on year 2/3 exams), and at MMath (on year 4 exams and a compulsory dissertation). Over the last five years, first class degrees were awarded to 24% of female students and 31% of male students at the BA level, and to 33% of women and 38% of men at the MMath level. Cohorts are small, so these differences are not statistically significant. Nonetheless, Figure 7 suggests that the situation must be monitored. Historically, mathematical sciences in Oxford displayed a clear gender gap, with proportionally fewer women achieving firsts. Since the transition to mixed gender colleges, the picture has been more mixed. The Student Union (OUSU) runs `Finals Forums' jointly with departments, providing advice on study skills, exam tips, stress management and general well-being during the examination period. This is promoted to `less confident students' rather than women to avoid the risk of stereotyping.

The dissertation is compulsory and contributes 37.5% to the 4th year degree classification. Over the last five years, 33% of female MMath students achieved first class marks for their dissertation, exactly in line with their overall results. This compares with 45% of male students. Although not statistically significant, this is something that academic committee will monitor. By contrast, in four out of five years the top dissertation was written by a woman. We have introduced a prize for the top dissertation which will help us celebrate successes of this type.

MSc

The MSc is classified on the basis of written examinations, practicals and a dissertation. Over the last five years, 19% of women and 33% of men have been awarded distinctions. For Home/EU students alone, these figures are replaced by 24% and 45% respectively. Although the numbers are small, this is clearly a cause for concern. A recent change has been the introduction of assessed group practicals and the course is now undergoing a major syllabus review. The GPSG have asked the Review Working Party to reflect on these numbers, the results of Action 2.3.iii (once available) and to examine possible gender differences in students' performance on components of the course with different forms of assessment.

PGR

The doctorate is not classified. Of the last five cohorts admitted, two students (one female, one male) have so far withdrawn.

ACTIONS 2.4:

i. **Investigate possible gender differences in performance of undergraduate/MSc students on components of course with different forms of assessment.**

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 Oxford career structure does not easily map onto national grades. Our permanent academic positions are Statutory Professorships and University Lectureships (ULs). These are recruited through open advertisement and appointed on a permanent contract to retirement, once they have passed any probation pertaining to the post.

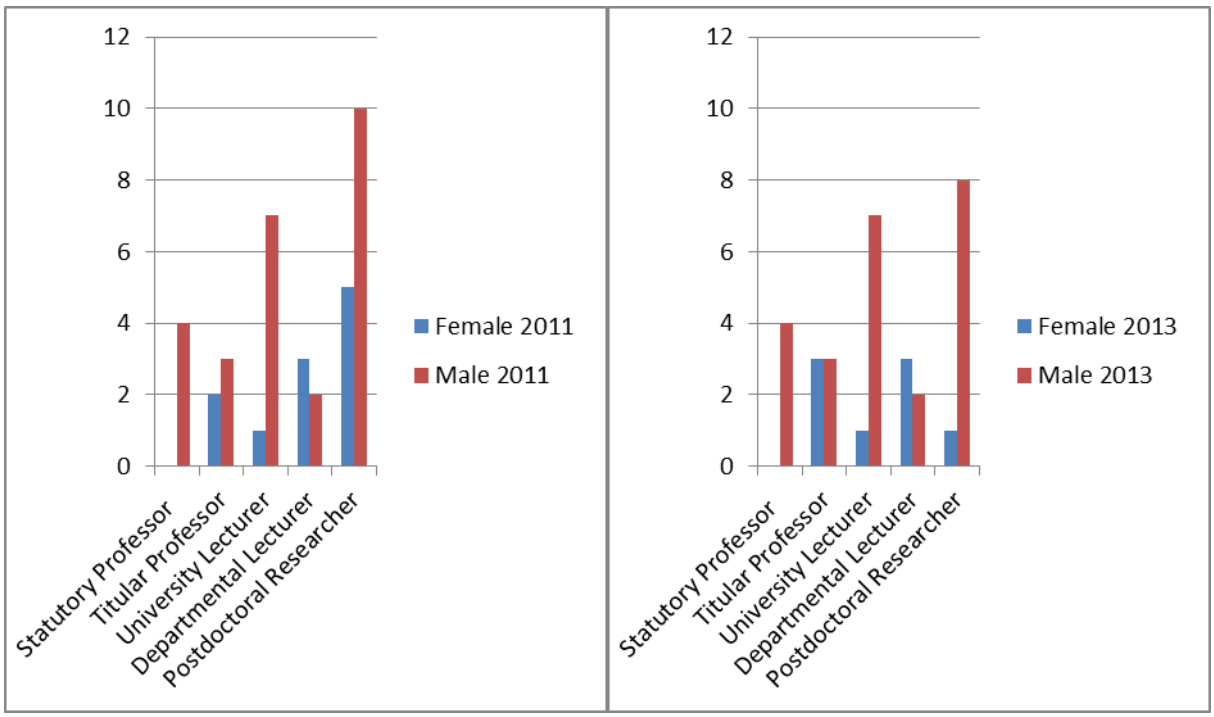
ULs are senior academic posts, recruited at Grade 10, and the starting salary equates to that of a Professor or Senior Lecturer at other universities. These are either ULNTFs, with no formal College teaching obligation, or ULTFs, held in conjunction with a Tutorial Fellowship at a College (which is an independent employer) and carrying a stint of around six hours of College tutorial teaching per week during term in addition to Departmental teaching duties.

Titular Professors are ULs and senior researchers who have been awarded a Professorial title in the `Recognition of Distinction' (RoD) exercise, Oxford's promotions exercise (see Section 4a(ii)). Although statutory and titular professors are distinct roles, both equate to Professorial appointments elsewhere.

Departmental Lectureships (DLs) are fixed term appointments at Grade 7 or 8, of equivalent status to a postdoctoral researcher, with no College teaching obligation, although many DLs take on some college tutorial teaching to broaden their experience.

PDRAs and research fellows are fixed term appointments, almost always externally funded. Although eligible to apply for positions in Oxford, most will move to another institution at the end of their contract.

Figure 8: The people pipeline 2: postdoc to professor.[4]



The COPS survey of staff in post in January 2013 reports that across the UK women make up 40% of postdoctoral researchers, 29% of lecturers, 25% of senior lecturers/readers and 13% of professors. This is not broken down into temporary and permanent contracts. Combining our

[4] Data based on July 31st census date.

categories of UL and DL (and omitting titular professors), 30% are women, but the majority are in the lower grade DL posts. Combining titular and statutory professors, 30% are women, but none hold the more prestigious statutory professorships.

Three things stand out from our raw data:

- we have no female Statutory Professors;
- the majority of women lecturers are on lower grade DL contracts;
- there has been a sharp decline in the number of female postdoctoral researchers.

Given the low turnover in the department, this will take time to address, but we are expecting to fill at least 3 statutory chairs (some joint with other departments) and 3 ULs over the next few years. It is vital that we attract top female statisticians to apply (see Section (b)(i) below). Our DLs are intended as early career positions. If we are to see the percentage of women at this level matched at later career stages, we must support and nurture these staff (see `Career Development' below).

From 2008 to 2012, consistently, approximately one third of our postdoctoral researchers were women, mirroring the percentages of PGR students. The sharp decline in the number of postdocs in 2013 was accompanied by a dramatic shift in the proportion of women. Growth in new research areas means that in March 2014, the total number of postdocs is again 15, but all are male. The GPSG was shocked by this figure. This has alerted us to differences in gender balance in different research areas: historically, most female postdocs were in groups now based in the Wellcome Trust Centre for Human Genetics. We are obviously concerned about the impact on the overall culture of the department. Although we don't see an immediate solution, we shall reflect on possible actions, informed by the results of Action 2.3.iii.

(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 of permanent academic staff is very low, driven almost exclusively by retirements, with no woman having left in the last five years. Postdoctoral researchers and DLs typically stay in the department for one fixed-term contract before moving on to another institution.

Table 5: Leavers in year leading up to July 31st 2010-2012

	Year		Headcount	Leavers	Turnover
Academic staff	2010	Female	4	0	0%
		Male	19	1	5%
	2011	Female	4	0	0%
		Male	19	2	10%
	2012	Female	6	1	17%
		Male	17	1	6%
Research Staff	2010	Female	4	1	25%
		Male	13	5	38%
	2011	Female	5	1	20%
		Male	10	1	10%
	2012	Female	5	0	0%
		Male	10	7	70%

Among academic leavers in Table 5, 2 men retired and the contracts of 1 female and 1 male (DL) ended. Since the final census date, all female postdocs have left and one professor returned to his home country.

To better understand the `people pipeline' and collect candid views of experiences in the department, we shall introduce `exit interviews' for all leavers.

ACTIONS 3.1:

i. **Introduce exit interviews for all leavers.**

[2497 WORDS] (extra 500 words used in this section)

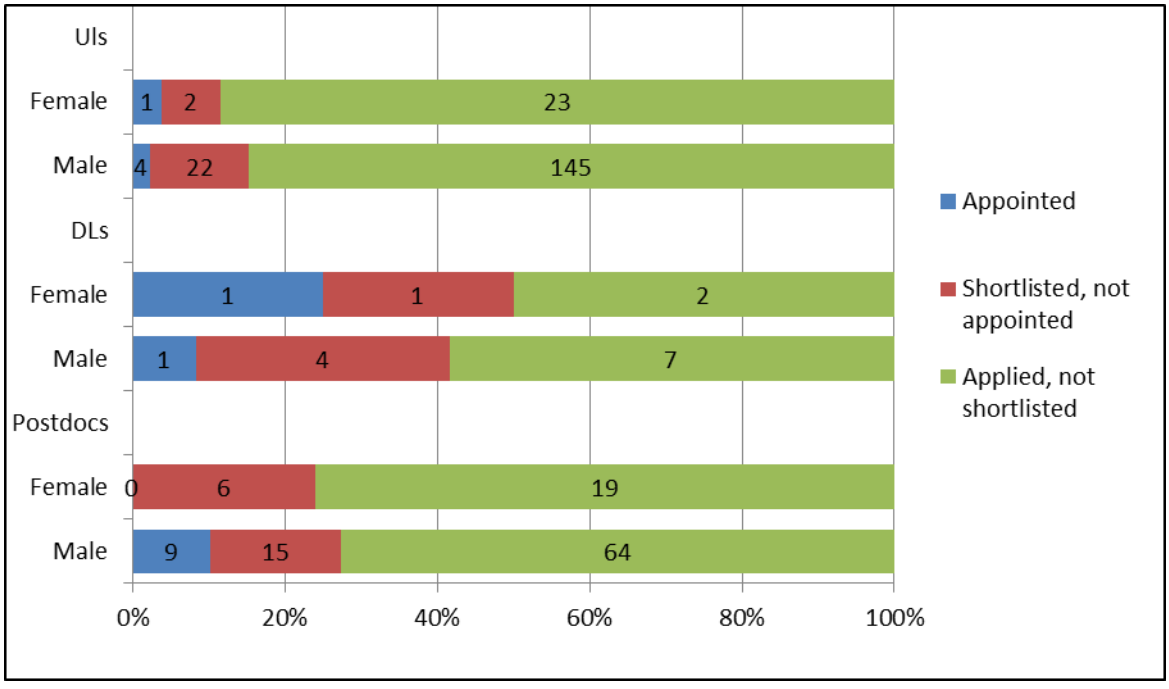
4. Supporting and advancing women's careers: maximum 5000 words

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.

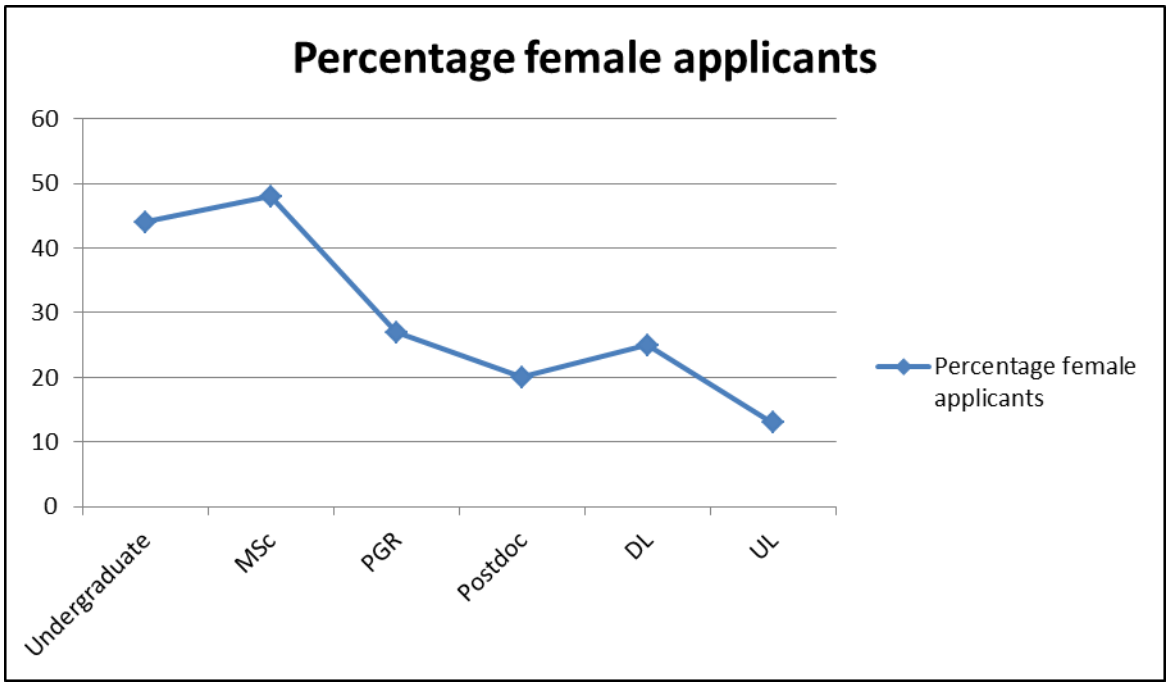
(i) **Job application and success rates by gender and grade** – comment on any differences in recruitment between men and women at any level and say what action is being taken to address this

Figure 9: Applicants and success rates for academic posts, 2010/1-2012/3. *(We have omitted those candidates whose gender could not be determined from their application).*



Although the percentages in Figure 9 don't suggest a bias in our selection process, the actual numbers are disappointing: they reiterate the fact that the principal challenge (at all career levels) is to attract more excellent female applicants and that the problem becomes more acute as we move through career stages (Figure 10).

Figure 10: Percentage female applicants at different career stages.



(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.

Oxford does not have a formal promotions process. All appointments to lectureships and statutory professorships are made through open competition when vacancies arise. Internal applications are welcomed. For example, one (male) ULTF has just been appointed to a statutory chair. Lecturers can apply for the title of professor in the Recognition of Distinction (RoD) process. This had been suspended since 2010, but has been reintroduced in 2014 as an annual exercise and linked to merit pay. All ULs are invited to apply for the title of Professor, the main criterion being that they are judged to have produced research of outstanding quality, with significant international reputation, and comparable in distinction with that expected of a professor in other major research universities. Candidates can put themselves forward for RoD, but often they are approached by the HoD, who assists in producing all the supporting material. Announcements are sent to all members of department when a post is advertised and when the RoD competition opens.

At the time of the last RoD exercise, there were 9 eligible members of staff in the department (1 female and 8 male). The only award made was to a woman. Currently three of the six titular professors in the department are women.

Professors can apply for professorial distinction awards (with salary implications) and supervisors can recommend merit awards for their postdoctoral researchers.

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

The key challenge, at every career stage, is to attract excellent female candidates. To replace current, ad hoc, arrangements, the GPSG is recommending a search committee (distinct from the appointment committee) be set up for each permanent post, with an explicit remit to consult with members of the department and seek out excellent candidates of both genders. Separating the search and interview committees avoids false expectations of those approached and responds to feedback from our survey, summarised by one respondent by *"... It is important to make EVERYONE feel as though they have a stake...."*

We will also consider where posts at all levels are advertised, in particular taking advantage of email networks such as `European Women in Mathematics', and we will review our templates for advertisements and further particulars. At least one male and one female member of the academic staff will be available for informal enquiries.

There is online training for interviewers, and it is mandatory that at least one member of each panel has been trained and there is at least one female selector on the panel. For postdoctoral positions, to reduce the burden on female academics, the Departmental Administrator (who is a woman) sometimes serves. As an alternative (and refresher and supplement) to online training, in 2012, the department had a lunchtime session with a member of the Divisional Human Resources Team which was attended by 10 academic staff. We aim to repeat this in 2014/5 and meanwhile will promote the online training to staff.

ACTION POINTS 3.2:

i. **Repeat the recruitment training course and promote online training;**
ii. **Institute a system of search committees for permanent academic appointments;**
iii. **Ensure that advertisements for posts at all levels are disseminated through networks such as `European Women in Mathematics';**
iv. **Review the language and style of our advertisements and further particulars to ensure that they are attractive to both women and men;**
v. **Ensure that there is at least one female and one male member of the academic staff identified to respond to informal enquiries in advertisements for vacant academic posts.**

(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 three key areas of attrition are the transitions between taught courses and postgraduate research; postdoc or DL and UL and, finally, to the very top level of statutory professor.

A small number of staff have taken advantage of university-wide resources such as the `Springboard' women's development programme, run through the Oxford Learning Institute (OLI), which provides training for women at all stages of their career from student to professor.

The University provides considerable support for researchers (see http://www.ox.ac.uk/research/support_for_researchers/index.html) and is currently further expanding its development courses for them. As part of this, the OLI is piloting Researcher Development Framework workshops. Aimed primarily at postdocs, these workshops provide prompts that facilitate discussions between participants and their colleagues about personal development planning. The intended outcome is to plug researchers in to the wider context of support available to them, and to set them on the path to thinking about professional development. We will apply to pilot such a workshop.

The `Ad Feminam' mentoring scheme aims to help address the under-representation of women in senior academic and administrative leadership positions at Oxford. Alison Etheridge is a mentor on this scheme.

Many academic staff have college attachments, providing further opportunities for networking and support. Since most postdoctoral staff and DLs don't benefit from this, and those that did felt the need for more subject specific support, a few years ago they started `the Network', a series of informal talks and networking events for junior staff. This has lapsed, but will be re-launched to provide peer to peer support and a forum for dissemination of useful information.

There are a wide range of networking opportunities for women within the MPLS Division and the wider university, for example, OxFEST, the Oxford Research Staff Society and the network of women academics in MPLS.

ACTIONS 3.3:

i. **Apply to pilot Researcher Development Framework workshop;**
ii. **Re-launch the Network with a small budget;**
iii. **Promote networking opportunities in MPLS and the wider university and the OLI leadership development programme.**

Career development

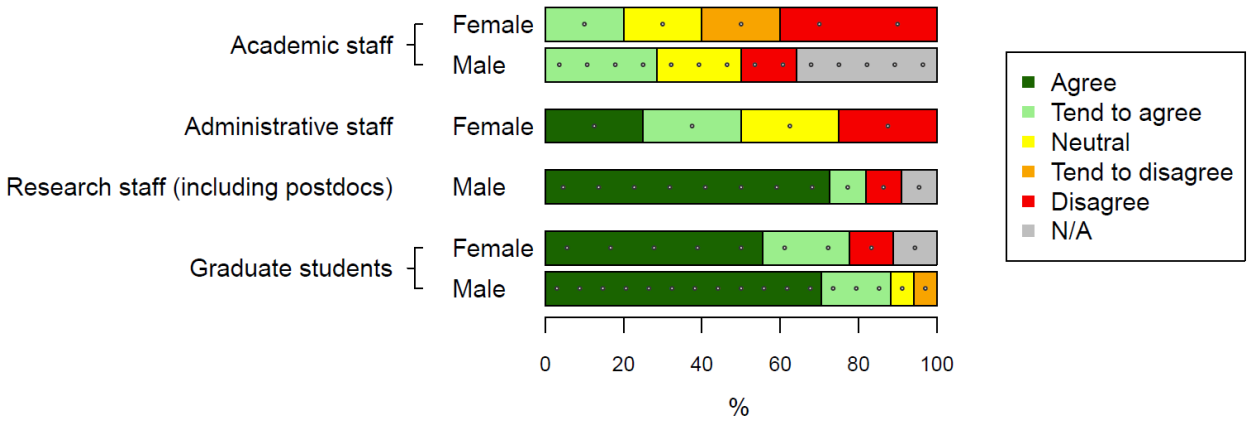
a) For each of the areas below, explain what the key issues are in the department, what steps have been taken to address any imbalances, what success/impact has been achieved so far and what additional steps may be needed.

(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?

Oxford has a system of voluntary annual appraisal for academic staff, with a compulsory interview every five years. In our staff survey, 40% of female and 50% of male academics reported having had a formal appraisal. For research staff (all respondents were male) the corresponding figure was less than 30% and for PGR students, although over 40% of men had experienced formal

appraisal, only 10% of women had. Generally an individual's line manager (which the survey specified should be interpreted as the HoD for academic staff) is responsible for appraisal. Anecdotally, there is a perception among senior staff that appraisal is unpopular. However, the survey suggested that some greater degree of feedback would be welcome (Figure 11).

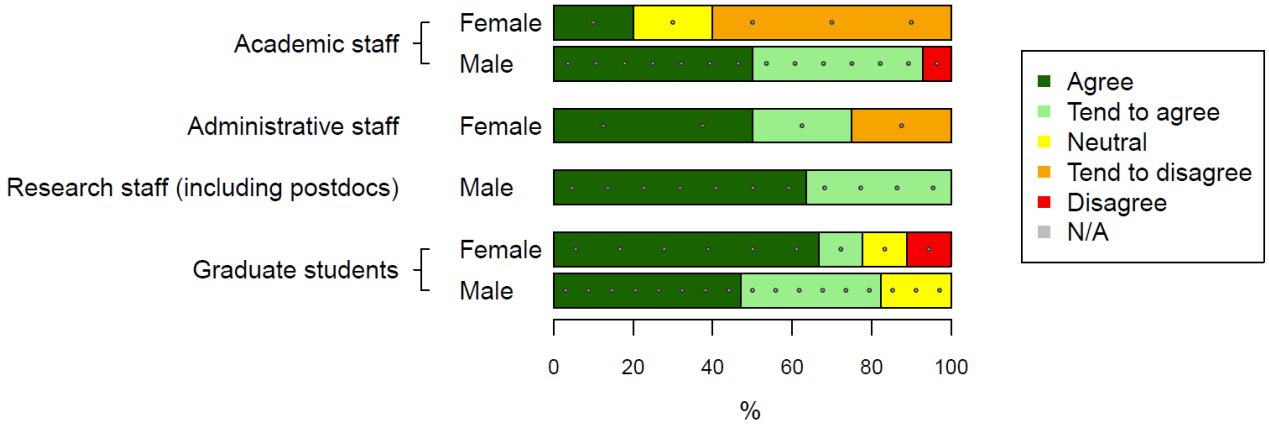
Figure 11: Response to survey question on feedback/appraisal: "<u>My line manager gives me sufficiently regular feedback/appraisal.</u>"



The UL focus group registered strong support for regular feedback/appraisal for all staff. There is appropriate training for senior academics and Principal Investigators (PIs) on grants in conducting appraisals, which we will promote, and PIs will be made more aware of their obligations in this respect. It was felt that the burden of appraisal of all academic staff should not fall exclusively on the HoD, but instead staff should be able to choose the appraiser from among a number of senior academics (including at least one of each gender). They requested a *"sufficiently distributed structure that everyone would be able to find someone they felt comfortable talking to*". They also suggested that since *"Appraisal is about helping you achieve what you want to do*", the process needs to be structured in such a way as to elicit the information that would help identify ways in which the department could assist individuals in setting and achieving realistic goals. The GPSG will consult with the department, and share ideas with corresponding groups in other departments, to identify ways to improve and effectively implement appraisals. We hope that this will also help address the worrying response from academic staff on how valued they feel for their work (Figure 12). This was one of several questions that led to concern about morale, especially among female staff.

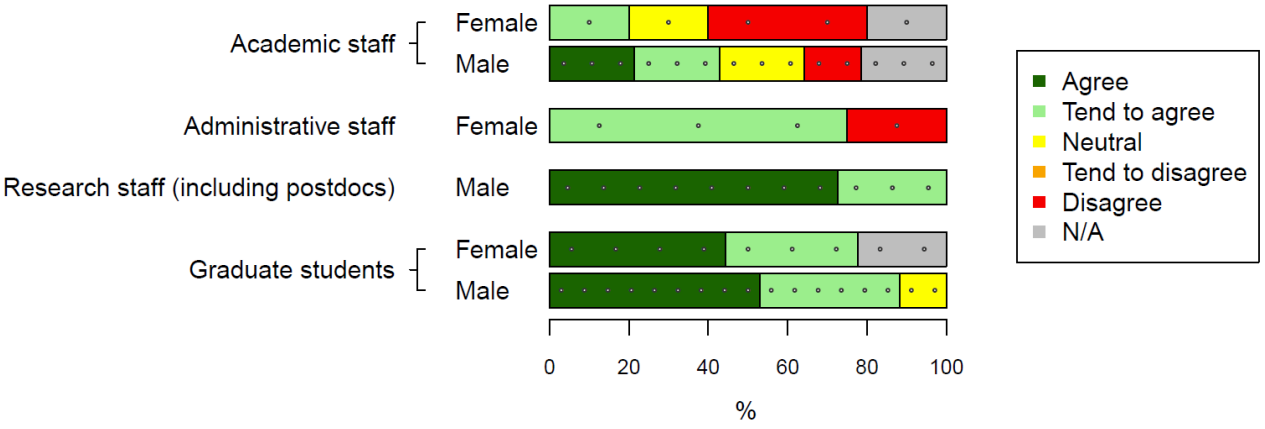
The pattern of annual appraisal, while appropriate for established academic staff, is not well suited to those on fixed term contracts or to new appointees who would benefit from support after a much shorter initial term. The GPSG is recommending that they receive an appraisal after six months, and annually thereafter, in order that any concerns that they have can be dealt with at an early stage.

Figure 12: Response to survey question on feeling valued: "I feel valued for the work I do."



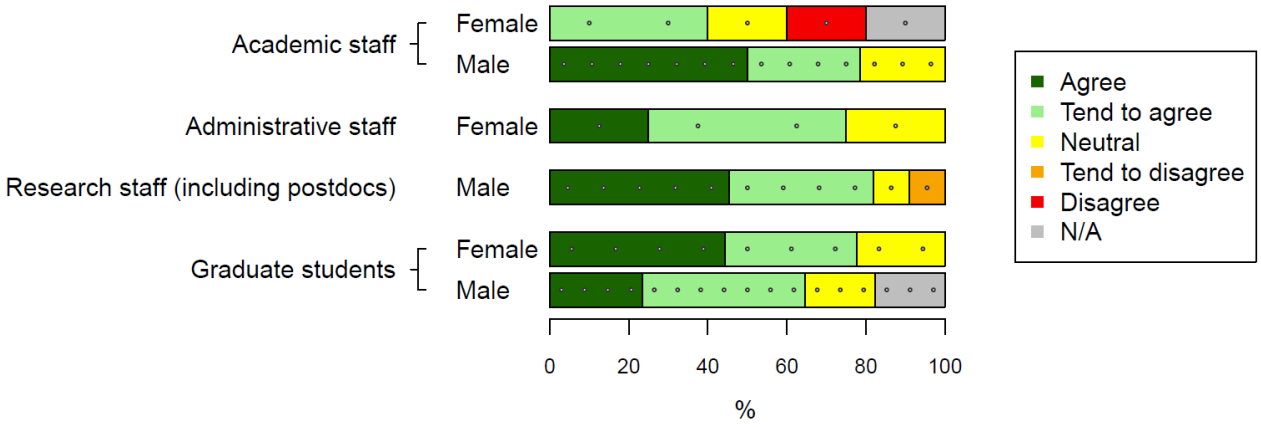
Our staff survey also uncovered weaknesses in our processes for supporting career development and promotion. Only one in five of our academic staff (of either gender) and around 45% of our postdoctoral researchers reported having had a career development discussion. Among female PGR students this fell to 10%, with the figure for male graduate students being around 35%. A significant number of respondents felt that their line manager did not take sufficient interest in their career development (Figure 13).

Figure 13: Response to survey question on career development: "My line manager takes sufficient interest in my career development."



Moreover, staff are not necessarily aware of the career options that are available (Figure 14). As reported by one respondent *"The information about career development has not been clear. Effectively I have found things out through informal discussions, almost by chance."* For graduate students and junior staff, the careers days planned in Action 3.6.i will be particularly relevant.

Figure 14: Response to survey question on awareness of career options: "I am clear about the career options available to me."



Perhaps in part because of the suspension of the RoD exercise, and also because we do not have a sufficiently robust framework for career development discussions and/or appraisal, our staff survey suggests that we need to communicate opportunities for promotion much more clearly (Figure 15). Moreover, for many staff the only route to promotion is to apply for internal posts. Although the whole department is currently informed when a post is advertised, responses to the survey show that not everyone perceives the department to be supportive of internal applications (Figure 16). The HoD is proactive in approaching individuals for promotion and all staff have the opportunity to discuss opportunities for promotion/internal appointments, in confidence, with him. In future we shall ensure that there are both female and male members of the senior academic staff available for such discussions.

Figure 15: Response to survey question on appointment and promotion processes: "Appointment and promotion processes are clear and transparent."

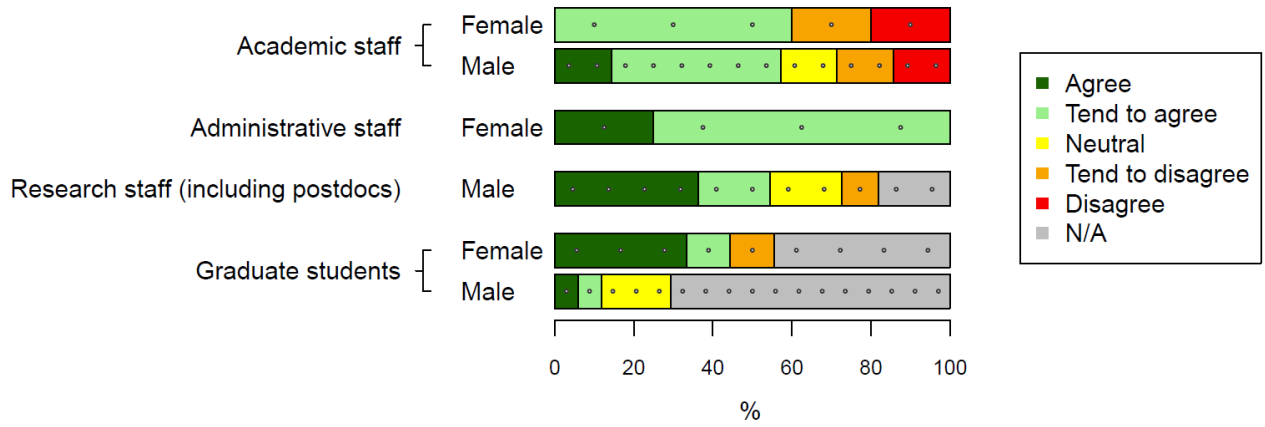
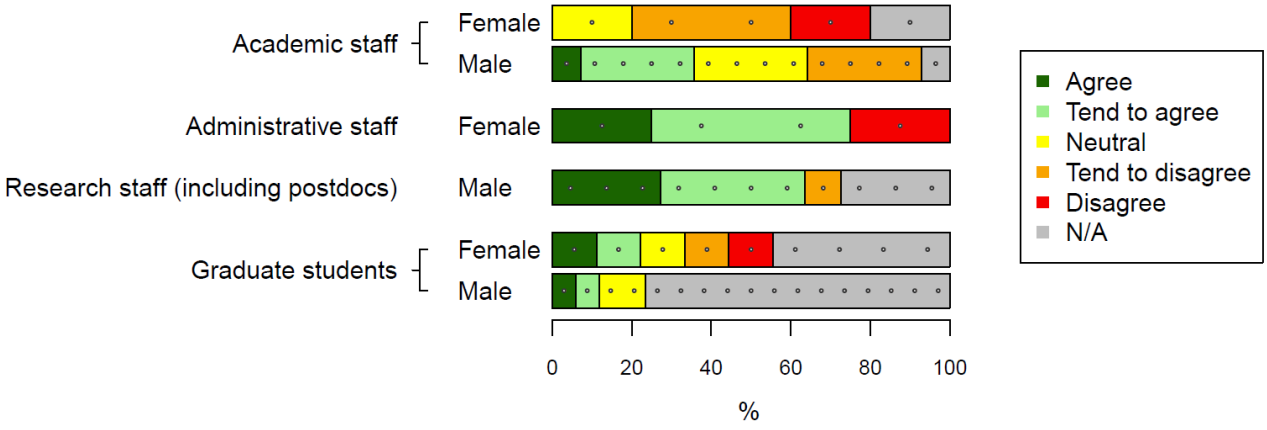


Figure 16: Response to survey question on applications for internal posts: "<u>The Department encourages and supports its staff to apply for internal posts.</u>"



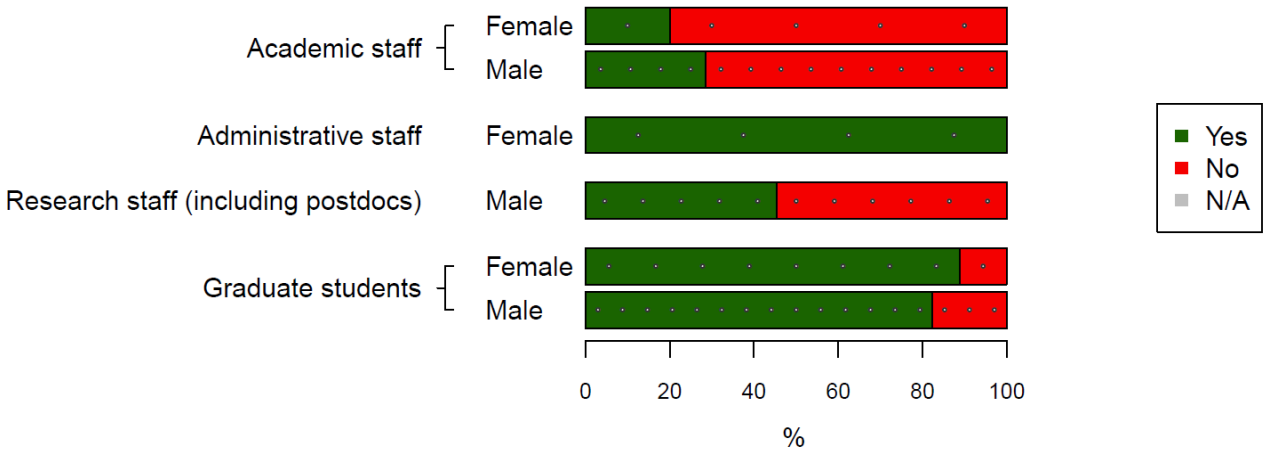
ACTION POINTS 3.4:

i. **Review the structures for appraisal/CDRs for all staff and share ideas on embedding good mechanisms with other departments, especially those in similar disciplines such as Computer Science and Mathematics;**
ii. **Revise the timetable for appraisal for new appointments and early career staff;**
iii. **Promote courses on `managing people' and, in particular, conducting appraisals/CDRs for PIs/line managers;**
iv. **Place a clear explanation of new RoD scheme and the support available for preparing applications on the website;**
v. **In career development discussions with staff outline the options available to them;**
vi. **Ensure that there are at least two senior members of staff, including one male and one female, available to discuss vacant posts or RoD in confidence with interested staff.**

(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?

Each new member of staff receives an initial induction to the department from the administrator who explains the structure of the department and how to find things like administrative and IT support. All recently appointed staff reported having received such an induction. New research staff are encouraged to attend the MPLS induction event for new researchers (held termly) and to make use of the extensive training and online resources provided by the OLI. However, for academic staff there is no specific induction to their role. This has to date been viewed as something that is picked up informally and through mentoring. As demands on academics grow, our focus groups reported that they would value something more formal, outlining support for things like obtaining grant funding and explicit discussion of what is expected.

Figure 17: Response to survey question on induction to role: "I received an induction to my role."



There is a great deal of information available for supporting staff, but this is not gathered in a convenient form. As part of the website renewal, a subgroup of the GPSG will put together an online `staff handbook', providing links to information from across the university.

Most of our academic staff and postdoctoral researchers are naturally associated with a research group in the department. However, focus groups revealed a particular anomaly with respect to DLs who felt that their initial meeting with the HoD explained their teaching role, but not the expectations with respect to research. They did not feel sufficiently embedded into the research activity of the department and were unaware of the possibilities for applying for grant funding. Their recommended actions are below. Most DLs had attended personal development courses related to teaching, but not research.

ACTION POINTS 3.5:

i. **All new academic staff to have formal meeting with HoD;**
ii. **All new research staff to have formal introduction to their roles;**
iii. **Online `staff handbook' to be developed for the new web pages.**
iv. **During initial HoD/DL meeting, stress expectation to conduct research as well as teaching. Highlight opportunities for grant funding/ significance of the REF. Help set research goals.**
v. **Ensure that each new DL has an initial meeting with the head of an appropriate research group on arrival.**
vi. **Anonymously collate data on training needs from CDR/appraisal discussions and identify and promote relevant courses.**

(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.

Every graduate student is attached to a college and receives pastoral support through the college as well as the department. In particular, any female student will have access to her college's womens officer and harassment officer. She will also have a college advisor, usually a college tutor or professor in statistics or mathematics who can give advice in the event, for example, of difficulties in the relationship with her research supervisor or a wish to change research topic and therefore to find a new supervisor. Within the department there is additional support from harassment officers (one male, one female), the Director of Graduate studies, heads of research groups and, of course, the student's own supervisor. Each student is also assigned a second supervisor, usually from the same research group. The Springboard programme is run for graduates and also undergraduates.

Most of our PGR students broaden their experience by leaving Oxford after graduation. We should like to better understand what motivates their career choices after Oxford (see Action 3.1), and we should also like to help them inform those choices. In statistics we expect a significant number of students to leave academia, even if they remain in research. In spite of the broadly positive responses from PGR students and postdoctoral researchers to our survey question on career development in Figure 13, the focus groups revealed a somewhat different picture. Both the male and female focus groups for PGR students reported that students feel uncomfortable talking about career options outside academia. The focus groups for both PGR students and ECRs, independently, asked if we could have a regular series of careers oriented days with a recent leaver speaking. It was emphasized that this should include representatives from industry as well as academia and, in thinking of speakers, we should be identifying suitable female role models. They also requested a networking lunch as part of the day. These events will be prominently advertised on our website to help reflect the culture of the department.

In organising careers events we shall make use of the University Careers Service, which offers a range of services to departments: one-to-one appointments, induction sessions to encourage researchers to start thinking about their career/information on how the careers service can help them, sessions on career planning/selection skills etc. They also offer support in organising events with alumni panels.

There are now many opportunities for students to network with their peers from other universities, for example through the annual UK `young statisticians' and European `young women in probability' meetings. We will set aside additional travel funds to support attendance of our female PGRs and postdocs at such meetings.

ACTION POINTS 3.6:

i. **In collaboration with the Careers Service, organise careers oriented days, with a recent leaver speaking (including female speakers and speakers from outside academia) and promote them on the website;**
ii. **Create a small travel fund to support participation of PGRs in conferences such as `young women in probability'.**

Organisation and culture

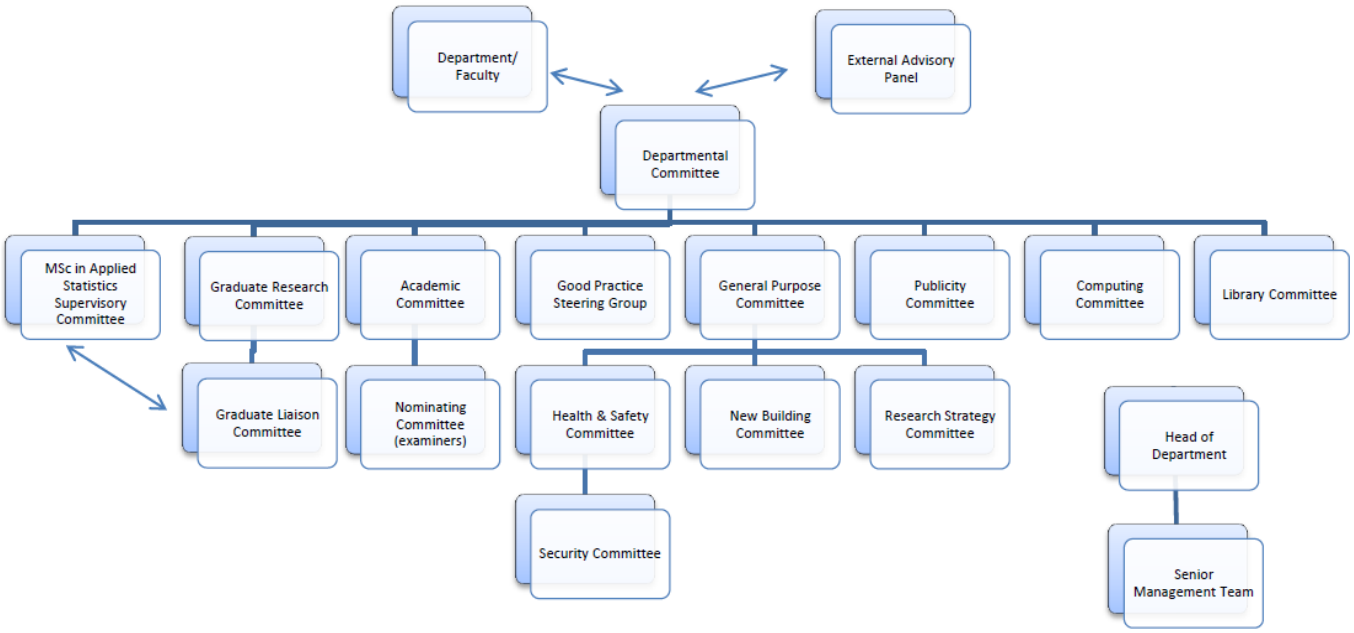
a) Provide data for the past three years (where possible with clearly labelled graphical illustrations) on the following with commentary on their significance and how they have affected action planning.

(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.

The number of committees has grown in a rather ad hoc manner over the years, with some resulting anomalies. The HoD serves on almost all committees and is often used as a conduit for flow of information. This is a huge burden on a single person's time and reliance on that person for a large part of information flow is too fragile. The GPSG is recommending an urgent review of committees and their membership (see Section (b)(i) below).

Department of Statistics Governance Chart, February 2014

Table 6. Committee membership by gender.



Name of Committee	HoD	Female Academic	2011/12		2012/13		2013/14	
			Female	Male	Female	Male	Female	Male
Academic Committee*	✓		1	6	1	6	1	7
Computing Committee*	✓		2	7	2	6	2	5
Corcoran Memorial Committee	✓		0	5	0	5	0	5
Departmental Committee	✓	✓	9	13	10	13	9	18
Faculty Committee	✓	✓	6	16	6	16	6	19
General Purpose Committee	✓		1	7	1	7	2	6
Graduate Liaison Committee*			1	2	1	2	1	2
Good Practice Steering Group (originally Athena Swan SA panel)	✓	✓	8	2	8	2	7	5
Graduate Advisory Panel			1	6	0	6	Assimilated to Graduate Research Committee	
Graduate Research Committee	✓		-	-	-	-	0	5
Health & Safety Committee	✓		1	4	1	4	2	3
Library Committee		✓	2	1	2	1	2	1
MSc in Applied Statistics Supervisory Committee	✓	✓	3	3	3	3	3	2
New Building Committee	✓	✓	-	-	5	3	4	3
Nominating Committee (for Examiners)	✓		0	3	0	3	0	3
Publicity Committee	✓	✓	3	2	3	2	5	2
Research Strategy Committee	✓	✓	-	-	-	-	3	3
Security Committee*	✓		2	3	2	3	3	2
Senior Management Team	✓		2	2	2	2	2	2

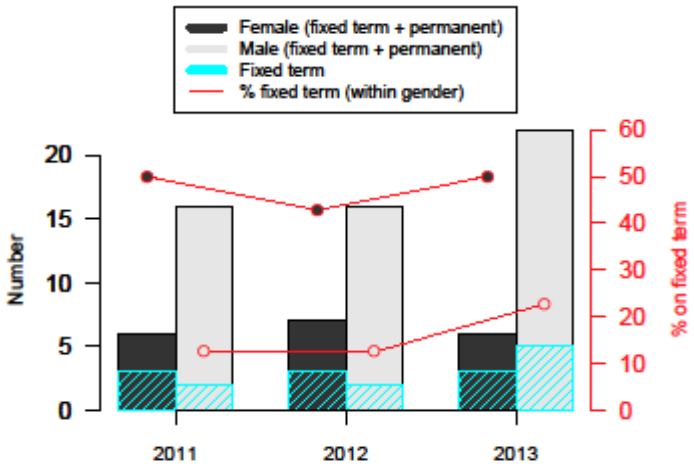
* One additional member is a student representative on this committee and it varies from year to year whether they are male or female.

Membership of a few committees is ex officio. Others include a mix of ex officio and invited members. Invitations to serve come from the HoD, in consultation with the Director of Studies, who aims to maintain gender balance and the right mix of expertise. This process will also be reviewed (Action 4.1.iii). We do not have formal quotas as we do not want the limited number of senior female academics to be overburdened, especially as they are all involved in committees in the wider university. As a result, whereas all our committees have at least one male academic, gender balance on many is achieved through the presence of female support staff.

All academic staff sit on departmental committee. Of the other three main decision making committees, Academic, General Purposes and Research Strategy, only one currently contains a female academic.

(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.

Figure 18: Ratio of academic staff on fixed term and permanent contracts.



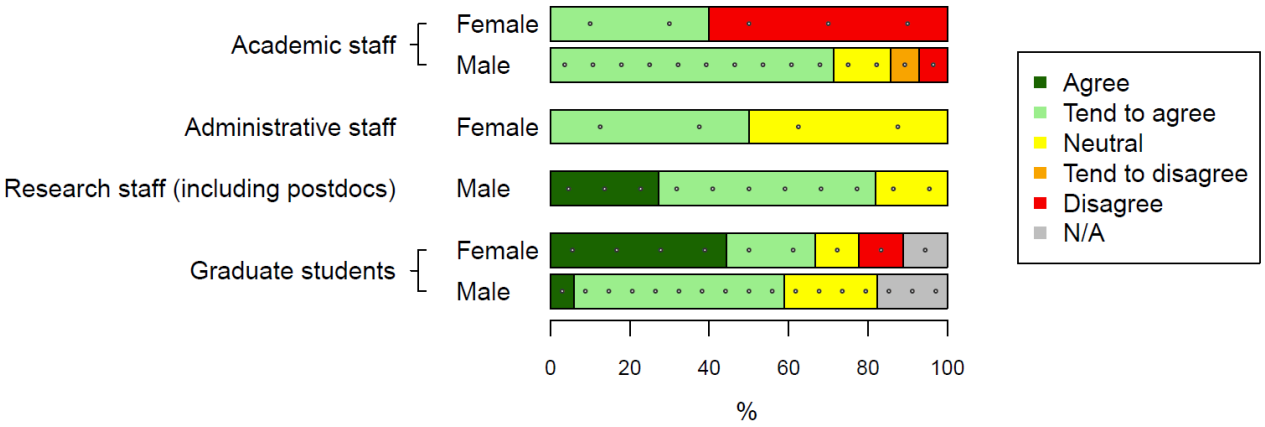
All statutory professors and ULs are recruited on permanent contracts to retirement, while all DLs and postdoctoral researchers are recruited on fixed-term contracts. These figures therefore reflect the low number of female ULs and the concentration of women in DL posts discussed above. We hope that the actions proposed above with respect to improving career support for early career researchers and attracting more female applicants to posts in the department will improve the balance.

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?

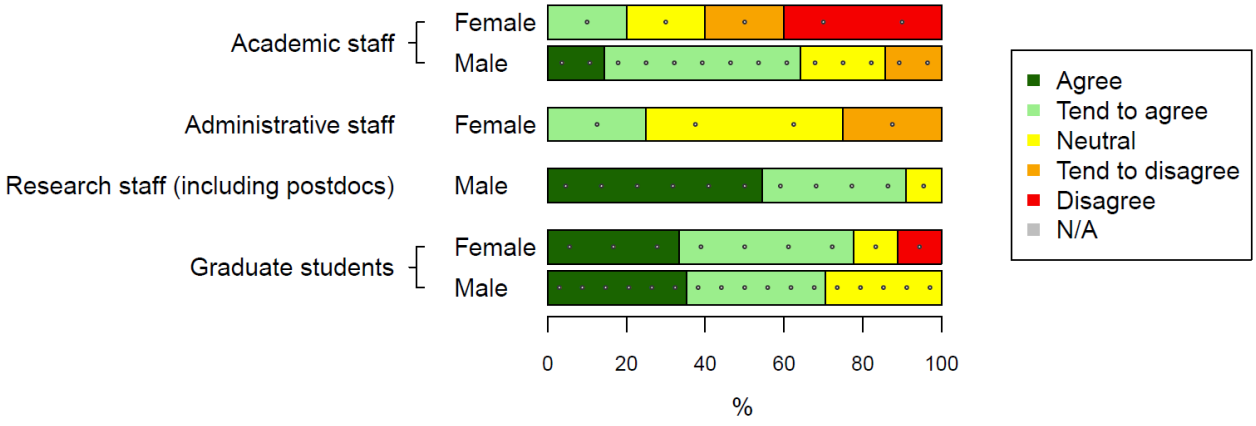
Our three women professors all sit on a range of influential committees. Within the department, Gesine Reinert chairs the research strategy committee and Alison Etheridge convenes the GPSG. Alison Etheridge led the department's REF submission. All three have also taken on significant leadership roles in the wider University: Charlotte Deane is director of the SABS-IDC centre for doctoral training (CDT) and Chairs the University's CDT Directors Forum; Alison Etheridge was a member of the University Council and is now an Associate Head of the MPLS Division; and Gesine Reinert is an elected member of the Divisional Board. They have also served on national and international bodies including subpanels for RAE2008, REF2014, councils of the LMS and IMS, the EPSRC Maths SAT and the EPSRC SAN.

Figure 19: Response to survey question on transparency of decision making: "The Department's structures for management and decision–making are clear and transparent."



Feedback from our staff survey suggested that current structures for management and decision making fall short of being clear and transparent, Figure 19. The clear gender discrepancy probably reflects the fact that there are relatively few female academics available to serve on committees and our women professors are heavily committed outside the department. Indeed with almost as many committees as academic staff, it is inevitable that not all constituencies will feel adequately represented on all committees and so we need to seek alternative mechanisms. In order that staff and students have the opportunity to voice their opinions over decisions that will affect them, we shall investigate means of disseminating lists of key agenda items to the department before they are discussed. As a first step towards improving information flow (c.f. Figure 20), we will place the Governance Chart on the website, with links to committee remit and membership. Staff will then be able to identify an appropriate committee member with whom to share their views.

Figure 20: Response to survey question on sharing of information and knowledge: "<u>Information and knowledge are shared openly within the Department.</u>"



Even in the relatively relaxed atmosphere of the GPSG (which generally meets over a sandwich lunch), we have found that students became much more confident in speaking out when they have the support of a peer. We are recommending that all committees with student representation should consider whether they should in fact have *two* student representatives.

ACTION POINTS 4.1:

i. **Review need for, and terms of reference of, all committees;**
ii. **Introduce standard terms of service on committees to ensure turnover;**
iii. **Review nomination process to committees;**
iv. **Identify key committees and make sure there is equality across them;**
v. **Place governance chart on web with links to remit and membership of committees;**
vi. **Investigate means of disseminating list of key topics under discussion;**
vii. **Those committees with student reps be asked to consider having two such.**

(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.

Until 2008, the department operated a points based workload model, but this was found to be unduly complicated and it created false incentives. Now the distribution of workloads is determined by the HoD and the Director of Studies, who try to assign responsibilities in a way that is balanced, taking into account, for example, career stage and period of time since appointment in Oxford. New ULs and DLs are given a half load of lectures (16 hours) in their first year, rising to 24 in the second and often not reaching 32 for some time, depending on other duties. They are also asked to supervise 2 MSc dissertations rather than 4, and they will initially be protected from administrative and examining duties. For a UL, the administrative load will be stepped up over

three years. DLs are, where possible, protected from administration, other than MSc admissions. Lecturers are asked to indicate preferences for courses. Lecturing assignments are ultimately a matter of negotiation with the Director of Studies, but, for example, teaching a course for which no-one has expressed a preference may lead to a lower overall load.

To try to achieve transparency, the Director of Studies circulates a list of everyone's lecturing and administrative duties to all academic staff each year.

The response to the staff survey showed a disturbing picture. A significant proportion of academic staff considered their workload unreasonable and even more reported feeling unreasonable levels of work-related stress (Figures 21-2). Indeed unreasonable work-related stress was perceived by staff and students at all levels. This was an important topic of discussion at focus groups.

Figure 21: Response to survey question on workload: "Generally speaking, my workload is reasonable."

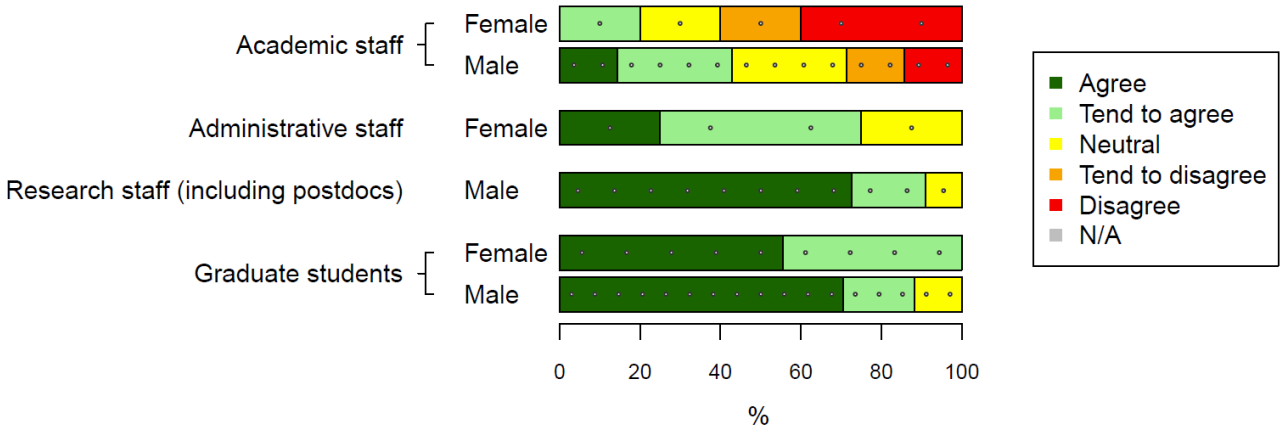
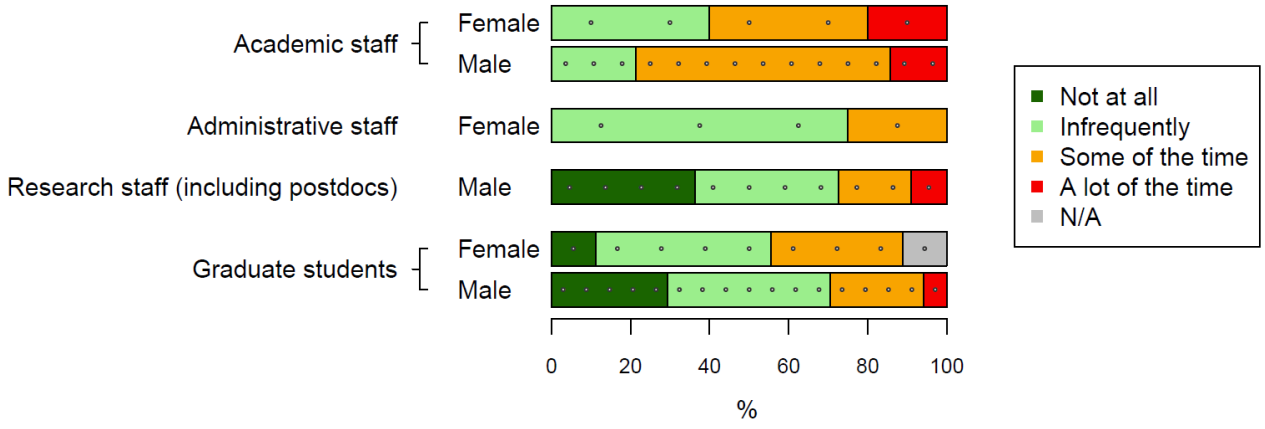


Figure 22: Response to survey question on work-related stress: "How often do you experience a level of work–related stress that you perceive as unreasonable?"



The focus groups felt that at least some of the stress was brought about by inadequate communication of what is expected of individuals and we hope that our proposed actions on improving induction to the role and appraisal will help here. It was also felt that information did not always reach those that needed it and we hope that our proposal for a web-based handbook and a review of the way that information flows between committees will improve this.

The major challenge that faces any Oxford department in assigning a reasonable balance of workloads to individuals is that almost all our academic staff hold at least one other appointment, either with a college or with another department. Moreover, many of our staff are heavily involved in the wider university or on national and international committees, all of which we see as bringing benefit to the department or university. Female staff are hit particularly hard by the demands of appointments committees. What we lack is a mechanism for automatically gathering this information and so having a view of an individual's total activity. As an interim measure, individuals will be asked to provide details of all aspects of their academic activity, both within and outwith the department, on an annual basis, so that the HoD can gain a holistic picture of the activities of each member of staff.

Figure 23: Response to survey question on workload allocation systems: "The systems for allocating workload are fair and transparent."

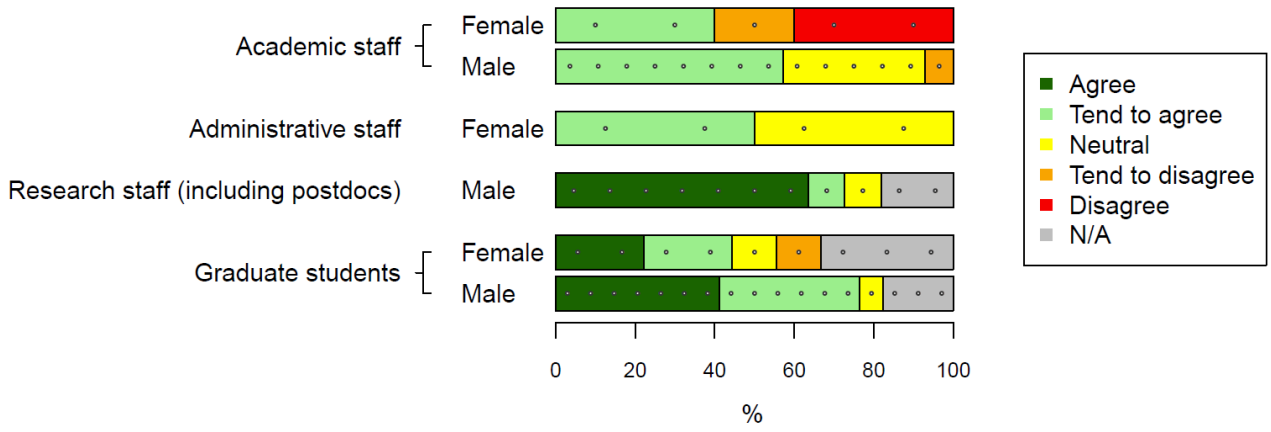
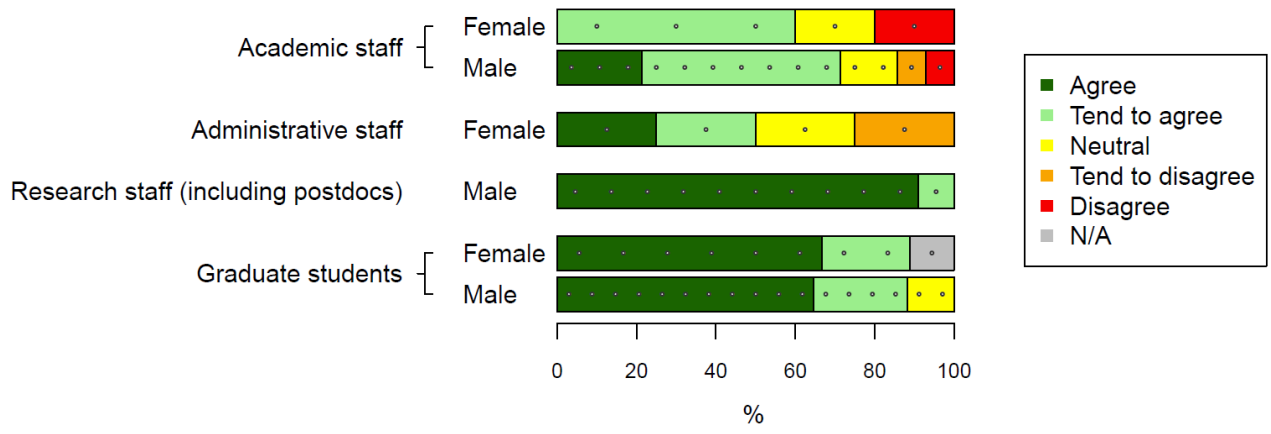


Figure 24: Response to survey question on work/life balance: "I am satisfied with the balance between my work and home responsibilities."



ACTION POINT 4.2:

i. **Annually gather information from individuals on all aspects of their academic activities, both within and outwith the department, to inform workload allocation. Seek ways to minimise the burden that updating this information will place on individuals.**

(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.

In response to concerns raised in the staff survey, by both academic and administrative staff, that timings of some of our meetings and seminars did not take account of family responsibilities, we have agreed to move some key meetings. Thus departmental committee, which used to meet at 9.00 a.m., will now meet over a sandwich lunch. After discussion with current members, academic committee has moved from 9.00 to 9.15 a.m. The main departmental seminar is at 2.15 p.m. and the probability seminar at noon. Although the mathematical genetics and bioinformatics seminar is not in the core hours of 10.00-4.00 that we have been aiming for, after consultation with the research groups concerned, it has been pulled back to 4.00 p.m. which allows time to get to nursery/ after school club for the parents in the audience.

Other than the annual Christmas dinner and welcome drinks for new students, social gatherings are usually at coffee or lunchtime. The summer party is in the afternoon.

(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.

Being spread across four different buildings, and with most academic staff having multiple bases across Oxford (in colleges and departments), it is challenging to maintain a feeling of cohesion across the department. To counter this, each site hosts a coffee morning once a week, where academic and support staff and students from all buildings gather for coffee and biscuits. This is proving to be a reasonably successful interim measure while we wait for our new building to be renovated. We also have a termly newsletter, *Simply Statistics*, which keeps everyone up to date and celebrates achievements of students and staff. Nonetheless, several respondents to the survey reported that although they felt like their research group operated as a team, they found it much harder to think of the whole department that way, simply because there were many people they never see.

Everyone is invited to our annual Christmas dinner and, similarly, everyone was invited to our 25th anniversary celebrations dinner. There was a seating plan, with academics, support staff and students mixed together and this was viewed an outstanding success by all involved. Our current buildings are too small to invite families to social events, but when we move to our new home we hope to be able to do so.

In 2013, we had a departmental away day, to which all academic and support staff were invited, along with student and postdoc representatives. Discussions were structured around breakout groups, each of which included a mixture of academic and non-academic staff. This was particularly valuable when, for example, we were discussing plans for the new building. This event

provided an unparalleled opportunity for communication and lively discussion and we plan to repeat it this year, with implementing our Athena Swan action plan as a key topic.

Academic and non-academic staff, postdocs and students are all represented on the New Building Committee. The design of the interior aims to promote interaction. There will be kitchens and baby-changing facilities. None of our current buildings has a proper reception area. In the new building, we hope to welcome visitors to a space housing displays promoting the achievements of women and men in statistics alongside photos of all current staff and students.

A concern that was raised at the GPSG was the tendency to segregate by job type at social events. Moreover, too often, it is exclusively support staff who are serving food and drinks to the rest of the department.

ACTION POINTS 4.3:

i. **Repeat the away day with implementing our Athena Swan action plan as a key topic; consider making it an annual event;**
ii. **Engage people from across all roles in the department to organise social events (e.g. set up and clear up, pass round food and drinks) such as welcome and summer parties and retain seating plans at departmental dinners.**

(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.

The department is strongly committed to an access and outreach programme. We have a schools liaison and outreach officer, jointly appointed with mathematics, and she coordinates all our activities, relieving pressure on academic staff. Much of this activity is joint with other departments in MPLS and is designed to give (mostly) year 12 students a `taster' of university level courses. Most of these courses are not gender specific.

For the last two years, we have had a schools outreach lecture, aimed at providing a taste of mathematical sciences to local sixth formers. This initiative has been led by a female academic and it is intended that at least half of the talks are given by distinguished female researchers. For logistical reasons this talk did not take place this year. Next year it will be part of a very much larger event, promoting women in mathematical, statistical and computational science, which will be run jointly by the mathematics, statistics and computer science departments. This four day event has attracted £20,000 from the Vice-Chancellor's diversity fund (a million pound fund set up by Oxford's vice-chancellor) and £6,000 from the London Mathematical Society. Day 1 will be aimed at girls in years 9-10, day 2 at years 11-13 and the final two days at research students and early career researchers. As part of the event we are also planning a `Florence Nightingale Lecture', which will be a popular lecture by a prominent female statistician highlighting the role of statistics in society. It is intended that this lecture be an annual event.

Although outreach is not formally recognised in the workload model, it will be captured, and so can be taken into account, under the proposed holistic approach to gathering information on staff activities.

ACTION POINTS 4.4:

i. **Take account of outreach activities in workload allocation;**
ii. **Organise annual Florence Nightingale lecture, celebrating the importance of statistics and, in particular, the contributions of female statisticians.**

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.

The department is small. Maternity return rate has been 100% for the last five years (three cases). One DL is about to take maternity leave. However, recent female postdocs who returned to work after maternity leave, left academia at the end of their contracts. UK research councils no longer fund the extension of grants to compensate for time lost on projects due to maternity leave, making it hard for women like these to reestablish their research after childbirth. The University recognises this issue and is actively seeking ways to address it.

(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.

We have not had any eligible staff in the last few years, but both our expectant fathers have signed up for paternity leave. One of them reported *"I organised my paternity leave. The options were clearly explained on the university personnel services website; the form was easy to find, and straightforward to fill in."* The department encourages flexible work patterns by parents and carers and believes that a work culture in which men take paternity leave and adjust their work patterns to fit in with the school run and other caring duties makes it easier for women to do the same, as well as sending a positive message that caring duties are the responsibility of both men and women.

(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.

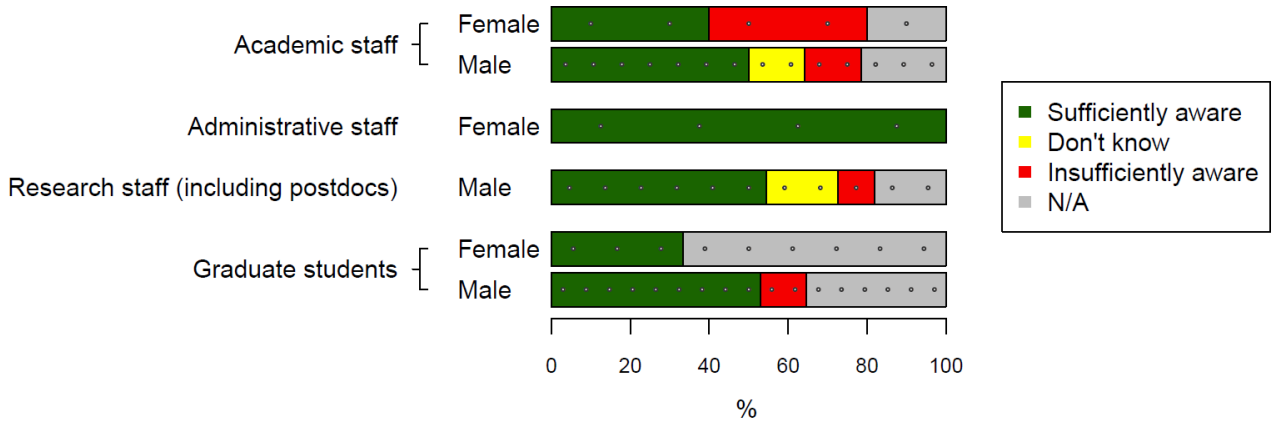
We have had no applications for flexible working.

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.

Although we have a strong focus on interdisciplinarity, very few of our staff are tied to labs or fieldwork and so they have huge flexibility and control over when and where they work. Many academic staff are jointly appointed to college and departmental positions and can arrange the timing of most of their teaching to suit themselves. Although there is less flexibility in the scheduling of lectures, it is possible for faculty to avoid, for example, 9am lectures because of the school run. Most staff value this informal approach. From the survey, our main concern is that some staff are unaware of the opportunities for flexibility, Figure 25.

Figure 25: Response to survey question on flexible working: "How aware are you of the possibilities for flexible working (part−time, flexible working hours...)?"



ACTION POINTS 5.1:

i. **Include information on opportunities for flexible working in staff handbook. Make sure the induction process adequately explains responsibilities in terms of both the department's and the individual's needs.**

(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.

There are standard procedures in place to cover leave of all sorts by academic staff, including sabbatical as well as maternity and adoption leave. Academic staff have access to all departmental facilities while on maternity leave.

All eligible staff (including academic and research) are entitled to 52 weeks' maternity leave, 26 on full pay, 13 on statutory maternity pay and 13 unpaid. The university has a salary sacrifice scheme which can be used at any of the four university nurseries, four college nurseries or five further nurseries in and around Oxford in which the university has subsidised places. The university's childcare information service provides a wealth of information, including arrangements for paying for other forms of childcare, such as after school clubs and holiday play-schemes out of pre-tax salary.

Maternity is an exciting, but confusing, time so the first step in making arrangements for maternity leave and thinking about return to work is a meeting with the administrator, who explains all the possibilities. Although all this information is available on the university website, it can be a little overwhelming. MPLS is currently preparing a simplified guide to maternity, paternity and childcare which we will link to our website. Where possible, a chat with a female member of the academic staff who has recently taken maternity leave is arranged. The situation has not arisen, but if no-one were available, we'd ask around other similar departments. The administrator also helps with the more formal aspects. An informal chat with the HoD discusses academic aspects and arrangements for the return to teaching. Staff are offered the choice of keeping in touch while they are on leave. Some prefer not to, but recent experience is that our coffee mornings provide an ideal opportunity to drop in.

In 2011, the MPLS division agreed with EPSRC to commit a proportion of the Developing Future Leaders funding to support women returning from maternity leave in re-establishing their scientific careers. One of our female academics took advantage of this to buy out some of her teaching, so that she could spend more time on research. She says "*The grant has been tremendously helpful to get me back on track with research*." Although this funding has run out, the University expects to launch a returners' scheme later in the year.

Since the department is small, a given HoD may deal with only one or two requests for maternity or paternity leave during their tenure. The Medical Sciences Division has produced a checklist of issues to discuss in preparing for maternity leave. We shall adapt this for statistics and supplement it with similar checklists for paternity leave and return from maternity.

ACTION POINTS 5.2:

i. **Link MPLS parents factsheet to website;**
ii. **Prepare checklists for the HoD of issues to discuss with those preparing for maternity and paternity leave, and those returning from it**.

[4994 WORDS]

5. Any other comments: maximum 500 words

Please comment here on any other elements which are relevant to the application, e.g. other SET-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.

The department has already benefitted enormously from the Athena Swan process. The 2014 survey gave us pause for thought, and we are now examining some of our structures to try to ensure that everyone feels that they are part of a team working towards a common goal. We have moved the times of major committees and seminars to fit in with the school run and after school clubs and nurseries. Most importantly, we have opened a dialogue in the department on work-life balance and, with a dedicated group in place to consider the issues, people know the first port of call if they have suggestions and ideas. The engagement with the process that we have seen from across all constituencies in the department has been really refreshing.

We firmly believe that the move to a new building will be the start of an exciting new era for the department. To celebrate this and to instil a sense of pride and unity we shall organise an opening event that celebrates the successes of women and men at all levels in the department.

We are under no illusions but that the difficult part is to ensure that our proposed actions really do take place. For most of the issues that have been brought to our attention, we are confident that the momentum that we have built up, combined with the clearly defined actions of our action plan, will lead to rapid progress. There are some aspects that we still don't fully understand and we shall need to investigate further. Since we are such a small department, it is difficult to decide which responses to the survey reflect different attitudes of men and women. We would be particularly interested to compare our survey results to those of a similar size department, but with a different gender balance. For this we must look outside the MPLS Division. We have identified two departments, both in the Medical Sciences Division, one of which has already agreed to share results (available shortly) and we are in the process of contacting the other.

ACTION POINTS 6.1:

i. **Organise an opening event for the new building, celebrating the successes of women and men at all levels in the department, instilling a sense of unity as we move under a single roof.**
ii. **Compare results of our survey to those of department with greater proportion of women.**

[345 WORDS]

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**.

The action plan does not need to cover all areas at Bronze; however the expectation is that the department will have the organisational structure to move forward, including collecting the necessary data.

Actions for the GPSG are prioritised using a traffic light system.
GREEN = structures are already in place to make this happen, GPSG will just need to monitor,
AMBER= some parts of the required structures are there, but they need strengthening and this will require input from GPSG,
RED= structures not in place and urgent and/or substantial work required. These will be top priorities for GPSG.

Ref:	Objective	Rationale and action already taken	Actions planned	Responsibility	Timescale	Outcomes, outputs and measures of success
1. The self-assessment process and structures for monitoring and promoting good practice						
1.1	Monitor impact of Athena SWAN actions	The staff/ research student survey uncovered a number of areas of dissatisfaction amongst staff and has been a very useful tool in bringing the Department together to look at how it can be strengthened. Our action plan will inevitably evolve as circumstances, and our understanding of them, change.	Introduce triennial staff and research student survey in order to audit staff and PGR satisfaction and monitor how our Athena Swan actions are impacting on the Department. GPSG to revise the action plan annually and report changes (and the rationale for them) to departmental committee.	GPSG GPSG	Staff and PGR survey to be taken at end of MT2016. Annually	***Outcomes:*** An understanding of progress made over the period. An Athena Swan action plan that remains relevant and thus continued engagement with the process. ***Outputs:*** Comprehensive data on staff and research student attitudes at end of period, to compare to 2013 survey. Annually refreshed action plans. ***Measures:*** Survey response rate. Target: 90% of staff and 60% of PGRs.
	Improved communication of information through website	A major theme running through responses to our staff/student survey was a lack of effective communication across the department. Our new website will be an important tool in combating this.	Guided by the UK Research Councils' report `Making Women Visible Online' use the new website to promote female role models, to facilitate communication and information flow and to promote the principles of the LMS Good Practice Scheme and the Athena Swan Charter.	Publicity Committee	Website to be launched 2014/15 Process of uploading and updating information ongoing	***Outcome:*** Improved platform for communicating information both within and outwith the department. ***Output:*** New website with, e.g. Equal balance of female/ male photos. ***Measures:*** Hits on website. Responses to 2016 survey.

Ref:	Objective	Rationale and action already taken	Actions planned	Responsibility	Timescale	Outcomes, outputs and measures of success
2. UG and PG students						
2.1	Increase the proportion of female home/EU students at UG level	Although our overall proportion of female undergraduates is quite close to 50%, it drops when we restrict to home/EU students. Transfer rate into the Mathematics and Statistics degree suggests that candidates don't have a good feel for what university level statistics involves. We have recently hired an outreach officer to promote statistics in schools.	Promote statistics to years 10-13, particularly girls, via outreach activities described in section 4. Interview students transferring into our degree from mathematics to better understand their motivation and thus to inform design of our promotional material and outreach activities. Explain Oxford stats clearly and attractively in promotional materials/website/open days Ensure prominent displays featuring female role models at all stages of their careers in new building.	Outreach officer Academic committee Publicity committee New building committee	Events held annually Annually over period Website updated by end of 2014/5, refreshed annually Materials produced by opening of new building in 2015	***Outcome:*** Long term target: 50% of all UG admissions women, including when restricted to home/EU. N.B. Significant progress towards this may not be made over three years. Aspiration: By 2017, 50% of all UG admissions and 40% of home/EU admissions are women. ***Outputs:*** Increase in number of 'taster' events to 20 by 2015/16. Display material in new building. ***Measures:*** Audience numbers/feedback/ repeat bookings Hits on website Application numbers
2.2	Maintain proportion of women on MSc course	The current proportion of women on the MSc is close to 50%, but the syllabus is under review.	Carefully monitor student data as the syllabus changes. Refresh publicity material, in particular ensuring that it features female role models at all career stages, drawn from current students, alumni and staff.	MSc supervisory committee	On an annual basis. New material available for 2014/5 admissions round.	***Outcome:*** MSc admissions remain at 50% women ***Outputs:*** New publicity material. ***Measures:*** Hits on website. Application numbers.
2.3	Increase proportion of female PGR students	Over 2/3 of 1st year PGR students are male (40:18 over 5 years). Concern	Survey/interview current 3rd and 4th year undergraduate and MSc students to understand what	GPSG	2014/5 academic year	***Outcomes:*** 35% women PGRs across the department by 2017. 30% female applicants to

Ref:	Objective	Rationale and action already taken	Actions planned	Responsibility	Timescale	Outcomes, outputs and measures of success
		that this may be worsened by the effects of the £9K fee, the OxWaSP CDT (85% of applications received to date are from men) and the changing balance of research groups in the department.	influences choices about pursuing further study/effects of the £9K fee. Review the approach to attracting applicants to OxWaSP with a view to attracting more women. Investigate gender balance in 4th year/MSc options courses and use focus groups of current students to understand what influences any differences (do role models and working patterns influence choice as well as subject matter?) Produce a series of `10 things I wish I'd known before...' sheets for the website.  Proactively encourage our best undergraduates, especially women, to apply for summer internships that give `tasters' for university research.	OxWaSP management committee GPSG with support from DoS GPSG DoS	Immediate effect. 2014/5 academic year One per year in period Annually	OxWaSP. ***Outputs:*** Summer interns `10 things I wish I'd known before…' sheets. ***Measures:*** Hits on website Application numbers. Applications for internships.
2.4	Avoid gender bias in assessment for degree classifications.	Although numbers are small, there is some evidence that women are underperforming relative to their male peers on the dissertation component of the MMath. This runs counter to what we expected. Moreover, assessed group practicals were recently introduced to the MSc – an important innovation, but a new departure for	Investigate possible gender differences in performance of undergraduate/MSc students on components of the course with different forms of assessment.	DoS/MSc advisory committee	Annually, but in 2014/5 academic year review historical data	***Outcome:*** Gender balance in final exam results.

Ref:	Objective	Rationale and action already taken	Actions planned	Responsibility	Timescale	Outcomes, outputs and measures of success
		Oxford.				
3. Career development						
3.1	Reduce attrition of female staff at transition from DL/Postdoc to UL	Turnover is extremely low among academic staff, but there is major attrition in the transition from DL/postdoc to permanent academic position. By interviewing leavers we can obtain candid views about life in the department and, in particular, by talking to postdocs understand their career decisions and provide more information and support for future generations.	Introduce exit interviews for all leavers.	HoD/HR officer	Ongoing	***Outcome:*** Retention of more women in the system beyond the DL/postdoc stage N.B. Since we currently have no female postdocs in post, we will have little or no data before 2017. *Outputs* will be actions arising from exit interviews.
3.2	Increase number of applications from women for academic posts at all career stages.	The percentage of women academics is too low, with numbers of female applicants falling away as we move through career stages.	Repeat the recruitment training course and promote online training. Institute a system of search committees for permanent academic appointments. Ensure that advertisements for posts at all levels are disseminated through networks such as `European women in mathematics'. Review the language and style of our advertisements and further particulars to ensure that they are attractive to both women and men. Ensure that there is at least one	HR officer HoD with advice on membership from Research strategy committee HR officer GPSG with advice from HR Officer HoD	Late 2014 (to capture new staff) Immediate effect Immediate effect Summer 2014 Immediate	***Outcome:*** Long term target, gender balance in applications at all career stages. N.B. Especially at later career stages we are unlikely to see anything like balance by the end of the three year period. Aspiration: by 2017, 20% of applications to ULs/Chairs, 30% of applications to DLs/postdocs women. ***Measures:*** number of applicants, number of informal enquiries number of downloads of further particulars

Ref:	Objective	Rationale and action already taken	Actions planned	Responsibility	Timescale	Outcomes, outputs and measures of success
			female and one male member of the academic staff identified to respond to informal enquiries in advertisements for vacant academic posts.		effect	
3.3	Postdocs and ECRs have access to, and take advantage of, networking and personal development opportunities both within and outwith the department.	Our survey and focus groups showed that postdocs and ECRs don't necessarily take advantage of personal development courses available to them. They would also like to revive schemes encouraging more networking within the department.	Apply to pilot Researcher Development Framework workshop. Relaunch the Network with a small budget. Promote networking opportunities in MPLS and the wider university and the OLI leadership development programme.	HR Officer ECRs/postdocs (volunteers have come forward) HR Officer/ GPSG	Autumn 2014 Summer 2014 Ongoing	***Outcome:*** Postdocs and ECRs provided with, aware of, and taking advantage of, networking and personal development opportunities. ***Outputs:*** The Network Researcher Development Framework workshop ***Measures:*** Attendance at the Network and workshop, Uptake of personal development courses and networking opportunities, Responses to 2016 survey
3.4	A robust framework for appraisal and career development reviews.	Our survey revealed a need for tightening up of arrangements for appraisal and career development reviews. There was call for more feedback at all levels and `appraisal with real information'.	Review the structures for appraisals/CDRs for all staff and share ideas on embedding good mechanisms with other departments, especially those in similar disciplines such as computer science and mathematics. Revise the timetable for appraisal for new appointments and early career staff. Promote courses on `managing people' and, in particular,	GPSG with advice from HR Officer HoD/HR Officer HR Officer/GPSG	Consultation 2014/5, train appraisers 2015/6, implement 2016/7 From 2014/5 From 2014/5	***Outcomes:*** All staff have a clear understanding of career options, including internal posts and promotions. A sufficiently distributed structure that all staff can identify an individual they can comfortably talk to about promotion/career opportunities. ***Outputs:*** Information on web Trained PIs/ Senior academic staff

Ref:	Objective	Rationale and action already taken	Actions planned	Responsibility	Timescale	Outcomes, outputs and measures of success
			conducting appraisals/CDRs for PIs/line managers. Place a clear explanation of the new RoD scheme and the support available for preparing applications on the website. In career development discussions with staff, outline the options that are available to them. Ensure that there are at least two senior members of staff, including one male and one female, available to discuss vacant posts or RoD in confidence with interested staff.	 HR Officer PIs/ Senior academic staff HoD /HR Officer	 Summer 2014 Train PIs/ senior staff summer 2014 Immediate effect	***Measures:*** Uptake of training Number of informal discussions about/ applications for promotion Numbers of (discussions about and) internal applications for posts Responses to 2016 survey
3.5	Support for new academic staff through induction to their role.	Although most respondents in our survey had received an induction to the department from the administrator, rather a small proportion of academic and research staff had had an induction to their role. With academic life becoming more and more demanding and many of our staff recruited internationally, it was felt that a more detailed induction, explaining what was expected of individuals, is now required. Moreover, there is a great deal if	All new academic staff to have formal meeting with HoD. All new research staff to have formal induction to their role. Online `staff handbook' to be developed for the new web pages. During initial HoD/DL meeting, stress expectation to conduct research as well as teaching. Highlight opportunities for grant funding/ significance of the REF. Help set research goals. Ensure that each new DL has an initial meeting with the head of an appropriate research group on arrival. Anonymously collate data on	HoD PIs GPSG HoD HoD/research group heads HR officer	Immediate effect Immediate effect 2014/5 plus annual refresh Immediate effect Immediate effect Ongoing	***Outcomes:*** All staff have a clear understanding of the expectations of them in all aspects of their role. ***Ouputs:*** Staff handbook Data on training needs Inductions ***Measures:*** Responses to 2016 survey, Uptake of training Research activity (papers, grants, invited lectures etc) of DLs

Ref:	Objective	Rationale and action already taken	Actions planned	Responsibility	Timescale	Outcomes, outputs and measures of success
		information to take in and it would be helpful to gather that in one place.	training needs from CDR/appraisal discussions and identify and promote relevant courses.			
3.6	ECRs/Postdocs and PGRs fully informed when making career choices	One of the big attrition points for women is between graduate research and postdoctoral position, with a second `cliff' at the end of a fixed term, early career post. Our students and ECRs independently requested support from the department in making career choices. They emphasized that this did not just mean within academia. There was also a clear desire for more opportunities to network with young researchers in other universities.	In collaboration with the careers service, organise careers oriented days, with a recent leaver speaking (including female speakers and speakers from outside academia) and promote them on the website. Create a small travel fund to support participation of PGRs in conferences such as `Young women probabilists'.	GPSG HoD	Annual	***Outcome:*** Support in making careers choices for ECRs and PGRs embedded into our activities ***Outputs:*** Regular careers events Travel fund for PGR attendance at networking events ***Measures:*** Attendance at careers events, Uptake of support offered by Careers Service Number of applications to travel fund for networking events Responses to 2016 survey
4. Organisation and culture						
4.1	Efficient and transparent decision making	Responses to our survey, and the construction of a departmental governance chart, revealed a need for a review of our committee structure, the way that individuals can feed opinions into it and the way that information flows out of it.	Review need for, and terms of reference of, all committees. Introduce standard terms of service on committees to ensure turnover. Review nominations process to committees. Identify key committees and make sure there is equality across them. Place governance chart on web	Working party on committees (to be set up by departmental committee) Publicity	First report summer 2015. Approve/ implement 2015/6/7 Summer	***Outcomes:*** Efficient and transparent decision making in the department. ***Outputs:*** A simplified committee structure, with balanced representation. A mechanism for soliciting input on key topics. Two student reps on committees. ***Measures:*** Number of staff

Ref:	Objective	Rationale and action already taken	Actions planned	Responsibility	Timescale	Outcomes, outputs and measures of success
			with links to remit and membership of committees. Investigate means of disseminating list of key topics under discussion. Those committees with student reps be asked to consider having two such.	committee Working party on committees All committees (GPSG to monitor)	2014 2014/5 Immediate effect	hours used by committees Responses to 2016 survey
4.2	Fair and transparent workload allocation.	Our survey revealed a great deal of dissatisfaction with workloads and a perceived lack of transparency and fairness in workload allocation. Focus groups suggested that a large part of the problem is the complex nature of an Oxford job, with most academic staff holding multiple appointments across departments and colleges and no one taking a holistic view of any given individual's activities.	Annually gather information from individuals on all aspects of their academic activities, both within and outwith the department, to inform workload allocation. Seek ways to minimise the burden that updating this information will place on individuals.	HoD/GPSG	Propose interim mechanism 2014/5 Thereafter Ongoing	***Outcome:*** The HoD has a holistic view of each individual's academic activities and takes them into account in workload allocation ***Outputs:*** Comprehensive information on activities of academic staff ***Measures:*** Responses to 2016 survey.
4.3	An inclusive culture in which all staff are engaged with the issues faced by the department and feel consulted over decisions that will affect them.	A major theme throughout our data gathering exercise was concern about communications and engagement in decision making. An away day, held in 2013, was viewed as a great success.	Repeat the away day with implementing our Athena Swan action plan as a key topic; consider making it an annual event. Engage people from across all roles in the department to organise social events (e.g. set up and clear up, pass round food and drinks)	HoD HoD/ Departmental committee	2014/5 Ongoing	***Outcomes:*** Better decision making and support for decisions. ***Outputs:*** Away day (possibly annual) Presentation of key messages of Athena Swan application/ action plan for staff

Ref:	Objective	Rationale and action already taken	Actions planned	Responsibility	Timescale	Outcomes, outputs and measures of success
		Further concern was expressed about the tendency for it to be exclusively support staff (and therefore women) acting as hosts at social gatherings.	such as welcome and summer parties and retain seating plans at departmental dinners.			Inclusive social events ***Measures:*** Responses to 2016 survey
4.4	Effective outreach activities	The department is strongly committed to outreach, and has recently appointed a schools liaison and outreach officer (joint with mathematics). However, outreach is not currently taken account of in workload allocation. Moreover, although we have a great deal of activity for schools, there is less aimed at conveying the role of statistics, and the contribution of female statisticians, to the wider university or the general public.	Take account of outreach activities in workload allocation. Organise annual Florence Nightingale lecture, celebrating the importance of statistics and, in particular, the contributions of female statisticians, targeting an audience from the wider university and the general public.	HoD Events manager/ Outreach officer	From 2014/5 First event 2015	***Outcomes:*** More staff involved in outreach activities. A better understanding of the importance of statistics, and the role of women statisticians, across the university and among the general public. ***Outputs:*** Outreach activities Florence Nightingale Lecture ***Measures:*** Numbers of events Audiences/feedback Repeat bookings
5. Flexibility and career breaks						
5.1	Awareness by staff of opportunities for flexible working.	Most staff value our informal approach to flexible working, but some are unaware of the formal possibilities.	Include information on opportunities for flexible working in staff handbook. Make sure the induction process adequately explains responsibilities in terms of both the department's and the individual's needs.	GPSG subgroup HoD	2014/5 Immediate effect	***Outcome:*** Awareness of opportunities. ***Output:*** Links in staff handbook ***Measure:*** Hits on website Responses to 2016 survey
5.2	Information for	Current staff about to	Link MPLS parent's factsheet to	Publicity	2014/5	***Outcomes:*** Easily accessible

Ref:	Objective	Rationale and action already taken	Actions planned	Responsibility	Timescale	Outcomes, outputs and measures of success
	parents and carers is easily accessible and the HoD is well briefed on issues for discussion with those seeking parental/ carers leave.	take maternity/ paternity leave, valued the amount of information available, but recommended finding a more `digestible' starting point. As a given HoD is unlikely to see more than one or two cases during their tenure, it is important that they are well briefed in items to discuss.	the website. Prepare checklist for the HoD of issues to discuss with those preparing for maternity and paternity leave, and those returning from it.	committee GPSG/HR Officer	 2014/5	information for parents and carers. Robust system for comprehensive discussions with HoD. ***Outputs:*** Links from handbook Checklists for HoD ***Measures:*** Hits on website Responses to 2016 survey
6. Miscellaneous						
6.1	A department that understands the issues that it faces and is working as a team towards a common goal.	The move into our new building should be a real catalyst for change in the department and we would like to use its opening to promote the notion of the department as a highly successful team working towards a common goal. Since we are quite a small department, almost none of our data is statistically significant and could be due to any number of factors. In particular, we would like to compare our survey results to those of departments with very different gender balance.	Organise an opening event for the new building, celebrating the successes of women and men at all levels in the department, instilling a sense of unity as we move under a single roof. Compare results of our survey to those of departments with greater proportion of women.	HoD/Events manager GPSG	Summer 2015 As data becomes available	***Outcomes:*** A sense of unity and pride moving forward. A better understanding of the responses to our 2013 staff/student survey. ***Outputs:*** An event celebrating the achievements of statistics and statisticians in our new home. Comparative data analysis of survey results from departments with different gender balances. ***Measures:*** Attendance at opening event Responses to 2016 survey