Athena SWAN Bronze department award application

Name of university: University of Birmingham

Department: School of Biosciences

Date of application: April 2013

Date of university Bronze and/or Silver SWAN award: Bronze in November 2011

Contact for application: Dr Juliet Coates

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Departmental website address: http://www.birmingham.ac.uk/schools/biosciences/index.aspx

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

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

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

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

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

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

UNIVERSITY OF BIRMINGHAM
School of Biosciences

Steve Busby FRS
Professor of Biochemistry
and Head of School

5 April, 2013

Direct Line: 0121 414 5402
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Endorsement of School of Biosciences application to Athena SWAN

I am delighted to give my enthusiastic support to the School's bid for an Athena-SWAN award, which emerged after a very beneficial period of consultation and reflection. Gender equality is just one aspect of a greater Equality and Diversity agenda to which we are committed, and it is especially appropriate that a School of Biosciences should be positioned at the vanguard. Recall that Bioscientists aim to study life in all its manifestations, and our discipline illuminates the importance and value of diversity, the interconnectedness of all life, and the tiny place of humankind in 3 billion plus years of evolution. Hence, driven by this overwhelming academic heritage, whilst, of course, we respect the right of individuals to follow faith-inspired viewpoints and lifestyles, there is little or no place for historically established biases, so-called 'natural laws', or even the 'hand of God' in Biosciences 2013.

Although the core values of Biosciences give us the steer to embrace the Athena SWAN agenda, there are many other more pragmatic reasons for us to engage. First, it is clear that we need to harness all our talents in the workplace in order to advance the Biosciences agenda for societal benefit. Second, the skill and attitude mix required to move science and technology forward has changed, even in recent decades, so that focussed and isolated individual minds are no longer sufficient to complete the theory-discovery-technology-impact virtuous circle. Put simply, we need movements such as Athena SWAN to catalyse the change required for us to be fit for purpose.
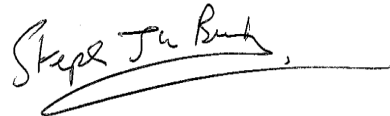
The University of Birmingham began to think seriously about equality and diversity in the 1990s and much progress has clearly been made. However, by the VC's own admission, our overall metrics are still not good, but, of course, they vary from sector to sector. Concerning gender equality in Biosciences, there is clearly still a problem at the level of more senior academic appointments, but the recent research done for the preparation of our Award submission has highlighted other issues. The documentation outlines our current assessment of these, and, crucially, our plans to address them. Together with colleagues in the School, College and Central services, the

School Exec is committed to implementing these plans, and to monitoring our progress as we move forward.

Perhaps I can finish this letter by presenting my personal credentials? First, I am currently vice-chair and a trustee of the Biochemical Society, and thus, in a small way, a direct funder of the Athena SWAN project! Over many years at the University of Birmingham, I have supervised 43 PhD students and 33 PDRFs, of whom 17 and 14 respectively are female. I am a member of the Royal Society Equality and Diversity Network, and served for over 15 years on the Royal Society Dorothy Hodgkin Fellowships Biology panel.

I am, of course, ready to provide any further information that you may require in connection with this application.

Sincerely

Steve Busby

Word count: 482

Section 2 - The self-assessment process: maximum 1000 words

Describe the self-assessment process. This should include:

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

The **School of Biosciences Athena Working Group** (Self-Assessment Team), includes a range of career points and personal and professional experiences, and currently comprises:

Dr. Juliet Coates, Part-time (80% FTE) University Lecturer, single parent of a 5-year old: in post 8.5 years. She currently chairs the Biosciences Athena working group, sits on the University Athena working group, teaches at all levels, is Final Year Exams Officer, and runs a research group. She is in charge of drafting this application. She implemented the Work-Life Balance Forum and Academic Staff Flexible Working Survey and collated their results (see below).

Prof. Brian Ford-Lloyd, Deputy Head of School and Director of the University Graduate School, has experience of caring for children and grandchildren alongside senior management, research and training. He will retire in May 2013, when **Prof. Steve Busby**, the current Head of School, will join the working group. **Brian** has previously chaired the Biosciences working group, and has had key input into Graduate School-related issues. **Steve** will ensure implementation of the Action Plan.

Dr. Jeremy Pritchard, University Senior Lecturer, in post 20 years, currently the School's Head of Education and heavily involved in the School's outreach activities. He is developing the School's transparent workload model.

Dr. Michael Tomlinson, full-time British Heart Foundation Senior Research Fellow, in post 4 years and running a research group. He has four children (8, 6, 4 and 2) and is married to a University Lecturer (80% FTE).

Prof. Robin May, Professor in Infectious Diseases and Lister Fellow, in post 8 years and running a research group. He has two children (5 and 2).

Dr. Helen Cooper, Reader in Mass Spectrometry, in post 10 years. She is Director of the Advanced Mass Spectrometry Facility, Biosciences Graduate School Training Coordinator, School Chemical Safety Officer and Deputy Director of the MRes in Molecular Cellular Biology. She teaches at all levels and runs a research group. She is married with two children (14 and 6).

Dr. Georgina Lloyd, currently full-time Postdoctoral Researcher, has worked in the School for 18 years. She has two children (11 and 5). She worked part-time from 2001 until 2011: 8 years at 50% FTE (Postdoc), then 2 years at 80% FTE (Research Technician). She implemented the Postdoc Flexible Working Survey and collated its results.

Dr. Anne-Marie Krachler, full-time Birmingham Fellow, in post 1 year. She runs a research group and has a 5-month old child.

Dr. Lindsey Leach, full-time Birmingham Fellow, in post 1 year. She also teaches at all undergraduate levels. She is married and hopes to start a family.

Dr. Kerstin Voelz, full-time postdoctoral researcher, in the School 5.5 years (3 years PhD, 2.5 years postdoc). Kerstin also is a personal tutor, supervises undergraduate and postgraduate projects,

and lectures. She is an Associate Fellow of the Higher Education Academy (HEA); soon a Fellow of the HEA. Kerstin and her partner hope to start a family in the future.

Laura Cronin, second year doctoral researcher: graduated from Birmingham Biosciences in 2010 and worked for a year in industry before returning to start her PhD. She is co-Chair on the Biosciences Graduate School Committee.

Laura Mutch, third year doctoral researcher: also graduated from the School. She is co-Chair on the Biosciences Graduate School Committee and has been on the committee throughout her PhD.

Susan Squire, University staff Diversity Adviser, works full-time. She provides advice and guidance to Schools participating in Athena SWAN and has supported the production of data and examples of best practice for this submission.

Deb Bayliss, College Head of HR, works full-time, with 21 years' experience of HEI HR. She advises the School's Athena working group, specifically around broad issues associated with equality. Her team has provided some data for this application.

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 Working Group, formed in March 2012, has met 6 times to date, and regularly corresponds by email. Issues discussed at meetings include:
- (i)   Gender- and caring-related issues identified by fora and surveys (see below),
- (ii)   The School's gender-related statistical information,
- (iii)   Workload and promotions (initially raised at the School Academic Retreat, May 2010),
- (iv)   Future plans for addressing gender imbalances within the School.

A College-wide **"Work-Life Balance Forum"** was implemented in November 2011: results from this have influenced discussions at subsequent Working Group meetings (at both School and University level). Outcomes from this open meeting will be discussed in relevant sections throughout the submission. Briefly, discussion identified **4 main "problem" areas: overall workload, working times, transitions to/from maternity leave, and career development/promotion, all of which will be tackled (Action Plan)**.

Our **data analysis** has highlighted "drop-off" in female numbers at all key career transition points after undergraduate > PhD student.

In August 2012, the Working Group implemented confidential "**flexible working**" **surveys**, to identify both problems and examples of good practice within the School. This revealed that a culture of flexible working exists in the School, without the need for formal arrangements in place, with all but one respondent saying they worked flexibly. One respondent said that the informal approach to flexible working was "**one of Birmingham's strongest advantages** and is surprisingly hard to find at any of our competitor institutions…we should probably advertise it more widely". **However, problems were identified with flexible or part-time working tailored around specific childcare commitments: these will be addressed (Action Plan).**

An output of the Working Group meetings to date has been featuring Athena SWAN on the School of Biosciences' web front page (http://www.birmingham.ac.uk/schools/biosciences/index.aspx), and providing a section entitled

"Practical Resources for Parents and Carers"
(http://www.birmingham.ac.uk/schools/biosciences/about/parents-carers.aspx). The pages will be further developed (Action Plan).

There is **regular interface** between members of the Biosciences and University Athena working groups. We consulted colleagues within the University of Birmingham College of Medical and Dental Sciences, and at the Universities of Nottingham, Bristol, Sussex and UWE, identifying good practice examples, and ideas for change.

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.

The team has met at a minimum frequency of every 2-3 months, reporting to the Head of School, School Executive Committee and School Meetings. The team will meet monthly post-submission with similar reporting arrangements to implement the Action Plan.

Word count: 1000

Section 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 School of Biosciences was formed in 1999 by amalgamating the neighbouring Schools of Biological Sciences and Biochemistry. It is based on a single site on the University of Birmingham's main Edgbaston Campus. Since 2008, the School of Biosciences has been part of the College of Life and Environmental Sciences, which comprises Biosciences, Geography Earth and Environmental Sciences, Sport and Exercise Sciences and Psychology. The College now manages many of the School's administration and service functions (e.g. finance, HR, planning, procurement, IT, workshop and recruitment).

In RAE 2008, 90% of the School's research was assessed as international quality: this research underpins the teaching programmes within the School. Research in the School includes human, animal, plant, microbial, cell and molecular biology, and is divided into the 4 overarching research "themes": BioSystems and Environmental Change, Microbiology and Infection, Molecular Cell Biology and Signalling, Plant Genetics and Cell Biology. These themes are supported by a number of underpinning technologies provided by facilities for genomics, mass spectrometry, biophysics, high-throughput sequencing, bioinformatics and microscopy.

The School's undergraduate (BSc) degree programmes are Biological Sciences, Biochemistry and Human Biology. These are complemented by a 4-year undergraduate Masters (MSci) programme taken by ~15% of the students. The School also contributes to Birmingham Foundation Academy teaching, and, at postgraduate level runs 2 taught MSc and 2 MRes courses, in addition to hosting PhD research in the Biosciences Graduate Research School.

There has been a steady influx of new members of staff (many of whom have young children) over recent years. In addition, the School has gained 6 (2 females) of the ~50 Birmingham Fellows appointed to date as part of a University-wide initiative to support the career transition from postdoctoral researcher to permanent academic position. In 2011, the Institute of Microbiology and Infection (IMI), a cross-College initiative bringing together research groups from across campus,

was established. The IMI is largely located in the School of Biosciences, leading to a recent influx of new staff at all levels.

The School's current core academic staff members are 51 Teaching and Research staff, 9 independent tenure-track fellows (including 6 engaged under the Birmingham Fellows Scheme; see section 4b(i)) and 5 teaching-only staff. The School also has 75 Research staff, 19 administrative staff, 48 support staff, 122 postgraduate research students, 69 postgraduate taught students and 792 undergraduate students.

There are 4 part-time members of permanent academic staff, one of whom is currently on maternity leave. Since 2009, 2 permanent academics and 7 researchers have taken maternity leave, while around 10% of academic staff have taken paternity leave, usually agreed informally. Over half the permanent academic staff have school age children and around 20% of permanent academic staff have pre-school age children. A few staff have caring responsibilities for adults. The age range of the core academic staff is evenly distributed between staff in their 30s, 40s, 50s and 60s.

As stated in Section 2b, nearly all members of academic staff who responded to the Flexible Working survey believed that a strong culture of informal flexible working arrangements already exists within the School, and is a key strength of the School's working environment.

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

Student data

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

The Birmingham Foundation Academy for international students was initiated in 2012, as a foundation year before a conventional BSc or MSci degree. The sample size is small, but, in 2012, 4 students (3 of whom are female) entered the Biosciences/Medical and Dental Sciences pathway.

We also take students onto Biosciences degree programmes from the highly acclaimed "Access 2 Birmingham (A2B)" scheme, which supports sixth form students from families and communities in the West Midlands who have little or no experience of higher education. The University-wide gender split for A2B Applications is 60:40 female:male, while our applications are split ~70:30 (Table 1). Although more girls are recommended by their teachers to participate in the A2B support scheme, fewer of them actually then come to University to study Biosciences degrees (Table 1), as they do not meet the required grades. However, numbers are relatively small.

Table 1 - A2B Biosciences participants (supported by A2B scheme) and entrants (who enter onto our degree programmes) by gender

Year	Participants		Entrants		Entrants %	
	Male	Female	Male	Female	Male	Female
2009/10	10	20	5	8	50%	40%
2010/11	9	25	2	11	22%	44%
2011/12	8	19	5	6	63%	32%

(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.

Figure 1 – Female undergraduate (UG) population compared to the sector average
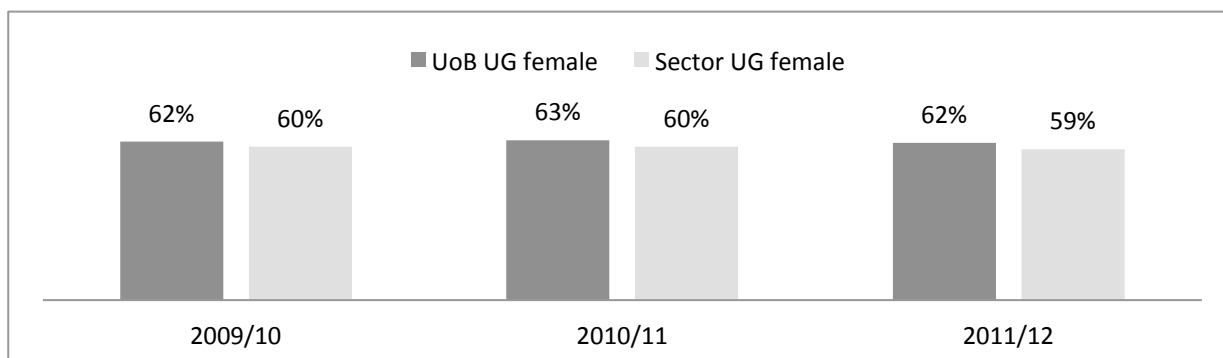
Undergraduate population by gender

Year	University of Birmingham (UoB) Biosciences					National average (HESA)	
	Female		Male		Total	Female	Male
2009/10	563	**62%**	343	**38%**	906	60%	40%
2010/11	548	**63%**	328	**37%**	876	60%	40%
2011/12	518	**62%**	323	**38%**	841	59%	41%

Undergraduate enrolment (year 1 only)

Year	Female		Male		Total
2010	157	**56.9%**	119	**43.1%**	276
2011	192	**61.5%**	120	**38.5%**	312
2012	141	**62.9%**	83	**37.1%**	224

The School has slightly higher numbers of female undergraduates than the national average, with around 62-63% women over the last 3 years' intake (Figure 1). As we do not have a problem with recruitment of female UGs, we do not have any female-centred outreach initiatives in place. We have no part-time UGs: the course design is not tailored to part-time working. However, we use lecture capture technology such as Panopto (recording lectures) to enable flexibility of learning.

We have formal procedures in place to support pregnant UGs, including:
• Considering safety issues during practical work - provision of alternative activities if attendance is unwise or if the student chooses not to participate in practical work;
• Providing a female point of contact (Helen Cooper) for students that wish to discuss pregnancy-related safety issues;
• Offering an alternative exam venue for students at an advanced stage of pregnancy;
• Allowing exam deferment if a student is at an advanced stage of pregnancy (students at earlier stages are advised of the future issues/struggles of caring for an infant whilst taking exams).

UG maternity leave is organised as a leave of absence; the student returns after a semester or more, or defers exams. We do not have significant data on UG performance after maternity, as typically we have around 2 cases every 3 years.

We plan to raise awareness of Athena SWAN (its aims and ethos) amongst the undergraduate population, as outlined in the **Action Plan Section 1.1 and 1.2.** We do not know whether the gender split is the same for home and overseas students, and we will address this in the **Action Plan Sections 1.3 and 1.5.**

(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 – Female postgraduate taught (PGT) population compared to the sector average**
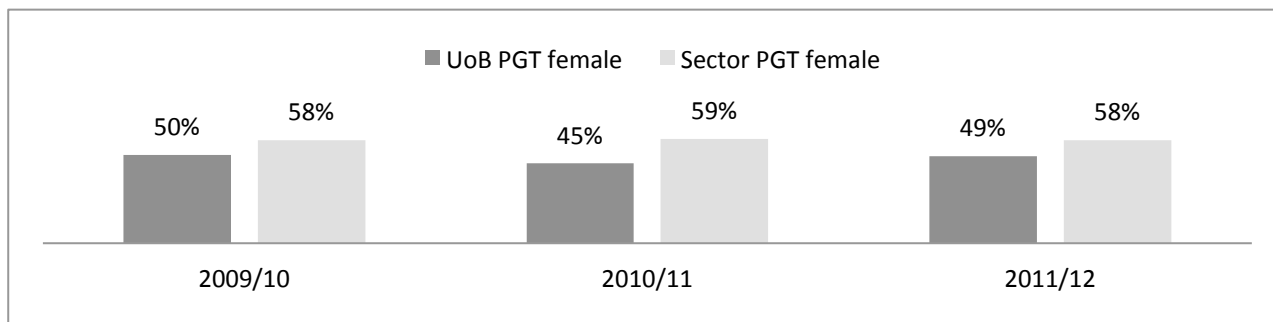
Postgraduate taught population by gender

	UoB Biosciences					National average (HESA)	
Year	Female		Male		Total	Female	Male
2009/10	63	**50%**	64	**50%**	127	58%	42%
2010/11	70	**45%**	84	**55%**	154	59%	41%
2011/12	87	**49%**	89	**51%**	176	58%	42%

Since 2009, we have had just under 50% female PGT intake. This represents a >10% drop compared to the UG student intake and is ~8% below the national average. This may be because females achieve higher UG degree grades and are more likely to progress straight to postgraduate research degrees (section 3b(iv)). At present we have 3 part-time female PGT students and 1 part-time PGT male student. The only part-time PGT student who has commented to us said that she was very happy with the support she receives to organise her timetable around her other commitments. We will address full-time/part-time PGT students in the **Action Plan (2.2, 2.3, 2.4).**

(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 – Female postgraduate research (PGR) population compared to the sector average
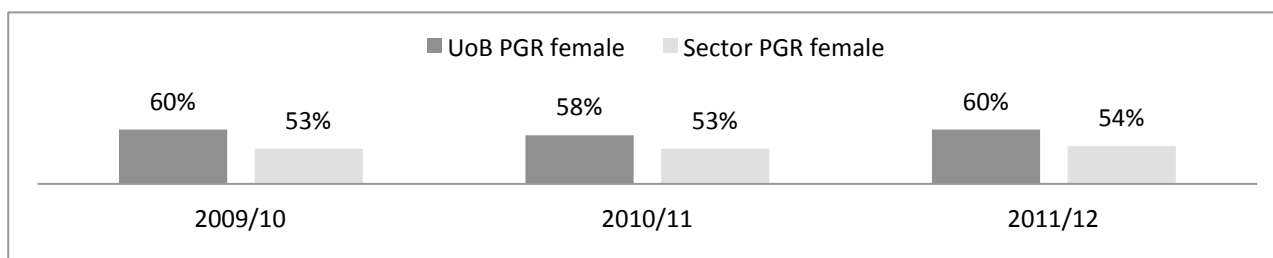
Postgraduate research population by gender

	UoB Biosciences					National average (HESA)	
Year	Female		Male		Total	Female	Male
2009/10	70	**60%**	46	**40%**	116	53%	47%
2010/11	63	**58%**	46	**42%**	109	53%	47%
2011/12	61	**60%**	40	**40%**	101	54%	46%

The PGR female:male ratio is very similar to the UG population and ~6% above the national average. We currently have 5 female part-time PGR students and 1 part-time male: but the PGR+ PGT numbers indicate that females are more likely to carry out part-time PG study.
From September 2013 (recruitment in October 2014), we will advertise Distance Learning PhDs in the College for certain research subjects, for international students. This route could be very attractive to women who want to work part-time and not move to Birmingham.

We do not appear to have a problem with recruitment of female PGR students, but we will address full-time/part-time PGR students in the **Action Plan (2.2, 2.3, 2.4).** We do not know whether the gender split is the same for home and overseas students, and we will address this in the **Action Plan Section 2.6.**

(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 – Ratio of course applications to offers and acceptances by gender

Note – 'Offers made' and 'offers accepted' rates are both presented as a % of applications received, i.e. in the second graph, 84% of all female applicants received offers and 36% of all female applicants accepted those offers. 2013 data covers applications up to March 2013, and therefore acceptance numbers are not complete (decisions are returned until May). UG acceptance includes firm and insurance acceptances.

Figure 4a - Undergraduate applications by gender and year of entry (%)
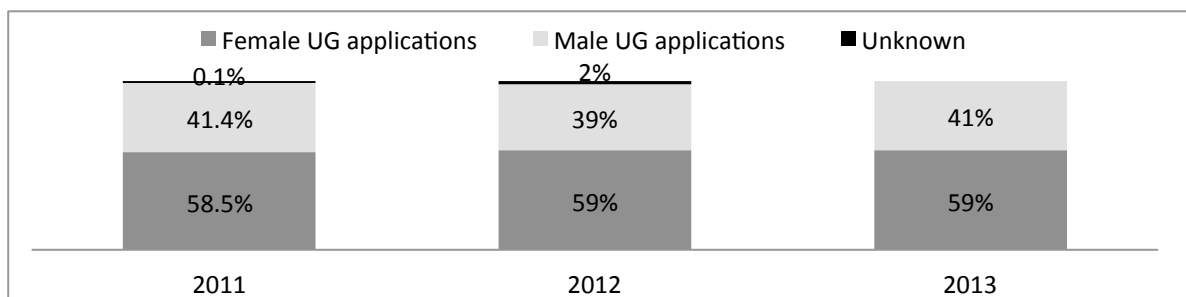
**Figure 4b - Undergraduate offer and acceptance rates by gender and year of entry (%)**
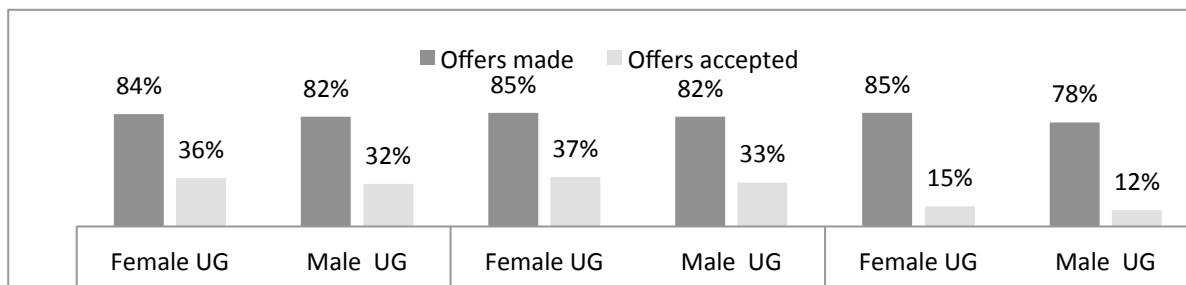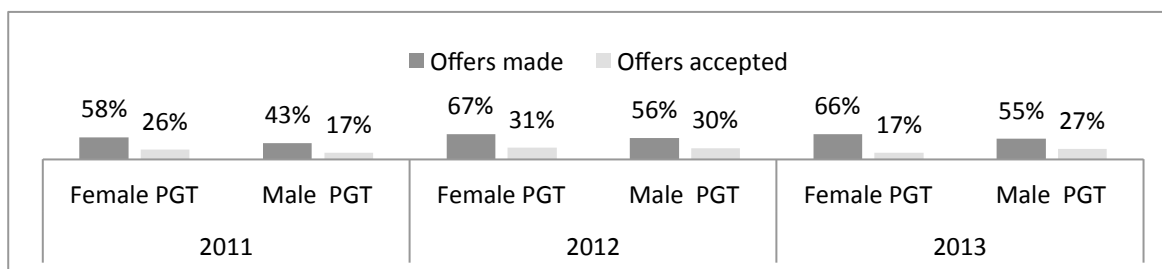
Figure 4 - Ratio of course applications to offers and acceptances by gender (continued)

UG Applications, offers and acceptances (no.)

	Applications			Offers made			Offers accepted		
	2011	**2012**	**2013**	**2011**	**2012**	**2013**	**2011**	**2012**	**2013**
Female	1301	1127	1141	1099	962	967	472	415	168
Male	925	745	789	762	609	613	292	243	91
Unknown	4	32	5	0	0	0	0	0	0
Total	**2230**	**1904**	**1935**	**1861**	**1571**	**1580**	**764**	**658**	**259**

Figure 4c – PGT applications by gender and year of entry (%)
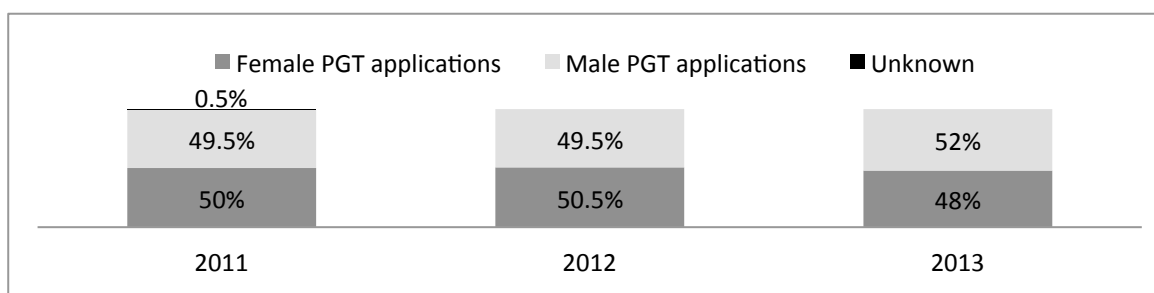
Figure 4d - PGT offer and acceptance rates by gender and year of entry (%)

PGT Applications, offers and acceptances (no.)

	Applications			Offers made			Offers accepted		
	2011	**2012**	**2013**	**2011**	**2012**	**2013**	**2011**	**2012**	**2013**
Female	256	180	92	149	121	61	67	55	16
Male	253	177	101	109	100	56	42	53	27
Unknown	3	0	0	0	0	0	0	0	0
Total	**512**	**357**	**193**	**258**	**221**	**117**	**109**	**108**	**43**

Figure 4 - Ratio of course applications to offers and acceptances by gender (continued)
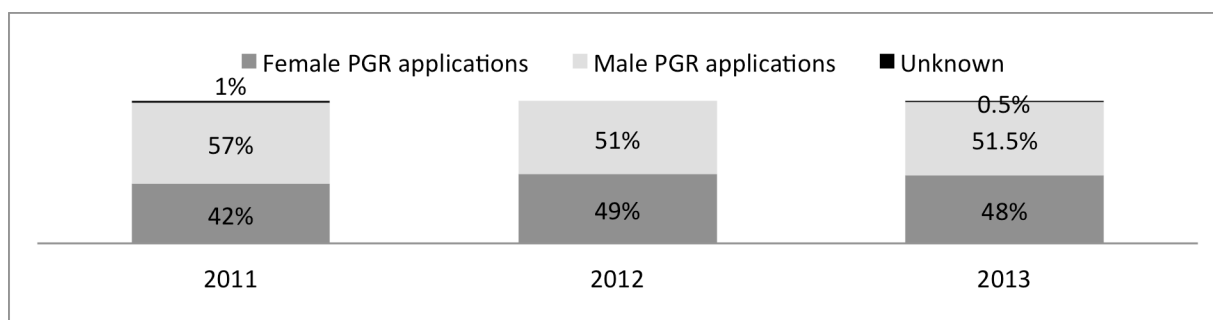
Figure 4e - PGR applications by gender and year of entry (%)

Figure 4f - PGR offer and acceptance rates by gender and year of entry (%)

PGR Applications, offers and acceptances (no.)									
	Applications			**Offers made**			**Offers accepted**		
	2011	**2012**	**2013**	**2011**	**2012**	**2013**	**2011**	**2012**	**2013**
Female	228	277	163	43	44	30	25	30	14
Male	309	286	175	59	61	31	31	38	18
Unknown	2	0	1	0	0	0	0	0	0
Total	**539**	**563**	**339**	**102**	**105**	**61**	**56**	**68**	**32**

At UG level, we consistently make slightly more offers to females than males (Figure 4b), which likely explains our 62% female UG population from only 59% female applicants (Figure 4a). Slightly more females who are offered a place seem to accept (Figure 4b).

Our PGT female population is below sector average (around 50%) and our female application rate is very similar (Figure 4c). We make a considerably larger number of offers to female applicants; acceptance rates are variable and the 2013 data are necessarily incomplete (Figure 4d).
The percentage of female PGR applicants (<50%) is considerably lower (Figure 4e) than our final PGR population (~60%). Male/female offer rates are the same in 2011 and 2013, with more males being offered a place in 2012, but proportionately fewer males accepting (Figure 4f). Not all students that are made/accept an offer finally take up their place and register on the course (particularly from overseas, usually due to funding).

We do not believe we have a strong gender imbalance around UG or PG applications/offers and therefore currently do not have mechanisms in place to address this issue. Nevertheless, we will ensure that this balance is maintained via monitoring and future action if necessary (Action Plan sections 1.5 and 2.5).

(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 5 - Undergraduate degree classification data by gender

■ % females with 1st or 2.1   ■ % males with 1st or 2.1

	2009/10	2010/11	2011/12
% females	62%	76%	90%
% males	60%	73%	68%
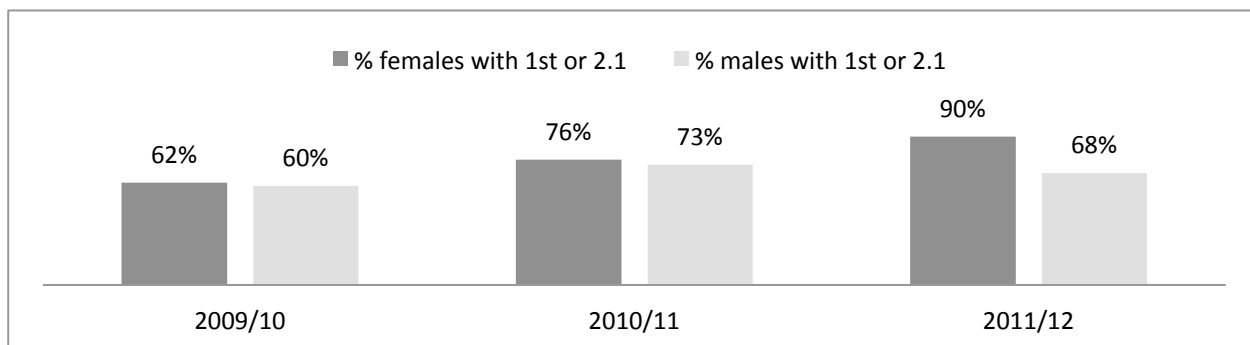
Undergraduate degree classification by gender

2009/10		Female		Male	
	1st	16	**12%**	15	**15%**
	2.1	68	**50%**	44	**45%**
	2.2	41	**30%**	27	**28%**
	3rd	11	**8%**	12	**12%**
	Pass	0	**0%**	0	**0%**
	Total	136	**100%**	98	**100%**

2010/11		Female		Male	
	1st	25	**19%**	8	**11%**
	2.1	77	**57%**	47	**62%**
	2.2	31	**23%**	17	**22%**
	3rd	1	**1%**	4	**5%**
	Pass	0	**0%**	0	**0%**
	Total	134	**100%**	76	**100%**

2011/12		Female		Male	
	1st	41	**29%**	15	**21%**
	2.1	86	**61%**	33	**47%**
	2.2	14	**10%**	18	**26%**
	3rd	0	**0%**	4	**6%**
	Pass	0	**0%**	0	**0%**
	Total	141	**100%**	70	**100%**

Since 2010, the percentage of our School of Biosciences students obtaining a first class or upper second degree has increased, coming more in line with the University average and national situation (Figure 5). We believe this is due to a number of complex and interlinking factors including improvement in entry grades, changes in exam structure, exam marking, and changes to teaching. **The general trend is for females to slightly outperform males, with a much larger discrepancy in 2011-12.** We do not have any female-specific initiatives in place, **but, as outlined in the Action Plan (1.3), we will analyse and monitor these data year-on-year** to address any significant and ongoing imbalances in either direction should they arise.

Figure 6 – Postgraduate taught degree outcomes by gender
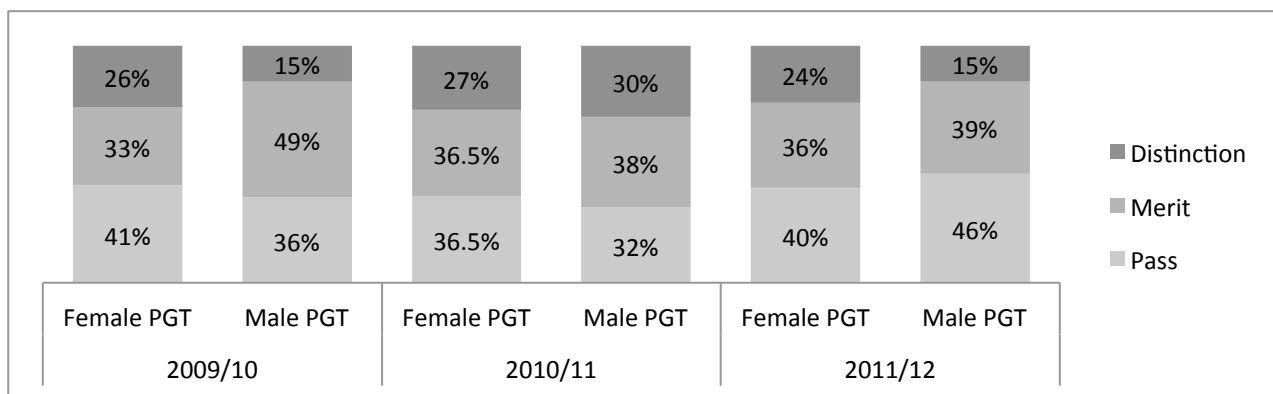
Postgraduate taught degree classification by gender					
2009/10		**Female**		**Male**	
	Distinction	10	**26%**	5	**15%**
	Merit	13	**33%**	16	**49%**
	Pass	16	**41%**	12	**36%**
	Total	39	**100%**	33	**100%**

2010/11		**Female**		**Male**	
	Distinction	12	**27%**	17	**30%**
	Merit	16	**36.5%**	21	**38%**
	Pass	16	**36.5%**	18	**32%**
	Total	44	**100%**	56	**100%**

2011/12		**Female**		**Male**	
	Distinction	12	**24%**	4	**15%**
	Merit	18	**36%**	10	**39%**
	Pass	20	**40%**	12	**46%**
	Total	50	**100%**	26	**100%**

There do not appear to be any clear trends or significant imbalances in PGT results (Figure 6). As outlined in the **Action Plan (2.5), we will continue to monitor these data year-on-year** to address imbalances if they arise.

Staff data

Note - Our staff population data are taken from a snapshot of the staff body in September of each year. Where data are used in relation to an employment process (such as recruitment and promotions), it is based on a full academic year.

(i) 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

Figure 7 – Academic and research staff gender data

Figure 7a – Academic and research staff by gender (%)
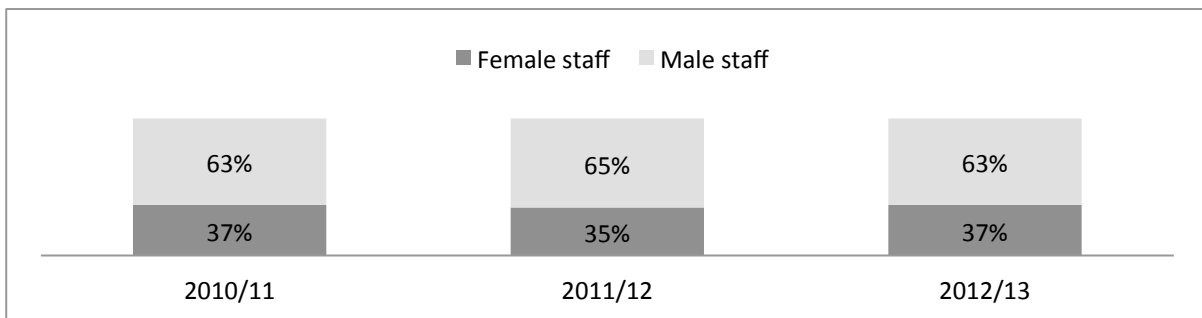
Figure 7b – Comparison to sector average (%)
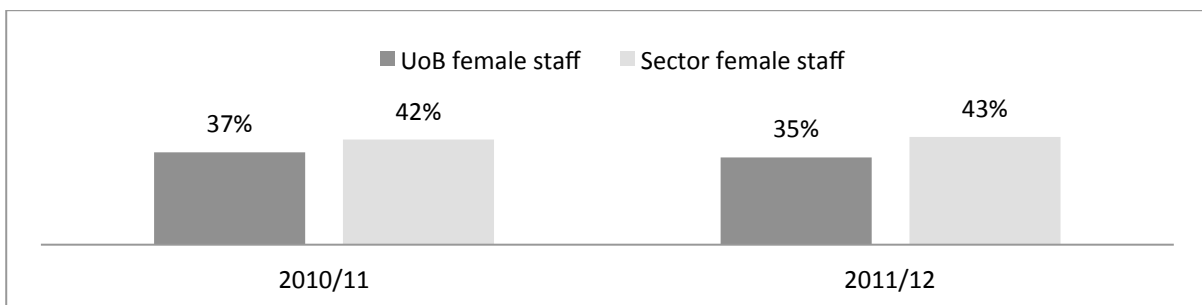
Figure 7c - Proportion of female staff per grade (%)

15

Figure 7 - Academic and research staff gender data (continued)

Staff by gender and grade

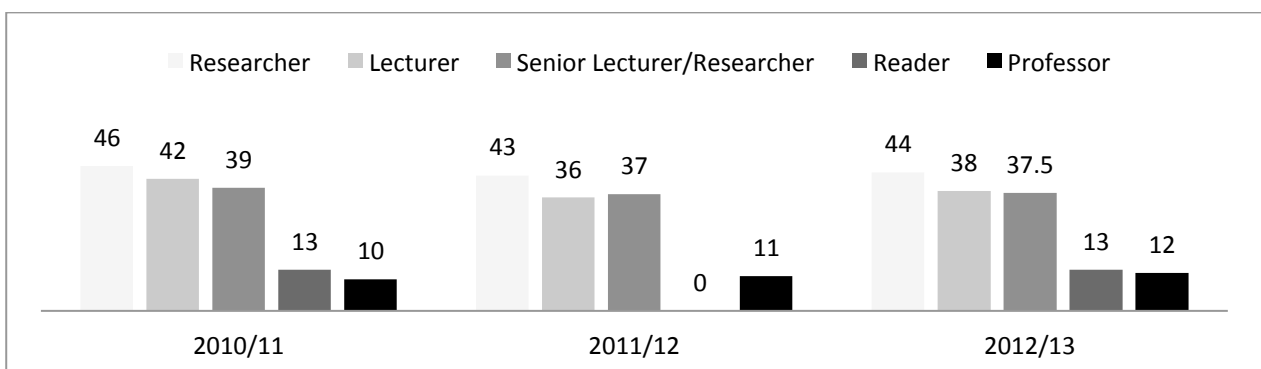|	2010/11			2011/12			2012/13		
	Female	Male	% Female	Female	Male	% Female	Female	Male	% Female
Researcher	31	37	**46%**	29	38	**43%**	32	40	**44%**
Lecturer	5	7	**42%**	5	9	**36%**	5	8	**38%**
Senior Lec/Researcher	7	11	**39%**	7	12	**37%**	6	10	**37.5%**
Reader	1	7	**13%**	0	6	**0%**	1	7	**13%**
Professor	2	18	**10%**	2	16	**11%**	2	15	**12%**
TOTAL	46	80	**37%**	43	81	**35%**	46	80	**37%**

Comparison with sector average

	2010/11		2011/12		2012/13	
	Female	Male	Female	Male	Female	Male
UoB	37%	63%	35%	65%	37%	63%
Sector average	42%	58%	43%	57%	-	-

Here, we have a complete reversal of what we see at the UG and PGR levels, with less than 40% of academic staff overall being female (Figure 7a), which is 5-8% lower than the higher education sector average (Figure 7b). **We believe that this is where we really have to start addressing problems.** The **male:female imbalance gets progressively larger** at each career transition point (PGR > postdoctoral researcher, postdoc > lecturer, lecturer > senior lecturer, SL > Reader, Reader > Professor; Figure 7c). Within our **teaching-focused academic positions** we have established a high proportion of female staff (4 out of 5 female). We will begin to address each of these issues (**Action Plan Sections 3, 4, 5**) but we appreciate the size of the challenge that faces us.

(ii) 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.

Table 2 - Turnover by gender and grade

					Female staff							
Year	Researcher		Lecturer		Senior Lecturer		Reader		Professor		Total	
2010	-	-	-	-	-	-	1	100%	-	-	**1**	**2%**
2011	1	3%	-	-	-	-	-	-	-	-	**1**	**2%**
2012	1	3%	-	-	-	-	-	-	-	-	**1**	**2%**

					Male staff							
Year	Researcher		Lecturer		Senior Lecturer		Reader		Professor		Total	
2010	1	3%	-	-	-	-	-	-	2	11%	**3**	**4%**
2011	3	8%	-	-	-	-	-	-	-	-	**3**	**4%**
2012	2	5%	-	-	-	-	-	-	1	7%	**3**	**4%**

Table 2 shows voluntary turnover through resignation: the number of staff leaving in a given year as a % of the total number of female or male staff that year. Our numbers are very low and we do not believe we have a gender imbalance problem. The female and male researchers all left at the end of fixed term contracts, the female Reader left due to retirement, the male Professors left due to retirement.

Word count: 1,807

# 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 8 – Job applications and appointments

Figure 8a – Total job applications and appointments by gender (%)
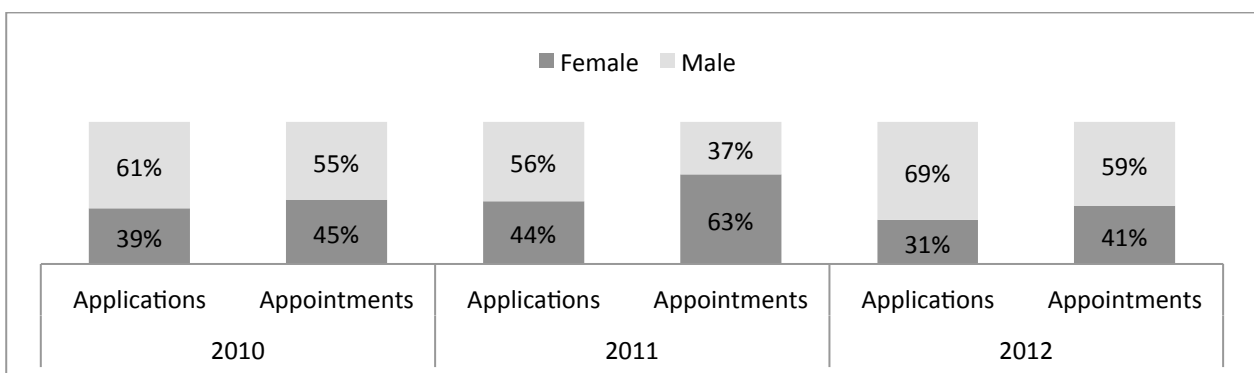
Figure 8b – Breakdown of applications and appointments by grade and gender (%)
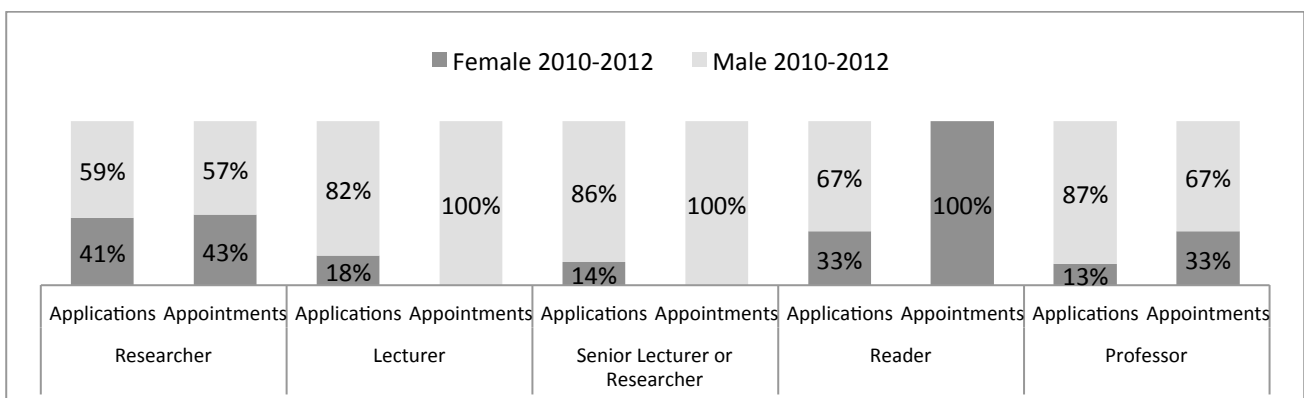
Figure 8 – Job applications by grade and gender (continued)

Job applications and appointments by gender and grade (2010-2012)

2010	Applicants			Appointments		
	Female	Male	% Female	Female	Male	% Female
Researcher	152	223	**41%**	16	18	**47%**
Lecturer	2	11	**15%**	0	2	**0%**
Senior Lecturer	-	-	**-**	-	-	**-**
Reader	1	0	**100%**	1	0	**100%**
Professor	0	6	**0%**	0	1	**0%**
Total	155	240	**39%**	17	21	**45%**

2011	Applicants			Appointments		
	Female	Male	% Female	Female	Male	% Female
Researcher	133	145	**48%**	9	14	**39%**
Lecturer	0	1	**0%**	0	1	**0%**
Senior Lecturer	1	6	**14%**	0	1	**0%**
Reader	0	2	**0%**	0	0	**0%**
Professor	4	21	**16%**	1	1	**50%**
Total	138	175	**44%**	10	17	**37%**

2012	Applicants			Appointments		
	Female	Male	% Female	Female	Male	% Female
Researcher	67	145	**32%**	7	10	**41%**
Lecturer	5	19	**21%**	-	-	**-**
Senior Lecturer	-	-	**-**	-	-	**-**
Reader	-	-	**-**	-	-	**-**
Professor	-	-	**-**	-	-	**-**
Total	72	164	**31%**	7	10	**41%**

The data (Figure 8) demonstrates that we have a problem with a **disproportionately low number of female applicants**, which (perhaps predictably) gets much worse at more senior levels. As ~60% of our UG and PGR populations are female, we would expect more than 41% of applicants for researcher jobs to be female, and more than 14-18% of L/SL applications to be from women. Numbers for Reader/Prof applications are very low overall, but still indicate a **serious gender imbalance**.

Although the **total appointment** figures show a greater percentage of female appointments than applications (Figure 8a), these **data mask gender imbalances** (Figure 8b). Although appointments at Researcher level are overall in-line with application figures, no new female appointments have been made at L/SL level in the last 3 years (Figure 8b).

Within the higher education sector, 12% of Bioscience Professors were female in 2010/11 and 15% in 2011/12. This compares to 10% and 11% respectively within the Birmingham School of Biosciences, so we are below the sector average.

We will begin to address these issues, in **Action Plan Sections 3.2, 3.4, 4.2 and 5.2.**

(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.

Figure 9 – Applications and promotions by gender

Figure 9a – Total applications and promotions by gender (%)
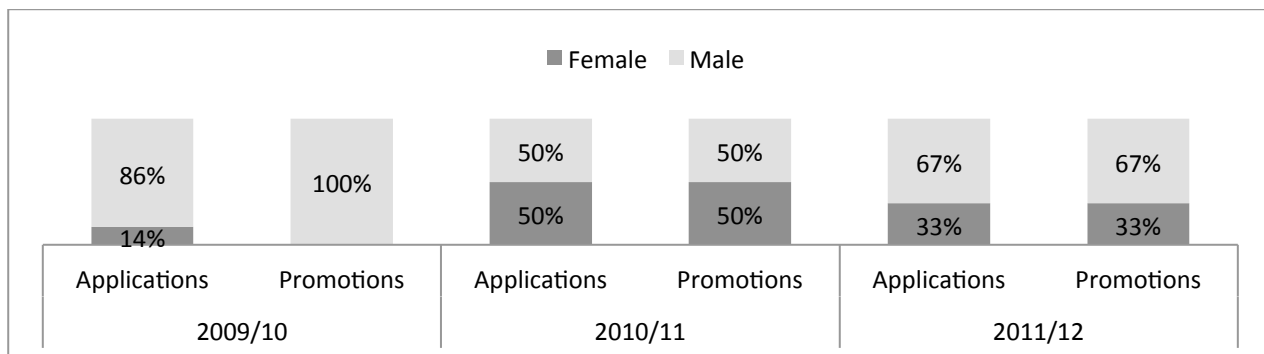
Figure 9b – Total applications and promotions by grade and gender (%)
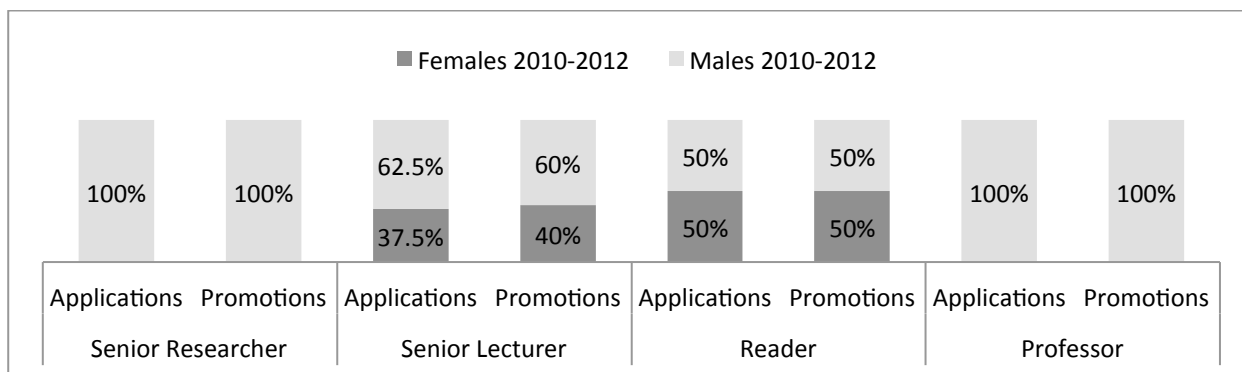
Applications and promotions by gender and grade (2009/10-2011/12)

2009/10	Applicants			Promotions		
	Female	Male	% Female	Female	Male	% Female
Senior Researcher	0	2	**0%**	0	2	**0%**
Senior Lecturer	1	2	**33%**	0	0	**0%**
Reader	0	1	**0%**	0	1	**0%**
Professor	0	1	**0%**	0	1	**0%**
Total	1	**6**	**14%**	0	4	**0%**

2010/11	Applicants			Promotions		
	Female	Male	% Female	Female	Male	% Female
Senior Researcher	0	1	**0%**	0	1	**0%**
Senior Lecturer	1	1	**50%**	1	1	**50%**
Reader	1	0	**100%**	1	0	**100%**
Professor	-	-	**-**	-	-	**-**
Total	2	2	**50%**	2	2	**50%**

2011/12	Applicants			Promotions		
	Female	Male	% Female	Female	Male	% Female
Senior Researcher	-	-	**-**	-	-	**-**
Senior Lecturer	1	2	**33%**	1	2	**33%**
Reader	-	-	**-**	-	-	**-**
Professor	-	-	**-**	-	-	**-**
Total	1	2	**33%**	1	2	**33%**

Female application rates for promotion are generally low (Figure 9a). In 2011 and 2012, overall successful promotion rates were the same as for men (Figure 9b). In 2010, no women (and 4 men) were promoted. No Professorial applications have been put forward by women in the last three years: in the same time frame, 3 men have applied and all have been successfully promoted to Chair. We recognise that sample sizes are very small.

However, **there seems to be a problem with getting women to apply for promotion**. This will necessarily become more problematic at more senior levels as fewer women are at senior levels already, so the pool of potential applicants is extremely small. Feedback from the College work-life balance forum and informal discussion amongst School academic staff has suggested **several reasons** for the lack of female applications, outlined in section 4b (career development). **We will begin to tackle these issues throughout the Action Plan (Section 3, 4, 5).**

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

We try to make the School attractive to all comers and use all means to advertise posts. We comply with the university's equal opportunities policies during all stages of recruitment. At present, we have no specific initiatives in place to attract female applicants, but we will begin to address this with **Action Plan sections 3.4 and 4.2.**

A recent University-wide initiative, started in 2011, may help to address the problem in Biosciences, where we have been fortunate enough in 2011-12 to recruit 6 of the ~50 University Birmingham Fellows (described earlier), of whom 2 are women (this is 33% of the total, similar to the current proportion of permanent female academic staff). Birmingham Fellowships are designed to attract the highest calibre early-career researchers to Birmingham, where they can then establish their careers. Fellows will be appointed to a permanent academic post, having had five years' protected time initially to establish a high-quality research programme, with a gradually increasing teaching load.

We recognise that we need to do more within the School to attract women to posts at all levels from Researcher to Professor, and we will specifically address this issue in the Action Plan (Sections 3, 4, 5).

(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.

Attrition occurs at all levels, therefore we recognise that we have a lot of work to do. At present, we have no programmes or activities specifically designed to support women at key transition points, but have **made some positive steps very recently** (see below), and **will address these issues further at all levels from PGR upwards, as outlined in sections 2.1, 2.2, 3, 4 and 5 of the Action Plan.**

PhD > Postdoctoral researcher (PDRA):
No gender-specific initiatives in place. **Future initiatives are outlined in section 2 of the Action plan.**

PDRA > permanent academic:
Within the School, we have recently initiated an informal "buddy" scheme for PDRAs. This provides PDRAs who want it with the support of an engaged but subjective mentor, to enhance individuals' personal development and help them find an identity within the academic community. Nineteen academic staff (out of 60) agreed to support PDRAs, and 7 PDRAs have opted to take part in the scheme to date, so 2 PIs have been assigned to each PDRA for now. As PDRA uptake was surprisingly low, PIs have also volunteered themselves as "topic-specific" mentors, with topics including "managing a career and family".

In addition, PDRAs will soon implement a seminar series inviting successful researchers to present their work and at the end describe how they achieved their career goals (e.g. how they established themselves in a foreign country, what hurdles they had to deal with).

Future initiatives are outlined in sections 3.1, 3.3 to 3.10 and 5.2 to 5.4 of the Action Plan.

Lecturer > Senior Lecturer, Senior Lecturer > Reader, Reader > Professor:
No gender-specific initiatives are in place at present. **Future initiatives are outlined in sections 4.1, 4.3-4.7, 4.9, 4.10, 5.1-5.4 of the Action Plan.**

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?

We have no gender-specific initiatives in place at present for promotion and career development. We recognise that this is a **key area for change** to address the gender imbalance and female attrition within the School. Via the work-life balance forum, the flexible working survey, and informal discussion amongst colleagues at all grades, we have recognised that there is a "disconnect" between the University guidelines for promotions/career development and staff perception/experience of the promotions and career development processes within the School of Biosciences over the last few years. We believe that this necessitates a cultural change (see section iv in "Organisation and Culture" below) within both the School and the College (which is the level at which promotions decisions are ultimately controlled). **We will start to address this, as outlined in the Action Plan section 4.3.**

<u>**Promotions**</u>
University promotion criteria and guidelines are clearly set out on the University website. The guidelines state:

> "The University will ensure that staff are not treated less favourably in the promotions process because of the following individual circumstances:
>
> • Absence on maternity, paternity, parental or adoption leave,
> • Disability-related, ill health and injury reasons,
> • Part-time or other flexible working arrangements,
> • Caring commitments.
>
> The University will take into account effects resulting from the above on a staff member's ability to demonstrate sustained performance against contractual requirements, but will still expect the staff member to demonstrate the achievement of the normal quality criteria. Thus, while no dilution of the required quality of inputs and outputs would be accepted, the quantity of inputs and outputs (subject to any appropriate threshold) would be considered in the following contexts, for example:
>
> • A female member of staff who has taken maternity leave may have a 'gap' in input and/or output. In these circumstances a reduction in quantity would be accepted.
> • Where a member of staff works part-time, the quantity of their input and output would be considered in relation to their reduced working hours."

However, it is clear from our data-gathering that the **perception** of the promotions process by staff (whether they have applied for promotion or not) can be **negative**. **Specific issues** that have been raised at several meetings (including the University Athena Working Group) are that (i) Research output (number of papers and grants) is the only metric that seems to positively affect promotion chances on a standard (three-legged) academic contract and (ii) there is a lack of understanding

amongst senior management of how issues such as maternity leave and/or part-time working can affect career development, promotion chance and the implementation of the three-legged academic contract generally (see more under Organisation and Culture section a(ii) below and **Action Plan sections 4.3, 4.4, 4.6**).

The data and information we have gathered around promotions and the Actions we will undertake that are identified in the Action Plan will also feed into a University-wide review of the grades and promotions process (including gender issues), instigated by the Vice-Chancellor.

Career development
Currently all Biosciences academic staff have a "Personal Best" meeting once a year, at which their achievements, plans and constraints are discussed with a senior member of Professorial Staff. This will be amended to a new Performance and Development Review (PDR) from 2013. Currently the PDR/"Personal best" form is very research-heavy and **this will be changed (Action Plan 4.3).** PDRAs currently have no formal Staff Development Review; **this will change as outlined in the Action Plan (Section 3.5).**

We do not run any female-specific career development courses, but the University's People and Organisational Development (POD) team run courses that could be relevant to Biosciences staff, such as: Assertiveness, Central Induction (for new starters), Diversity in workplace (e-learning), Delegating for success, Handling difficult conversations, Influencing skills, Mentoring, PDR. **We will advertise these widely to staff (Action Plan 4.11).**

Within the College, the College Research Support Team runs regular and successful half-day **career development courses** such as grant-writing workshops, and early career options. The University Research and Commercial Services team provides regular courses and workshops surrounding EU funding (usually at lunchtime, and repeated on various days).

A very **recent College initiative** (April 2013) has been set up **to support PDRA staff specifically**, with £10,000 funding from ISSF. This will include: personal best development, a mechanism for PDRA profiles on websites, connections to School meetings, PDRA-specific workshops, updating email lists, PDRA representation on committees, development of fact-sheets on funding/fellowship schemes, focus groups and profile-raising events. **This initiative ties in very well with parts of section 3 of our Action Plan, and should aid the achievement of its goals.**

(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?

Induction is an area where we are currently lagging behind and have work to do. We have started making Athena-related information accessible on the Biosciences website, but **developing strong staff induction** (information in booklets, on the web and support of key staff members) is a **key component of our Action Plan (3.7, 5.2).** We have conducted informal surveys and dialogue amongst staff to start to discover what current staff "wish they had been told" when they started. A University induction course exists, but Biosciences Staff who have been on the course did not find it particularly helpful.

All staff are requested to complete online diversity training (https://bham.marshallacmtraining.co.uk/).

(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.

The School does not offer anything gender-specific in terms of career support for UGs. Most Biosciences UG career support is carried out via:

a)   The University's popular (with students) **Careers and Employability Centre** (http://www.birmingham.ac.uk/currentstudents/careers.aspx). A majority of the careers advisers attached to the College in the Careers Network are female. Students can book one-to-one appointments with the careers advisers. We will investigate the scope for delivering gender-specific advice via the careers service in the **Action Plan (Section 1.4)**

b)   The School's successful **academic tutorial system**. All students have a personal tutor from the academic staff with whom they meet regularly (6 meetings/semester in first year; 4 meetings/semester in 2nd year, 2 meetings/semester in 3rd/4th year). Providing all female students with a female tutor would be logistically impossible given the numbers involved (~60% female UGs, ~25% female academics), but all female academics are tutors as part of their normal teaching duties; many provide informal career advice to final year project- and module-students, and the Careers Tutor is female.

The School does not offer anything gender-specific in terms of career support for PGRs. There are national seminars directed at encouraging female personal/career development for female PGRs, which we encourage female PGRs to attend. The School is mindful that entering an academic career pathway should not be the only measure of "success" for a PG degree. However, **in the Action Plan (section 2.1) we will monitor the career trajectories of our PGRs to see if the academic route shows specific attrition** (for women going into academic research - presumably largely at other institutions).

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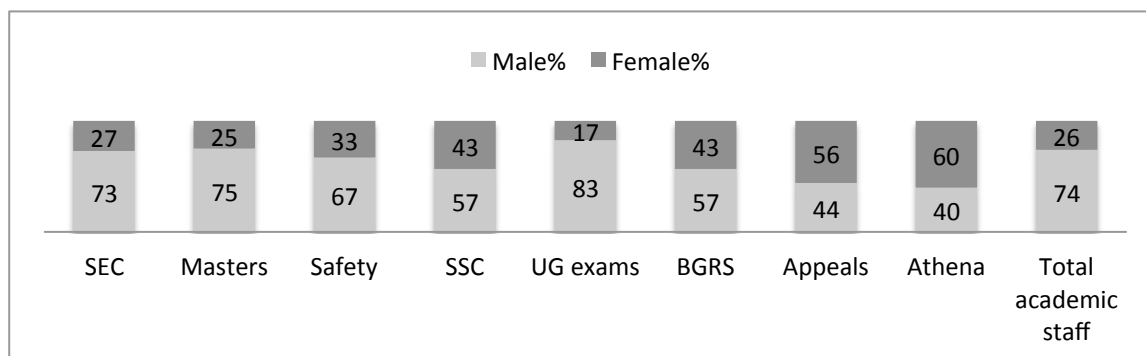
(i) Male and female representation on committees – provide a breakdown by committee and explain any differences between male and female representation. Explain how potential members are identified.

The committees within the School (Figure 13) are:

1) **School Executive Committee (SEC)** – the key decision-making committee, which meets monthly. This has 11 academic members (3 female) and 2 support/administrative staff members (both male). The HoS (male Professor) chairs.
2) **School Learning and Teaching Committee (LTC)** – this is a committee open to all staff, which meets every semester and is chaired by the Head of Education (male). It is held on a Wednesday at 2.15pm.
3) **Biosciences Research Committee (BRC)**: open to all academic staff and held monthly at 2pm on a Wednesday, before the Biosciences Research Colloquium (internal seminars, 3pm, open to all staff).
4) **Masters Teaching Committee** – 4 academic members (1 female (chair)).
5) **Health and Safety Committee** – 10 members, 6 academic (2 female), 2 support staff (2 female). Male Professor chairs.
6) **Staff-Student Committee (SSC)** – 7 academic staff members (3 female) plus undergraduate student reps. Male Professor chairs.
7) **Undergraduate Exam Committees** – 24 members (4 female) in total over 1st, 2nd and final year committees. 3 staff (1 female) sit on more than one committee). Overall and final year exams officer is female; 1st and 2nd year exams officers are male.
8) **Biosciences Graduate Research School Committee (BGRSC)** – 7 members of academic staff (3 female) plus 1 student representative.
9) **School Appeals panel** – 9 academic members (5 female)
10) **School Athena SWAN Working Group** – 14 members (10 female); 10 academic/research staff (6 female)

In addition, several key posts (7 teaching, 2 research) in the School are currently occupied by females: Welfare co-tutor + QA co-ordinator (1 person), MSci year tutor, Year 2 tutor + Careers tutor (1 person), Masters Programmes co-ordinator, Exams Officer, Mass Spectrometry facility director, MCB research theme co-ordinator. However, the most senior academic management roles (Head of School, Deputy Head of School, Head of Education, Head of Research and Knowledge Transfer, Director of Research, Head of Graduate School) all have male incumbents.

Figure 13: Male and female representation on School committees that are not open to all (%)

Legend: ☐ Male% ■ Female%

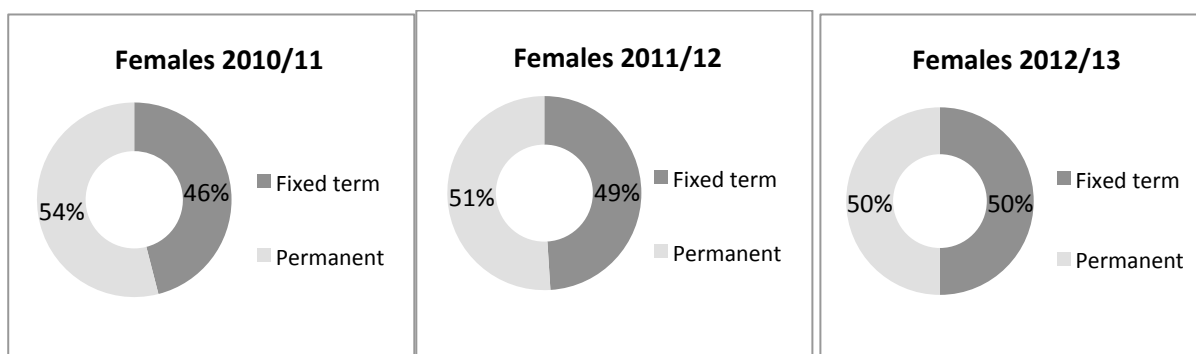| Committee	Female%	Male%
SEC	27	73
Masters	25	75
Safety	33	67
SSC	43	57
UG exams	17	83
BGRS	43	57
Appeals	56	44
Athena	60	40
Total academic staff	26	74

Our data, summarised in Figure 10, show that, compared to our current split of male/female academic staff, women are over-represented on the UG student Appeals committee, the two "student-facing" committees (SSC and BGRS), the safety committee and the Athena committee. There are no male-only committees at School level. **Committee representation will be addressed in the Action Plan section 4.7.**

Since the two other major decision-making committees (BRC and LTC) are open to all staff, this theoretically gives women the opportunity to participate in the decision-making processes in the School. However, we plan to move the times of these open meetings to make then more "carer-friendly", avoid clashes with the school run, part-time workers' days off, etc, and will implement PDRA representation on relevant committees (**Action Plan Sections 3.1 and 4.10).**
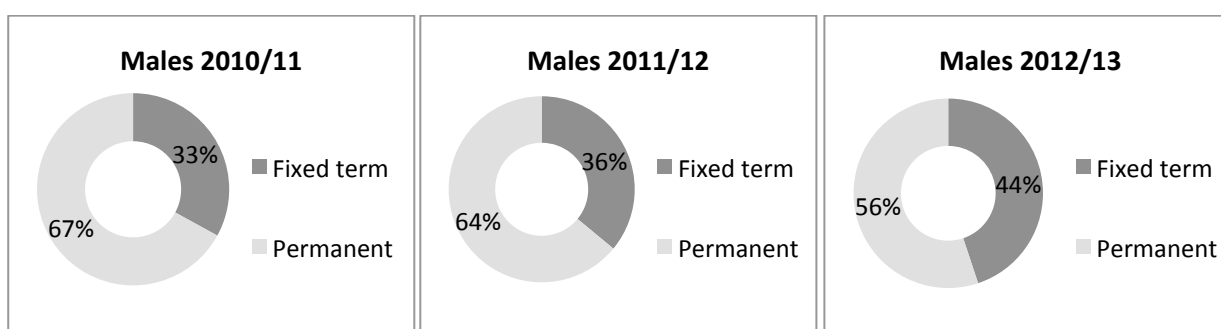
ii) Female:male ratio of academic and research staff on fixed-term contracts and open-ended (permanent) contracts – comment on any differences between male and female staff representation on fixed-term contracts and say what is being done to address them.

Figure 11 – Staff by contract type (permanent or fixed-term)

Figure 11a – Overall female staff by contract type

Females 2010/11
46% Fixed term
54% Permanent

Females 2011/12
49% Fixed term
51% Permanent

Females 2012/13
50% Fixed term
50% Permanent

Figure 11b –Overall male staff by contract type

Males 2010/11
33% Fixed term
67% Permanent

Males 2011/12
36% Fixed term
64% Permanent

Males 2012/13
44% Fixed term
56% Permanent

Staff by gender and contract type

	Female			Male		
2009/10	**Fixed**	**Permanent**	**% fixed**	**Fixed**	**Permanent**	**% fixed**
Researcher	21	10	**68%**	25	12	**68%**
Lecturer	0	5	**0%**	0	7	**0%**
Senior Lecturer	0	7	**0%**	0	11	**0%**
Reader	0	1	**0%**	0	7	**0%**
Professor	0	2	**0%**	1	17	**6%**
Total	21	25	**46%**	26	54	**33%**

	Female			Male		
2010/11	**Fixed**	**Permanent**	**% fixed**	**Fixed**	**Permanent**	**% fixed**
Researcher	21	8	**72%**	28	10	**74%**
Lecturer	0	5	**0%**	0	9	**0%**
Senior Lecturer	0	7	**0%**	0	12	**0%**
Reader	0	0	**0%**	0	6	**0%**
Professor	0	2	**0%**	1	15	**6%**
Total	21	22	**49%**	29	52	**36%**

	Female			Male		
2011/12	**Fixed**	**Permanent**	**% fixed**	**Fixed**	**Permanent**	**% fixed**
Researcher	23	9	**72%**	33	7	**82%**
Lecturer	0	5	**0%**	0	8	**0%**
Senior Lecturer	0	6	**0%**	1	9	**10%**
Reader	0	1	**0%**	0	7	**0%**
Professor	0	2	**0%**	1	14	**7%**
Total	23	23	**50%**	35	45	**44%**

Overall, there is a consistently higher proportion of men than women on permanent contracts (Figure 11a/b): this is due to the higher numbers of male permanent academic staff (Lecturer or above c.f. PDRAs), as at Researcher level there is a slightly higher proportion of male fixed-term staff (Figure 11). **Action to encourage more female applicants for permanent positions are outlined in section 4.2 of the Action Plan.**

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?

Committee members are identified by the Head of School, Head of Education, and SEC, on the basis of expertise and overall workload, and following discussion with the individuals concerned. To quote the Head of School: **"we really do make a big effort to deploy all staff irrespective of gender"**. There has also been a new initiative to 'advertise' for filling key posts within the School, such as Director of Postgraduate Taught programmes.

We do not have initiatives in place to encourage women to sit on University committees outside the School. 3 Biosciences female academic staff are visible at College/University level (1 representative on each of College disciplinary committee, College careers forum, University Athena SWAN committee), but are absent from other key committees**: this will be addressed in the Action Plan (Section 4.7)**. Several female staff members sit/have sat on national academic committees such as UK Research Council committees, etc via their own merit, and the School encourages both women and men to apply for such posts.

We will begin to address the overall issue of women on committees in section 3.1, 4.7 and 4.10 of the Action Plan.

(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.

The School has recently initiated (2012) the development of a transparent workload model that includes research, teaching and administrative activities for research-active staff. Workloads will be modified to maintain a degree of parity amongst staff, to balance research with other activities, and to allow for focus on grant capture. The model will take into account part-time working and career breaks. **As a key part of our Action Plan (Section 4.9), we will develop and publish this model.**

At present, the academic PDR/Personal Best review form is research-heavy with only one space on the form to list Administrative duties**. This will be reviewed and modified (Action Plan 4.3, as discussed in section "Career development a) i)" above).**

As discussed elsewhere, the University Promotion criteria are in place, but staff perception of this process is negative, and we will begin to address this in our **Action Plan (Section 4.3). The data we have gathered and the Actions we will undertake will also feed into a University-wide**

review of the grades and promotions process (including gender issues) instigated by the Vice-Chancellor.

(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.

The School introduced a **new policy** (2012) to hold School meetings/events/gatherings between the hours of **10.00 and 4.30** to allow for both female and male members of staff to fulfil family commitments: this timeframe will be further reduced in **Action Plan section 4.10**). The School meeting has very recently been brought forward from 2pm to 1pm to fit with staff commitments to school age children.

SEC has agreed to look at adjusting module timetabling to accommodate the requirements of those with family commitments. Some staff have had positive experiences of timetabling around family commitments being **agreed on an individual basis** with Module Organisers, Year Tutors and Head of Education. **In our Action Plan we plan to address these issues further, learning from good practice in other Schools (sections 4.7, 4.10, 5.4, 5.5).**

(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.

The overall perception by staff and students seems to be that the School is a friendly place. Student feedback consistently records the lecturers as being approachable and the tutorial system is popular. The Head of School is friendly and approachable, and responds promptly to emails.

The School has a number of open social spaces with a cafe, coffee-making facilities, etc. These are used either by all staff or by all staff and students. All the School's seminars (which nearly all take place at 1pm) and research colloquia are open to all, and a regular newsletter ("The Mole") is emailed to all staff, containing news of people, events and funding.

Two key meetings (School Meetings and LTC) are open to all academic staff. The School also holds a series of annual social/networking events, including the Biosciences Graduate Research Symposium, post-graduation parties, the Staff-Student pub quiz and an Xmas party. In addition, younger academic staff (male and female) periodically get together as a group for lunch.

The 2011 Staff Satisfaction Survey (open to academic, support and admin staff in Biosciences) highlighted several areas where women gave higher (>5% above men) positive scores than men, namely:
- "My job makes good use of my skills and abilities",
- "I am clear about what I am expected to achieve in my job",
- "I am able to strike the right balance between my work and home life",
- "I can meet the requirements of my job without regularly working excessive hours" (note overall positive responses to both these last 2 questions were low!).

However, the survey also highlighted areas where women gave lower (>5%) positive scores than men, namely:
- "My work gives me a feeling of personal accomplishment",
- "I am able to make decisions that enable me to work effectively",
- "I feel able to speak up and give my views/suggestions on the way things are done at the

University",
- "I think the University 'all staff' events provide a useful opportunity to hear from senior management e.g. VC's Open Forum, University Services Forum or College Assemblies",
- "I find the Staff Development Review (SDR) process useful (Academic and other related staff)",
- "My manager deals effectively with poor performance",
- "I am comfortable with the amount of work I am expected to do",
- "Overall, I am satisfied with my immediate physical working environment",
- "I am valued for what I can offer the University",
- "The University offers equal opportunities to all staff",
- "I would feel confident in reporting bullying/harassment",
- "The University respects individual differences (e.g. cultures, working styles, backgrounds, ideas)",
- "I feel committed to the University's goals",
- "I would recommend the University as a place to work".

As these data include non-academic staff and questions about the University as a whole, we will focus in the **Action Plan** on the School issues already raised in other sections, specifically SDR **(Section 4.3)** and workload **(section 4.9).**

(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.

17 of our staff (6 female; 35% of total) regularly give talks to schools and the general public. In addition, several PhD students and academic staff are UK STEM ambassadors via the STEMNET scheme: 9 postgraduate students (7 female; 78% of total) and 4 academic staff (3 female; 75% of total). One of our current female PGRs will represent the University at the Universitas 21 Presidents' meeting in Vancouver in May, and will also run a session at the Vitae Annual Conference in September.

Both male and female academic staff participate regularly in the School's applicant visit days and open days, so are visible to prospective students and their parents.

From these data, it is clear that women are over-represented in many of the School's outreach activities. These are not currently recognised by formal metrics in workload models or promotions. **The Action Plan will work to formally include these activities in workload models, PDRs and promotion recognition (Sections 4.3, 4.9).**

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.

2 permanent academics and 7 researchers have taken maternity leave during this period, with a 100% return rate. Maternity leave arrangements are promoted on the University and School websites and are formally managed by central HR, who take staff through their leave options.

(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.

Paternity leave is agreed locally between staff and their Head of School and follows the University's policy of 2 weeks paid leave. Approximately 10% of academic staff have taken paternity leave in total and we know of 3 informal paternity leave arrangements in the School in the last 3 years. Our recent informal surveys of staff (including the Athena Working Group!) have shown that male academic staff do not realise that they are entitled to paid paternity leave (most took annual leave if they took time off) and **we will address this in the Action Plan (Section 4.8).** Adoption leave/additional parental leave has not been requested amongst academic staff in the last 3 years.

(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.
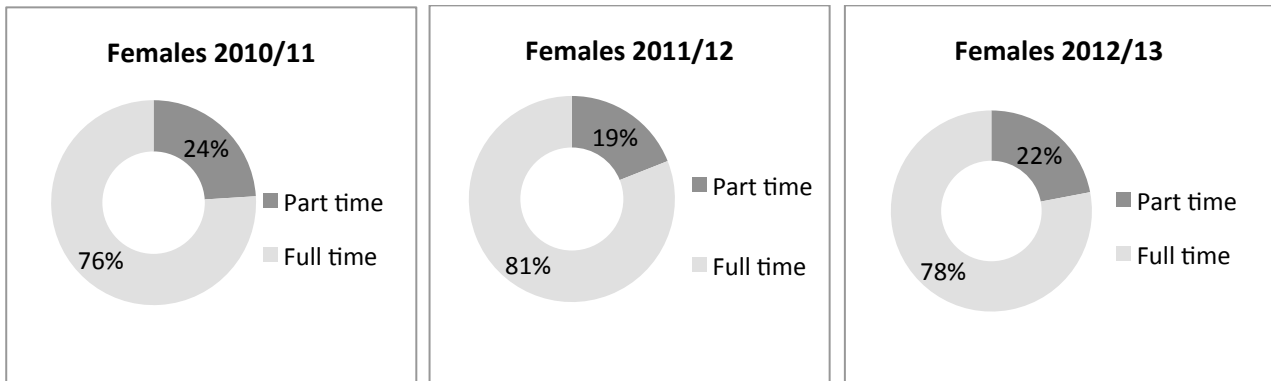
The University has a flexible working policy, and "staff with 26 weeks' continuous service have the right to request a flexible working pattern to care for a child aged 16 or under, or a disabled child under the age of 18; or to enable them to provide support to an adult in need of care".

HR does not formally monitor requests for flexible full-time working in the School of Biosciences, which are arranged on a one-to-one basis for academic/research staff via the Head of School or Principal Investigator, respectively (see section b(i) immediately below). It is also recognised that academic staff have greater flexibility than other staff groups and that many staff work flexibly as a matter of course or as an informal arrangement, without making a formal application under the University's policy.
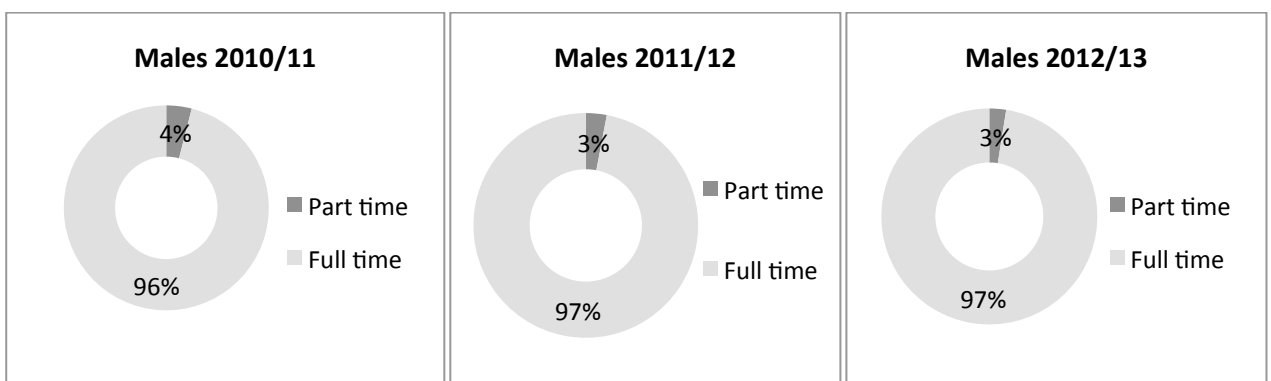
At present there are 4 academic staff working part-time on a formally agreed basis (Figure 12). To our knowledge, no requests for part-time working have been turned down.

Figure 12 – Staff by full-time/part-time working

Figure 12a – Female staff by full-time/part-time working

Females 2010/11	Females 2011/12	Females 2012/13
24% Part time, 76% Full time	19% Part time, 81% Full time	22% Part time, 78% Full time

Figure 12b – Male staff by full-time/part-time working

Males 2010/11	Males 2011/12	Males 2012/13
4% Part time, 96% Full time	3% Part time, 97% Full time	3% Part time, 97% Full time

Figure 12 – Staff by full-time/part-time working (continued)

Staff by working pattern

2009/10	Female			Male		
	Part-time	Full-time	% part-time	Part-time	Full-time	% part-time
Researcher	8	23	26%	2	35	5%
Lecturer	2	3	40%	0	7	0%
Senior Lecturer	1	6	14%	0	11	0%
Reader	0	1	0%	0	7	0%
Professor	0	2	0%	1	17	6%
Total	**11**	**35**	**24%**	**3**	**77**	**4%**

2010/11	Female			Male		
	Part-time	Full-time	% part-time	Part-time	Full-time	% part-time
Researcher	5	24	17%	1	37	3%
Lecturer	2	3	40%	0	9	0%
Senior Lecturer	1	6	14%	0	12	0%
Reader	0	0	0%	0	6	0%
Professor	0	2	0%	1	15	6%
Total	**8**	**35**	**19%**	**2**	**79**	**3%**

2011/12	Female			Male		
	Part-time	Full-time	% part-time	Part-time	Full-time	% part-time
Researcher	5	27	16%	1	39	2.5%
Lecturer	2	3	40%	0	8	0%
Senior Lecturer	0	4	0%	0	10	0%
Reader	0	1	0%	0	7	0%
Professor	1	1	50%	1	14	7%
Total	**8**	**36**	**21%**	**2**	**78**	**2%**

A consistently higher proportion of women (19-24%) work part-time compared to men (3-4%) across all levels (Figure 12).

Part-time working was identified by our surveys as a situation with unique problems. It was **felt overwhelmingly that moving to an academic part-time contract (usually undertaken by women with children) was a move towards losing research time almost exclusively (compared to teaching and administration), and several full-time female academics stated this as a reason they had not chosen to go part-time after maternity leave and whilst caring for children.** Several respondents commented that there was not enough recognition of the way that part-time working affects research and hence REF output. For example, given that FT academics generally work more than 37 hours a week, it should be recognised that those on PT contracts will have far greater constraints on their time and are not able to work e.g. 80% of a 50-hour week. PT workers and those considering PT working felt that there was a general lack of understanding (by senior management) of the effects of PT working on a standard (3-legged) academic contract, with research suffering to the greatest extent. It was noted by more than one PT academic that if you are on a 50% contract that you cannot write 50% of a paper, 50% of a grant or deliver 50% of a lecture and still be successful, and that a 50% FTE academic does not receive 50% of the emails received by FT workers.

Amongst part-time postdoctoral researchers, there is not a general feeling that PT working has impeded career progression, but all responses to our informal questionnaire were from female postdocs who have worked part-time in the School (for various PIs) for over 10 years. Respondents feel under pressure from themselves (rather than PIs) to work longer than their part-time hours in order to achieve a certain level of publishable output and ensure continued contract research

employment (there is no "permanent PDRA" career stream). Most work part-time in order to acquire the flexibility required for childcare e.g. in the School holidays, or to avoid a day at nursery for their child, but often choose to work full-time (or longer) hours some of the time.

These are key issues, and will likely take much longer than three years to fully address (e.g. the short-term nature of postdoctoral contracts). **Sections 3.3, 3.6, 3.8, 3.9, 4.6 and 4.9 of the Action plan** will begin to address issues around standard 3-legged contracts/PT working and transition of PDRAs to permanent positions.

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.

Individual flexible working arrangements agreed with the Head of School are in place with many parents/carers, and our Flexible Working Surveys (described in Section 2b) show that, **in the main, both academic and postdoc staff are happy with this type of arrangement, which is a strong part of the School's culture and has been widely praised.** The vast majority of staff feel that they work flexibly already (e.g. working longer or shorter hours on different days around their other commitments).

There are 4 academic staff who have a formal part-time working arrangement: within this part-time arrangement at least one (Juliet Coates, 80% FTE) also works flexibly as agreed with the Head of School (teaching constrained around the school day, with home-working in the evenings).

However, the Flexible Working surveys also highlighted issues with flexible working. Generally, childcare arrangements (e.g. nursery care) are inflexible once arranged. Mapping flexible working (such as working at home one day a week, or at certain times of day, or having a day off for part-time working) onto teaching timetables and meetings can be a problem, as childcare has to be booked and formalised long before teaching timetables and meeting dates are available. At present, requests for flexible teaching are successfully agreed on a case-by-case basis with the Head of Education (no dissatisfaction with this arrangement was highlighted in the survey), and in our **Action Plan (section 4.10)** we will address the timings of meetings.

In addition, for PDRAs, discrepancies may exist between individual PIs in their support for PDRA flexible working (including requests for part-time working). We will address this in the **Action Plan (3.9)**.

(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.

Currently, the School follows the University maternity leave guidelines, which include 18 weeks full–paid leave for eligible academic staff.

Maternity leave tends to be managed on a case-by-case basis, as every situation is slightly different. Numbers in the School of Biosciences are fairly low (4 cases amongst permanent academic staff in the last 6 years (only 2 in the last 3 years), and 7 PDRA maternity leaves in the last 3 years). Cover for academic staff on maternity leave is provided by the remaining ~50 academic staff (or occasionally by paying a PDRA), as it would be for other absences e.g. due to illness. There is no budget at School or College level for maternity cover.

Aside from the ability to request part-time or flexible working, maternity returners currently receive **no additional support** (e.g. teaching relief), **but we will begin to address this in the Action Plan.** We will be guided by the results of the College work-life balance forum, which identified **problems with mothers feeling forced to return to work sooner than they wanted to because they know their colleagues were covering for them for nothing**. Some mothers **felt forced into coming back full-time rather than part-time because of the feeling that part-time working could not enable viable promotion/career development chances due to a "squeezing out" of research time rather than proportionately adjusted teaching/admin load**. We believe that this necessitates a change in institutional culture, particularly around **maternity return and promotion/career development (Action Plan sections 4.3, 4.4, 4.6, 4.9).**

It is University policy that all Doctoral Researchers have at least two supervisors, so neither DR nor supervisor on leave should be disadvantaged by staff absence. In recent years we have tried to implement a policy of all UG modules being co-taught by several staff members, to minimise the impact of long-term staff absences.

Word count: 4886

Section 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.

We realise that we have a lot of work to do, but we believe that we have begun to make some small steps forward recently. We are excited and hopeful that this Athena SWAN Bronze Application will provide the vehicle for a change of culture and communication within the School, enabling us to better support women, but also to become more "family-friendly" as a whole.

The Action Plan is centred largely around the following areas:

1) Raising the visibility of Athena SWAN and its aims at all levels within the School
2) Additional data gathering
3) Initiation of discussions between key groups and HoS
4) Raising the profile of PDRAs in the School
5) Improving staff induction
6) Further developing a transparent workload model
7) Addressing identified promotions issues
8) Addressing identified maternity issues

We have tried to avoid Actions that require women to take on additional time commitments (e.g. women-specific coffee mornings, fora or workshops), as women are likely to be the people already suffering from larger time constraints, and therefore unwilling to participate. Instead, we believe that open discussion amongst males and females, and several Actions that will benefit <u>all</u> staff, will particularly have a positive effect on our female staff.

Word count: 203

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.