Athena SWAN Silver department award application

Name of university: University of Birmingham

Department: School of Biosciences

Date of application: 29/11/16

Date of university Bronze and/or Silver Athena SWAN award: Bronze 2011; renewed 2014

Contact for application: Juliet Coates

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

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

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

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

Sections to be included

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

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

UNIVERSITY OF BIRMINGHAM

School of Biosciences

Chris Bunce
Professor of Translational Cancer Biology
and Head of School

Direct Line: 0121 414 5402
Email: C.M.Bunce@bham.ac.uk

Our Ref: CB/ace

17 November 2016

To the Athena SWAN assessment committee:

I joined the Biosciences Athena SWAN Self-Assessment Team in September 2015 and was appointed Head of School in April 2016.

I wholeheartedly support the School's Athena SWAN Silver application. We feel that we have delivered our Bronze actions to a very high level of completion and beyond in some areas, leading to improvements in student and staff numbers. The proposed silver actions are based on this foundation and will have benefit beyond the school, both at College level and in leading University-wide best practice.

Our Silver Action Plan is designed to deliver equality of opportunity and personal development. This will drive up School morale and collegiality, and will directly impact the School's outputs, feeding into the strong REF and TEF performances we aspire to.

I have a track record in developing opportunities for women to pursue a career in science and academia. For ten years, I ran a translational cancer research programme in the School. This programme continues today, with the leadership succeeded by my female ex-Post Doc Dr Farhat Khanim, who is now the Programme grant holder. Under my and now Farhat's leadership the group has always had an equal balance of female and male members. Currently the group has five postdoctoral researchers, three of whom are women. I have supervised to successful completion fifteen PhD students of which nine are female; all of whom went on to pursue post-doctoral careers in academia or public science bodies. My current and sixteenth PhD student Maiss Kasim is also female and an overseas student supported on an Iraqi studentship.

As head of School, I am committed to developing and creating opportunities to support and development my female academic and non-academic staff, and also the female professional services that have roles supporting my School and College. My commitment carries to the College level, as College Lead for Equality, and to institutional level as a member of the Equality Executive Group headed by the Professor Una Martin (Deputy Pro-Vice Chancellor for Equalities). Evidence of my impact since coming to post includes appointments of: Prof. Helen Cooper to the School Executive Committee and as Deputy Head of School (replacing Prof. Christopher Franklin), Dr Julia Lodge as School Head of Education (previously Dr Jeremy Pritchard), Dr Susannah Thorpe as Academic Lead for the Biosystems and Environmental Change research theme (previously Prof Mark Viant) and the recruitment of Dr Eleanor Cull as programme lead for the Human Biology Undergraduate Degree (Previously Dr Steven Jacques).

As operations are now College-led, a few aspects of our Bronze Action Plan have not progressed as quickly as we had hoped to date. Barriers to School progress have been logistical but are improving as the School is ensuring improved two-way communication with the College around E & D/Athena SWAN. Appointment of a Biosciences Operations Manager (Joanne Cope, started September 2016) has created extra resource for Athena SWAN activities at School level.

I will take overall responsibility for ensuring successful delivery of our Silver Actions.

Yours faithfully

Chris Bunce
Professor of Translational Cancer Biology
and Head of School

2. The self-assessment process: maximum 1000 words

Table 1: list of abbreviations used throughout this application	
A2B	Access to Birmingham – widening participation initiative
AVD	Applicant visit day
BME	Black and minority ethnic
BSc	Bachelor of Science (undergraduate degree)
CoSS	College of Social Sciences at University of Birmingham
E & D	Equality and Diversity
ECU	Equality Challenge Unit
EEG	Equality Executive Group (University – level Committee at UoB)
EPS	College of Engineering and Physical Sciences at University of Birmingham
EU	European Union
F	Female
FT	Full-time
FTE	Full-time equivalent
HESA	Higher Education Statistics Agency
HoS	Head of School
HR	Human Resources (professional services at University of Birmingham)
IT	Information Technology (professional services at University of Birmingham)
L	Lecturer
LES	College of Life and Environmental Sciences at University of Birmingham
LGBTQ+	Lesbian, Bisexual, Gay, Trans, Queer/questioning and others
LTC	Learning and Teaching Committee
M	Male
MRes	Masters by Research (postgraduate degree)
MSc	Master of Science (postgraduate degree)
MSci	Master in Science (undergraduate 4-year degree)
PDR	Performance Development Review (for permanent academic staff)
PDRA	Postdoctoral Research Associate (PDRA)
PERCAT	PDRA/Early Researcher Career Development and Training
PG (T/R)	Postgraduate (Taught/Research)
PT	Part-time
RG	Russell Group of Universities
SAT	Self-Assessment team
SDR	Staff development review (for PDRAs)
SEC	School Executive Committee
SL	Senior Lecturer
STEM	Science, Technology, Engineering and Maths
UG	Undergraduate
UoB	University of Birmingham
WAM	Workload allocation model

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

Rachael Ununuma Akpiri

Third-year doctoral researcher: Environmental Toxicology. Specific interest in promoting E & D among BMEs. STEM Ambassador; organised PG survey.

Jesamine Bartlett

First-year doctoral researcher: Polar Biology. At the university since 2008 as a mature student.

STEM ambassador particularly to girls/young women. Organised PG survey.

Chris Bunce (CB)

Head of School since April 2016. Champions E & D at College Board; sits on the University EEG. Recently had three years outside academia working in the charitable sector. Returned to UoB full-time in September 2015. Has track record of promoting women in science via mentorship and training e.g. 10 of his 16 PhD students are or were female.

Steve Busby

Professor of Biochemistry. Staff member since 1983 - many roles. Married with 3 grown-up children. Biochemical Society Chair. Royal Society's E & D network committee member. Instrumental in delivering the Bronze action plan as HoS 2012-2016.

Juliet Coates (JCC - Chair)

Senior Lecturer. Part-time (80%FTE), single parent of 8-year old. In post since 2004. Works flexibly around school hours. Teaches at all levels; runs research group. University Athena SAT member, School E & D champion, chairs University Parents and Carers' Network. Co-ordinates Athena applications/implementation; integrates Athena actions with other emerging E & D policies.

Helen Cooper (HC)

Professor of Mass Spectrometry, in post since 2007. Deputy HoS, Advanced Mass Spectrometry Facility Director, Biosciences Graduate School Training Coordinator, School Chemical Safety Officer, Deputy Director MRes in Molecular Cellular Biology. Teaches at all levels; runs research group. Married with two children (17 and 9). Liaises with Graduate School on Athena issues/actions.

Joanna Cope (JMC)

Operations Manager (full-time). Joined UoB in September 2016. University administration career spanning 20 years, including student recruitment and admissions, academic administration, finance, human resources and planning. In charge of coordinating and implementing Athena SWAN amongst School and College support staff.

Nick Howe

Doctoral researcher: bee biology. Interest in gender-equality, career progression and work-life balance. Organised PG survey.

Farhat Khanim (FK)

Full-time research fellow since 2003. Runs research group; teaches at all levels. College E & D lead, ensuring clear communication between School, College and University: will help to implement Biosciences Silver Action Plan.

Anne-Marie Krachler

Full-time Birmingham Fellow 2012-2016 with 3-year old. Worked on Athena areas including PDRA support (moved to USA).

Lindsey Leach

Full-time Birmingham Fellow since 2012; teaches at all levels. Married with 2 children under 5. Just returned from maternity leave.

Georgina Lloyd

Full-time PDRA, in the School since 1995. Two children (14 and 8). Worked part-time 2001 - 2011: 8 years at 50%FTE (PDRA), 2 years at 80%FTE (Research Technician). Helped improve staff induction and instigate the University's Parents and Carers' Network. Stepped down from SAT July 2016.

Jeremy Pritchard

Senior Lecturer, in post since 1993, School Head of Education until Sept 2016; now College Head of Education. Heavily involved in outreach activities. Developed the School WAM.

Susan Squire

University staff Diversity Adviser, works full-time/flexibly after 1 maternity leave. Provides Athena SWAN guidance to Schools - supported the production of data and examples of best practice.

Leanne Taylor-Smith

Full-time PDRA, previously 60% lecturer and 40% PDRA for 9 months (maternity cover for Kerstin Voelz). In the School since 2006 (undergraduate then doctoral researcher). LGBTQ+ mentor; married. Designed, implemented and analysed Biosciences Staff E & D survey.

Michael Tomlinson

Senior Lecturer since 2013; previously British Heart Foundation Senior Research Fellow 2008-2013. One of 4 School Research Theme Leads; runs research group; teaches at all levels; MSci Tutor. 4 children (11, 9, 7 and 5); married to University Lecturer (80%FTE). Designed and implemented staff survey; organises school social events.

Kerstin Voelz

Lecturer, previously PDRA, since 2010. Married with a daughter (1). Teaches at all levels; runs research group. College Research & Knowledge Transfer committee member; Senate member; STEM ambassador. Implemented changes to PDRA support and career development and developed "expectant parent" crib sheets.

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 Biosciences SAT meets 4-6 weekly. JCC and FK meet monthly with other LES Athena SWAN school leads to share best practise and coordinate College-level E & D activities. JCC reports to and from the University SAT; FK and CB report to and from the University's EEG and LES College Board; CB, JMC and HC all sit on SEC.

JCC is part of the CoSS Win:Win network steering group (Win:Win focuses on women in Academia, and advises on Bronze Athena applications for CoSS) providing advice whilst gaining ideas/examples of good practice.

We invited Jane Hill (Biology, York, Gold award) to give a seminar, and attended Paul Walton's (Chemistry, York, Gold) and Tom Welton's (Chemistry, Imperial, Gold) visits in 2014-16, to learn from other institutions. This generated ideas and reassured us that our approach to Athena SWAN is positive with good practice.

JCC attended the Society for Experimental Biology Athena workshop (December 2015), collating advice on action plans, data presentation, and on running future surveys. Meeting dialogue and feedback were positive and reassured the SAT that our approaches are sensible.

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.

SAT will meet minimum 2 monthly. The Action Plan will shape each agenda. The Action Plan identifies individuals (defined by Role title) responsible for each action. The SAT Chair and HoS will ensure that those identified to take responsibility for proposed actions are monitoring action progress and reporting to SAT. SAT in turn reports to SEC (meets weekly) via JMC, aiding implementation. Although SAT meets less regularly than SEC, issues can be raised and significant progress reported at any SEC meeting as E & D is a standing item on the SEC agenda. Action owners will be asked by HoS to confirm that actions are on track. Significant barriers or issues will be reported via HoS to College Board. Yearly progress reports will be prepared for School Committee and College Board. All minutes are on the School Intranet.

959 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 School of Biosciences resides in the College of Life and Environmental Sciences (LES) with the Schools of Geography Earth & Environmental Sciences, Psychology and Sport Exercise & Rehabilitation Sciences. The College now manages most of the School's administration and services (e.g. finance, HR, planning, IT).

In REF2014, 32% of the School's research was assessed world leading and another 59% internationally excellent: this research underpins our teaching programmes. Within the REF, the gender split of staff submitted was the same as the overall gender split of eligible staff in the School (in terms of %FTE).

The School's undergraduate (UG) degree programmes are Biological Sciences, Biochemistry and Human Biology, which may be taken as a BSc or an MSci including a year in industry, international year or an extended research project. The School runs 3 taught MSc and 2 MRes courses and hosts PhD research via the Biosciences Graduate Research School.

The School's student/staff numbers are as follows (Table 2).

Role	Numbers
Core academic staff, consisting of:	70
Teaching and research staff	*49*
Tenure-track research fellows	*13*
Teaching-focussed	*8*
PDRAs	80
Professional services staff (administration and support including techicians)	54
PGR students	153
PGT students	121
UG students	914

Table 2. *Numbers of staff (dark grey) and students (lighter grey) in the School of Biosciences at the University of Birmingham.*

The School has gained 9 (4 female) of the 82 Birmingham Fellows appointed to-date as part of a University-wide initiative to support the career transition from PDRA to permanent academic position.

There are 14 part-time members of academic staff (5 professors, 1 senior lecturer, 1 lecturer and 7 research fellows) and 2 currently on maternity leave. Nearly half the permanent academic staff have dependent children; a few have adult caring responsibilities. The age-range of academic staff is evenly distributed. Most academics who responded to our staff survey (Section 4.4b) believe that a strong culture of informal flexible working exists within the School, and is a key strength of the School's working environment.

Since our Bronze Athena application, we have made good progress with the majority of our actions and have gone well beyond some of them, as outlined in the following sections. We are working hard to embed E & D/Athena SWAN within every aspect of our School culture and have been instrumental in changing University policy.

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 School has no foundation courses. Overseas foundation students enrol via the Birmingham Foundation Academy: fewer than 5 students study Biology modules. Students who progress to a BSc are included in our overseas UG data (section (3)(b)(ii)).

The school hosts UG, PGT and PGR "Access to Birmingham" (A2B) students (Fig. 1) - UK Widening Participation students with alternative offers (e.g. 2 grades below standard entry, who must complete work at the School to qualify) - who receive a £1,500 scholarship per year of study.

More of our UG A2B students (Fig. 1) are female than those on a non-A2B route. **Silver Action 1.1** will investigate the reasons for this. PGT/PGR A2B numbers are too small to draw conclusions (Fig. 1). **Silver Action 2.1** will continue monitoring this data.

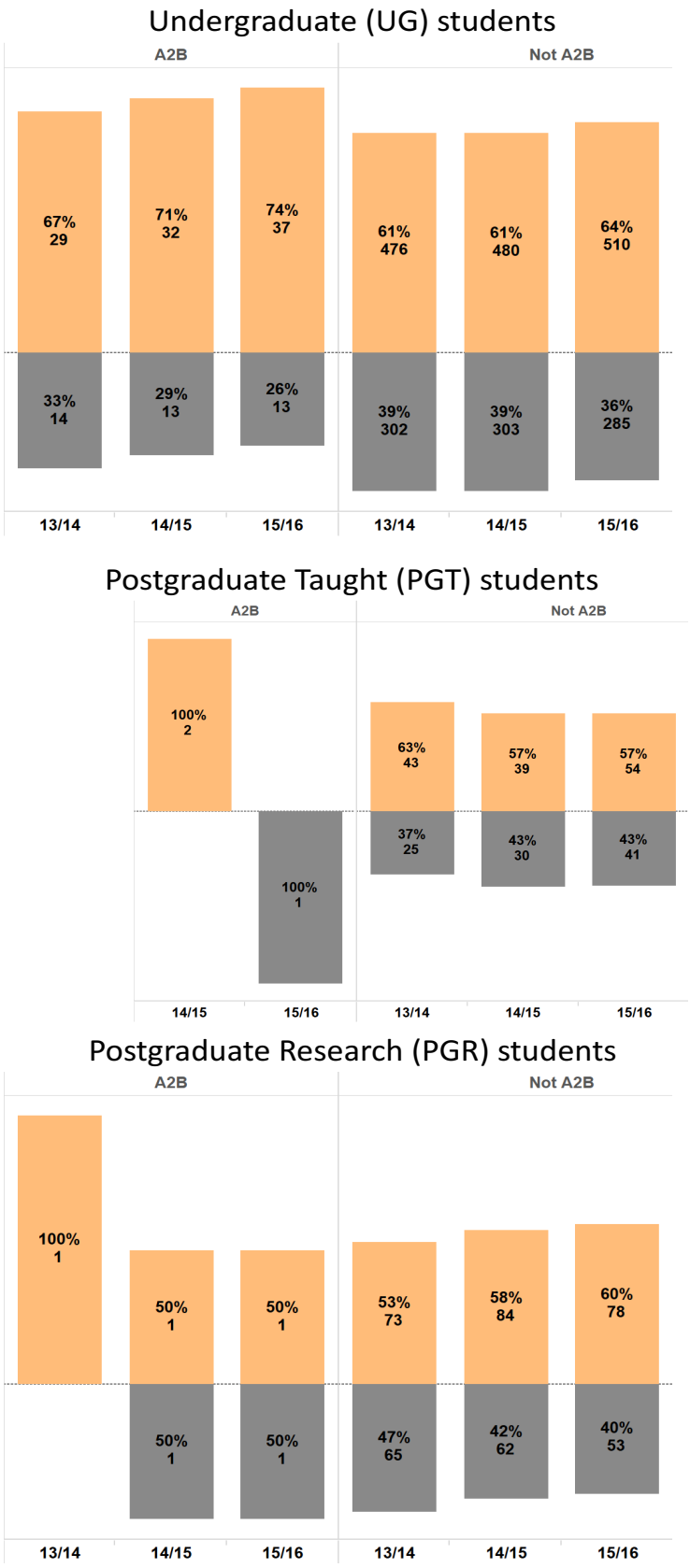

Figure 1. Access to Birmingham (A2B) student numbers compared with non-A2B student numbers by gender and academic year for the School of Biosciences. *Data shown as percentages and as absolute numbers for undergraduate (UG), postgraduate taught (PGT) and postgraduate research (PGR) students. Note that we have only 3 PGT and 5 PGR A2B students. Female students are shown in orange (will photocopy light grey) and male are shown in grey (will photocopy dark grey). This colour scheme is preserved in all subsequent figures.*

NB: Our data is collected as female:non-female, where non-female includes males, those who identify as non-binary and people who chose not to declare their gender. However, for clarity in this application we will use the terminology female:male as suggested in the application form.

(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.

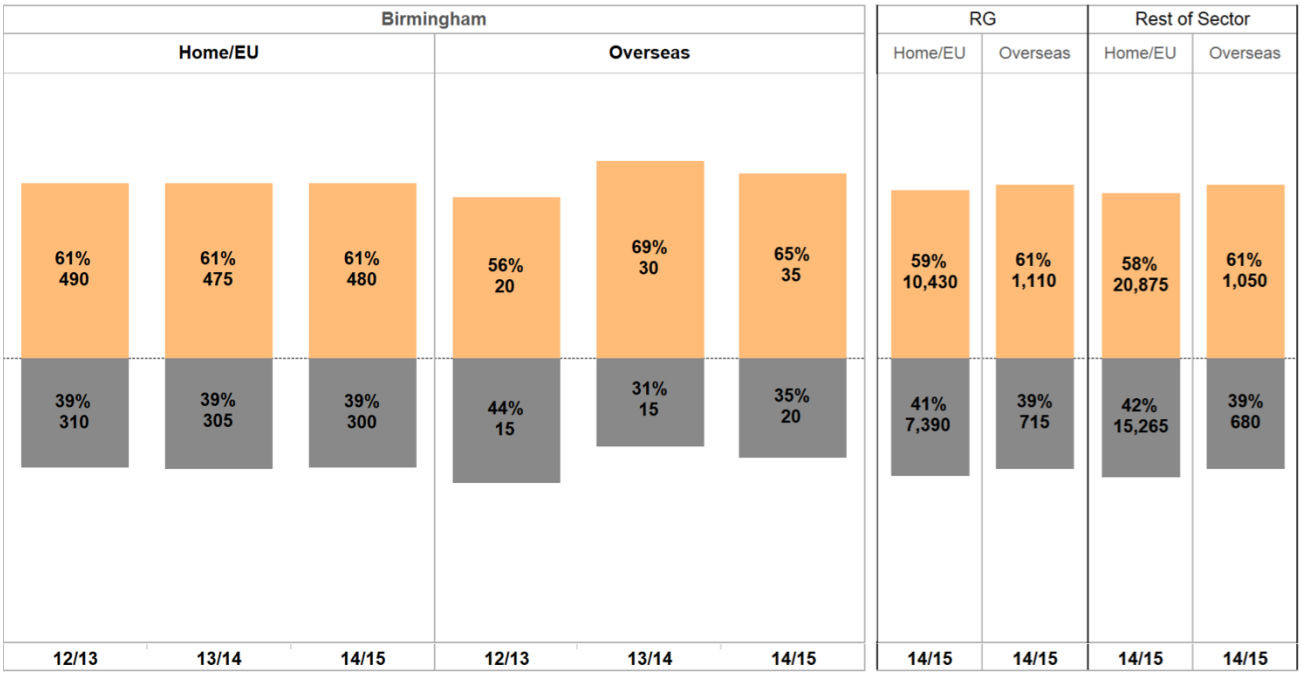

Figure 2. Undergraduate female and male student numbers. *Data shown as percentages and as absolute numbers for Home/EU and Overseas students within the School of Biosciences and compared to current Russell Group (RG: all RG Universities except Birmingham (UoB)) and Rest of Sector averages (All Universities except RG and UoB) from comparative Schools/departments. Females, orange, males, grey.*

Bronze Action 1.5 monitored home/EU and overseas UG numbers separately (Fig. 2; Table 3).

Our home UG female:male ratio has remained consistent at 61% in 2012-15, above the current RG and rest-of-sector averages, and slightly lower than 2009-12 (62-63%).

Our overseas student female:male ratio has increased in 2012-15 to exceed RG/sector averages (numbers are relatively small). We have **increased our overseas female student population by 9%** from 56%-65% while benchmarks have remained static. Our 2015/16 (non-benchmarked) data shows 56% female overseas students this year, possibly due to global factors outside our control. **Silver Action 1.2** will continue monitoring this data.

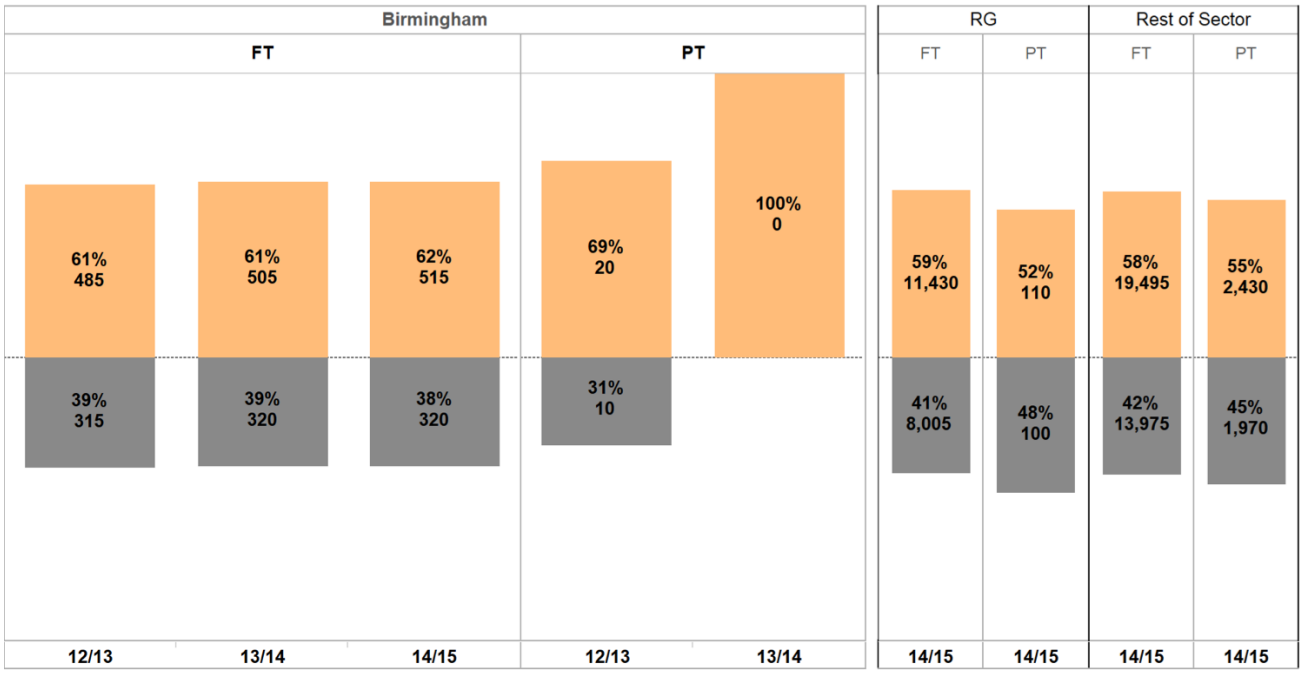

Figure 3. Undergraduate female and male student numbers enrolled as full-time (FT) or part-time (PT) *for the last 3 academic years, based on HESA data for which benchmarking data is available. Data shown as percentages and as absolute numbers for the School of Biosciences and compared to current Russell Group (RG) and Rest of Sector averages from comparative Schools/departments. Absolute numbers are rounded to the nearest 5 in accordance with HESA confidentiality policy: in 2013 we had less than 3 female PT students (rounded down). Females, orange; males, grey.*

Investigation with our marketing team (in response to Bronze feedback) has revealed no demand for PT degree programmes. A number of our FT-registered students with particular needs (e.g. disability, parenting) subsequently ask to take their degree PT via our reasonable adjustments/Student Support Agreement system, demonstrating flexibility in our degree system, which female students utilise. Our female PT student numbers are higher than males and higher than RG/sector averages (Fig. 3; we also had 65% female PT students in 2011/12).

We have a formal support policy in place for pregnant students. We use compulsory lecture-capture technology to enable flexible learning for all UGs.

To investigate why more females choose to study PT and to start analysing impact on student attainment, **Silver Action 1.3** will run a focus group for PT students and **Silver Action 1.4** will ask students to declare whether they are home/overseas/FT/PT in our UG careers surveys to gather more details on student career perceptions. We currently have no overseas PT UG students.

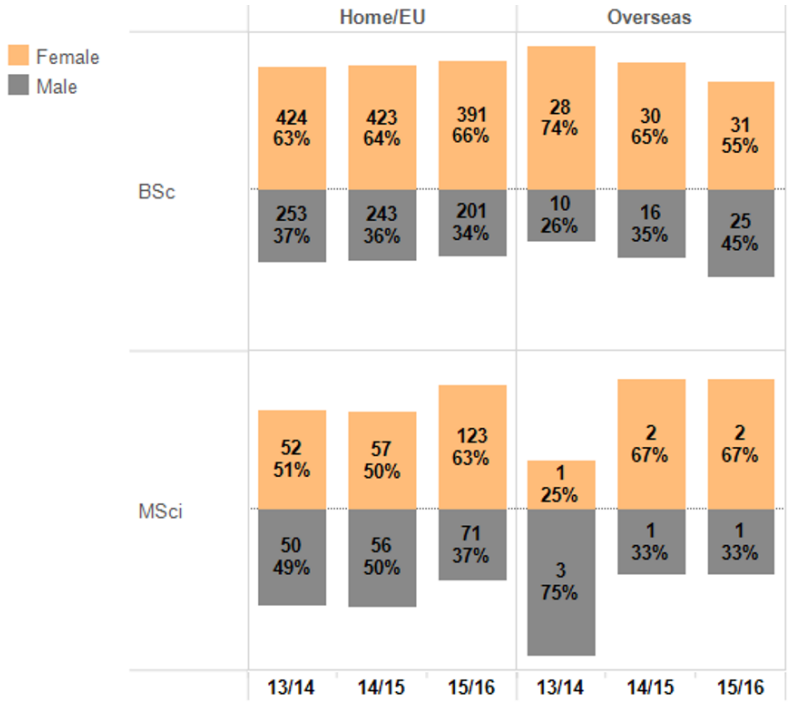

Figure 4. Undergraduate female and male student numbers enrolled as BSc or MSci in the School of Biosciences. *Data shown as percentages and as absolute numbers for Home/EU and Overseas students. This is non-HESA data for the most recent 3 academic years. Females, orange; males dark grey.*

We offer both 3- and 4-year BSc and 4-year UG MSci courses (Fig. 4). The proportion of females taking MSci courses increased in 2015-16, possibly because 4-year degrees with an international year or professional placement (predominantly female students) changed from BSc to MSci. Previously the only MSci programme required a 4th year extended lab project. Thus, we have increased female participation in MSci courses. **Silver Action 1.5** will distinguish between 3-year and 4-year students in careers and Athena surveys and may uncover why more females opt for 4-year degrees. **Silver Action 1.6** will interrogate entry grades by gender (also section 3(b)(v)) to see whether females have higher grades that enable them to apply directly for MSci courses (AAA, rather than AAB for BSc).

BSc	2013/14	2014/15	2015/16	MSci	2013/14	2014/15	2015/16
Biochemistry	54	57	62	Biochemistry	52	50	61
Biological Sciences	65	68	68	Biological Sciences	50	50	69
Human Biology	69	66	73	Human Biology	80	64	63
Natural Sciences	61	52	42	Natural Sciences	36	45	50

Table 3. Percentage of female home students on each of our BSc and MSci degree programmes for the last 3 academic years. *Overseas student numbers broken down in this way are small, so not meaningful.*

A larger percentage of female home students take Biological Sciences/Human Biology compared to Biochemistry/Natural Sciences (Table 3). However, our Biochemistry female student numbers are increasing and Natural Sciences ended in 2015/16. **Silver Action 1.2** will continue data monitoring, particularly Biochemistry numbers.

SUMMARY BOX 1

Summary of Section 3b (i and ii): To ensure we were not masking gender biases in our Bronze student data, Bronze Action 1.5 committed to monitor home and overseas UG student intake numbers separately - we have achieved this. Broadly speaking, our data indicate that our entry process does not disadvantage female students. Our Silver Actions 1.1-1.6 will gather more detailed data to understand trends and discrepancies.

(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.

Bronze Action 2.6 monitored home/overseas/FT/PT PG student numbers separately (Fig. 5 & 6). Our home (53 - 61%) and overseas (58-67%) PGT female populations are in-line with RG numbers. This improves on our Bronze application, where total female PGT numbers were 8% lower than our UG intake and 10% below sector average. Total PGT female proportions are now in-line with RG average and 2% below our UG population. **Silver Action 2.1** will continue monitoring this data to see whether we maintain this improvement, informing future actions.

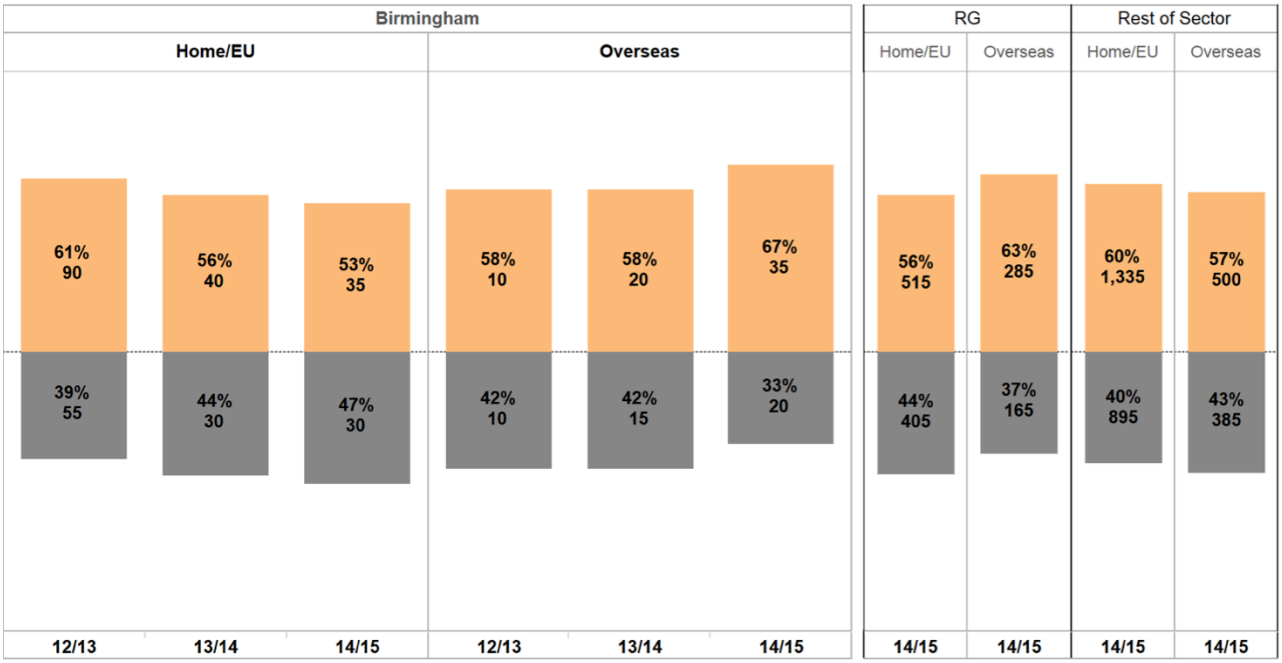

Figure 5. Postgraduate taught (PGT) female and male student numbers based on benchmarked HESA data. *Data shown as percentages and as absolute numbers for Home/EU and Overseas students within the School of Biosciences and compared to current Russell Group (RG) and Rest of Sector averages from comparative Schools/departments. Numbers are rounded to the nearest 5 (HESA data agreement). Females, orange; males dark grey.*

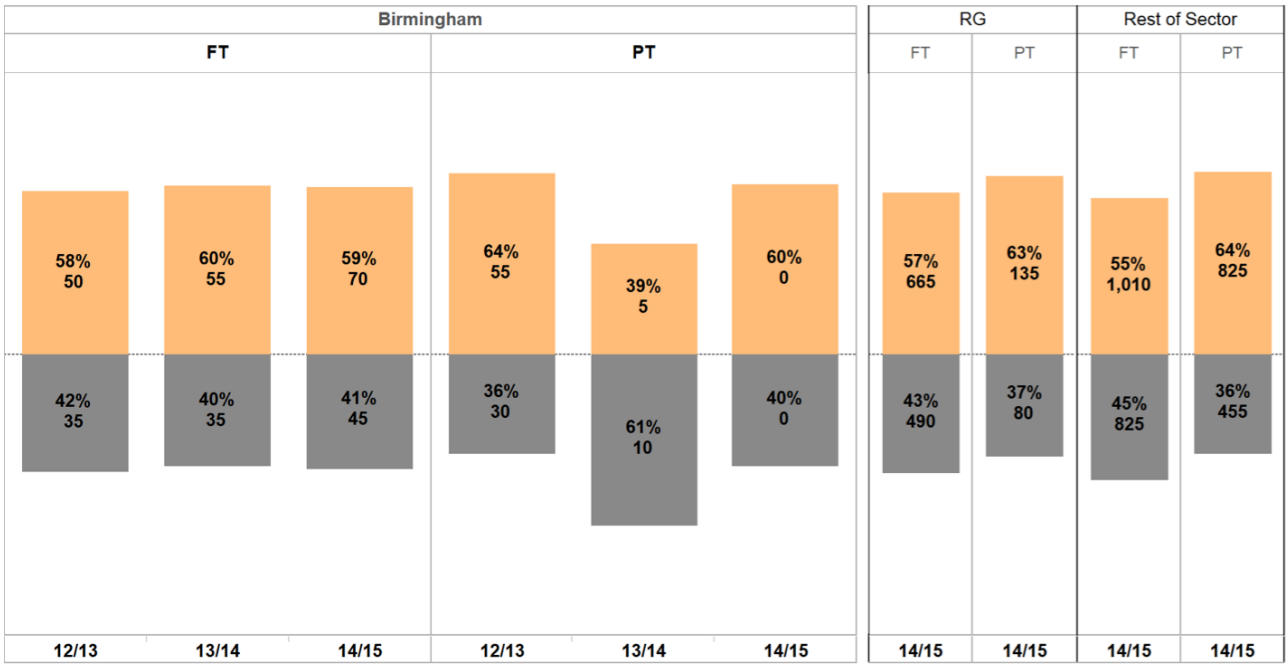

Figure 6. PGT female and male student numbers enrolled as full-time (FT) or part-time (PT). *Data shown as percentages and as absolute numbers for the School of Biosciences and compared to current Russell Group (RG) and Rest of Sector averages from comparative Schools/departments. Numbers are rounded to the nearest 5 (HESA data agreement), so in 2014/15 we had fewer than 3 PT students for both females and males. Females, orange; males dark grey.*

Our home PGT FT population is 59% female, slightly higher than RG and 2% below our UG intake (Fig. 6). Our PT PGT student numbers are small but largely in-line with RG. 2 completely PT MSc courses (Ornithology & Biological Recording) finished in 2012/13: PT numbers dropped subsequently. We have no overseas PT PGT students, due to the restrictions imposed by visas/overseas funding. **Silver Action 2.1** will continue monitoring this data.

(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.

Our total PGR population has declined slightly from 59% in 2009-12 to 54% in 2013-15 to be more in-line with RG (52%) and rest-of-sector (53%) averages.

Our Home/EU PGR population is 57% female, 5% higher than RG average, but 2% lower than our PGT population and 4% lower than our UG population (Fig. 7). Our overseas PGR female population is 2% below RG average but in-line with the rest-of-sector, although numbers are small and may be improving. We suspect that female overseas PGR fluctuations are due to global issues outside our control.

Silver Action 2.1 will continue monitoring this data.

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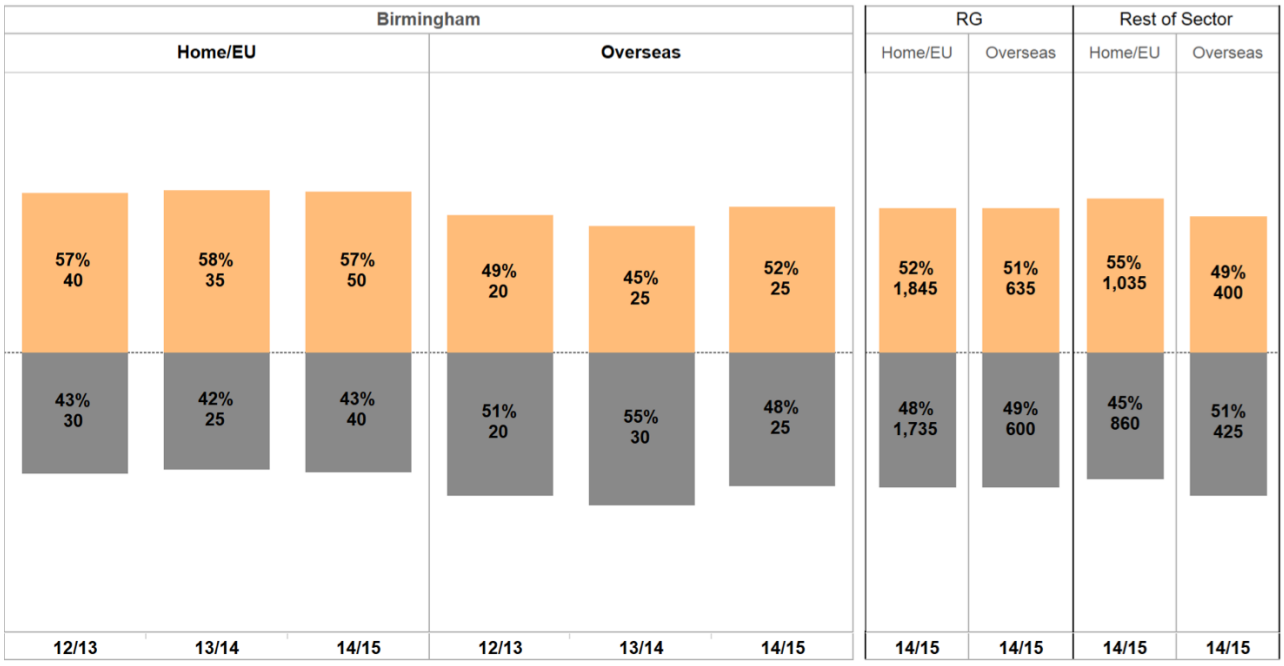


Figure 7. Postgraduate research (PGR) female and male student numbers. *Data shown as percentages and as absolute numbers for Home/EU and Overseas students within the School of Biosciences and compared to current Russell Group (RG) and Rest of Sector averages from comparative Schools/departments. Females, orange; males dark grey.*

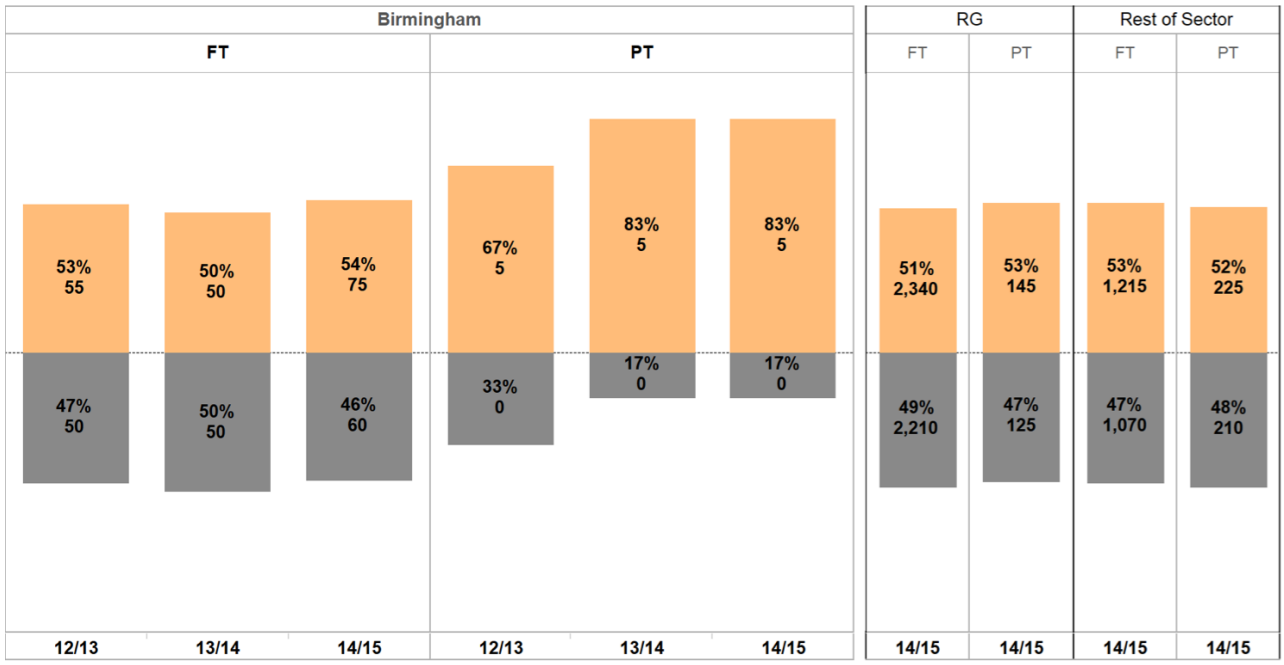


Figure 8. PGR female and male student numbers enrolled as full-time (FT) or part-time (PT). *Data shown as percentages and as absolute numbers for the School of Biosciences and compared to current Russell Group (RG) and Rest of Sector averages from comparative Schools/departments. Numbers are rounded to the nearest 5 (HESA data agreement) so each year we had fewer than 3 PT male students. Females, orange; males dark grey.*

We have more female PT PGR students than RG average, although PT numbers are very small. This is a positive sign and demonstrates impact as our Bronze Action 2.4 advertised School policy on PT degrees on the web and in the PG prospectus. Moreover, the Biosciences SAT has ensured via discussions with our BBSRC-funded PhD training programme co-ordinators at Warwick, Birmingham and Leicester that PT options are offered and supported by the Midlands Integrated Biosciences Training Partnership (MIBTP). We currently have no overseas PT PGR students due to restrictions imposed by visas/overseas funding structures. Bronze Action 2.4 tried to address this by offering distance-learning courses with some supervisors.

Silver Action 2.1 will continue monitoring this data.

SUMMARY BOX 2

Summary of section 3b (iii and iv): To ensure we were not masking gender biases in our Bronze student data, Bronze Action 2.6 committed to monitoring home and overseas PGT and PGR student completion numbers separately and we have achieved this. Our Bronze Action 2.4 was to advertise PT PG degrees widely. Our PGT F numbers have improved in the last 3 years. Our PGR F numbers are above benchmarks. Our PT F PG populations are largely above benchmarks. Broadly speaking, our data indicate positive impact of Bronze Actions and that our PG courses are F-student 'friendly'. Our Silver Action 2.1 will continue our detailed data monitoring.

(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.

Bronze Action 1.5 monitored application/offer/acceptance data for UG home/overseas students separately (Fig. 9). Home female students are slightly more likely to receive an offer than males. Overseas student female and male offers are more evenly matched. A female home student offered a place is more likely to accept than a male; for overseas female students, ratios are more variable year-on-year.

We suspect that elevated home/EU female offers are due to higher entry grades. Females receive more A and A* A-level grades in biology/geography but not chemistry/maths; females receive more A*-C across all STEM subjects (Guardian data 2013-14). Many of our students have biology, geography and language A-levels and not all take chemistry/maths/physics.

Silver Action 1.6 will interrogate our entry data incorporating entry grades and entry subjects.

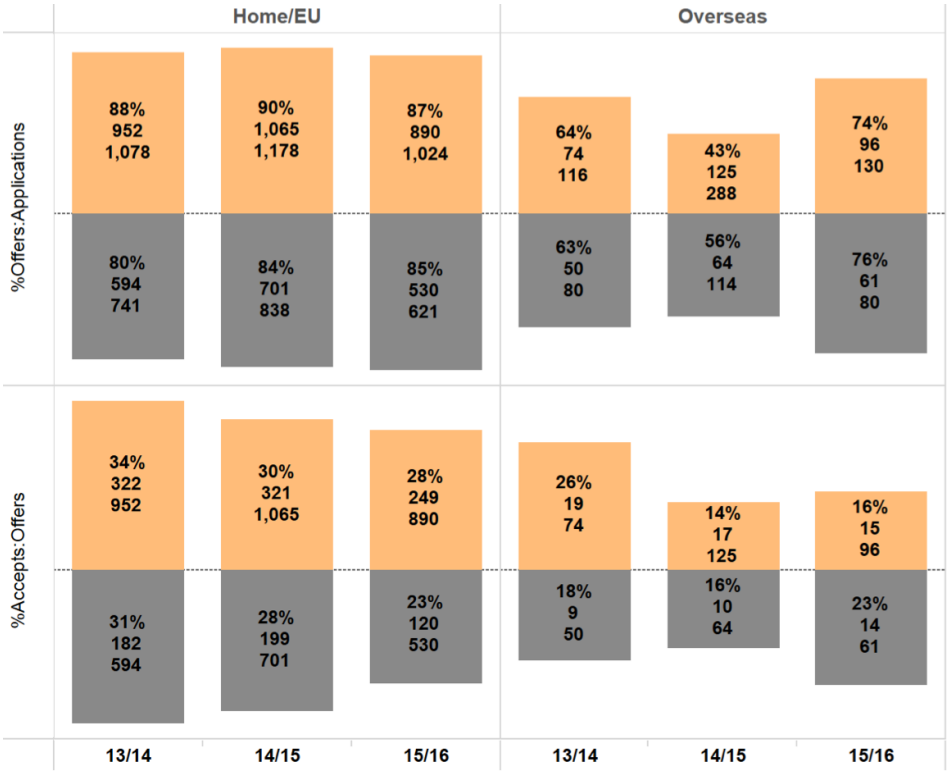


Figure 9. Undergraduate (UG) admissions by gender. *Data shown for offers made as a percentage of all applications (%Offers:Apps) and as percentage of offers accepted (%Accepts:Offers). Data shown as percentages and as absolute numbers for the School of Biosciences for Home/EU and Overseas students. Percentages are similar if broken down by BSc/MSci students or between our 3 degree programmes (Biological Sciences, Human Biology, Biochemistry), but numbers are too small to be meaningful. This is internal, non-benchmarked data. Females, orange; males dark grey.*

Bronze Action 2.6 monitored home/EU/overseas PG student data separately (Fig. 10 & 11; Table 4). Whilst female PGT students (home and overseas) are more successful at gaining an offer, there is more variability in the acceptances for home PGT females and a slight tendency for higher female overseas acceptances (Fig. 10).

Silver Action 2.1 continues monitoring data, and ascertains entry grades for female/male applicants to correlate with offer success rate.

More females (home and overseas) are offered a PGR place (Fig. 11). This is consistent for PhD courses; for MRes the ratios are more variable (Table 4; small numbers). Slightly fewer home females accept an offer; more overseas females accept (Fig. 10). Home female/male PhD acceptances are similar, whilst overseas female PhD acceptance is higher (Table 2). MRes female home students have a lower offer rate in 2 years (but small numbers); female MRes overseas acceptance is generally lower (but small numbers).

Silver Action 2.1 continues data monitoring and will also collect grade/qualification data for all applicants by gender.

Silver Action 2.2 adds questions into the PG survey about why students chose their PG degree.

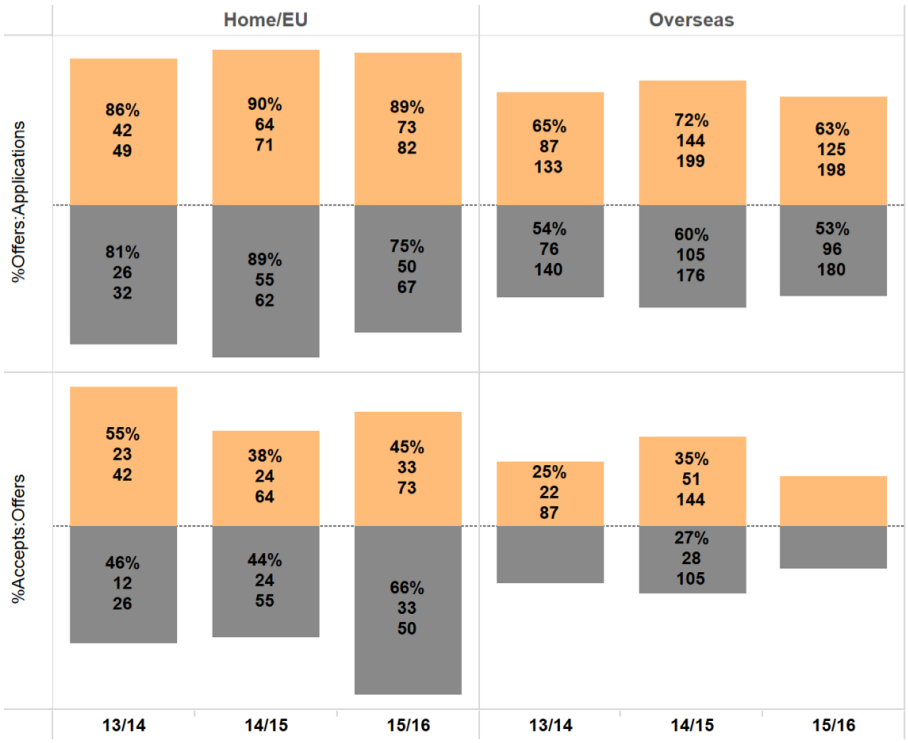


Figure 10. Postgraduate taught (PGT) admissions data. *Data shown for offers made as a percentage of all applications (%Offers:Apps) and percentage of offers accepted (%Accepts:Offers) with corresponding absolute numbers (top, accepts; bottom offers). Male overseas accepts 2013/14, 22% (17 accepts/76 offers); Female overseas accepts 2015/16, 20% (25/125); male overseas accepts 2015/16, 17% (16/96). This is internal, non-benchmarked data. Females, orange; males dark grey.*

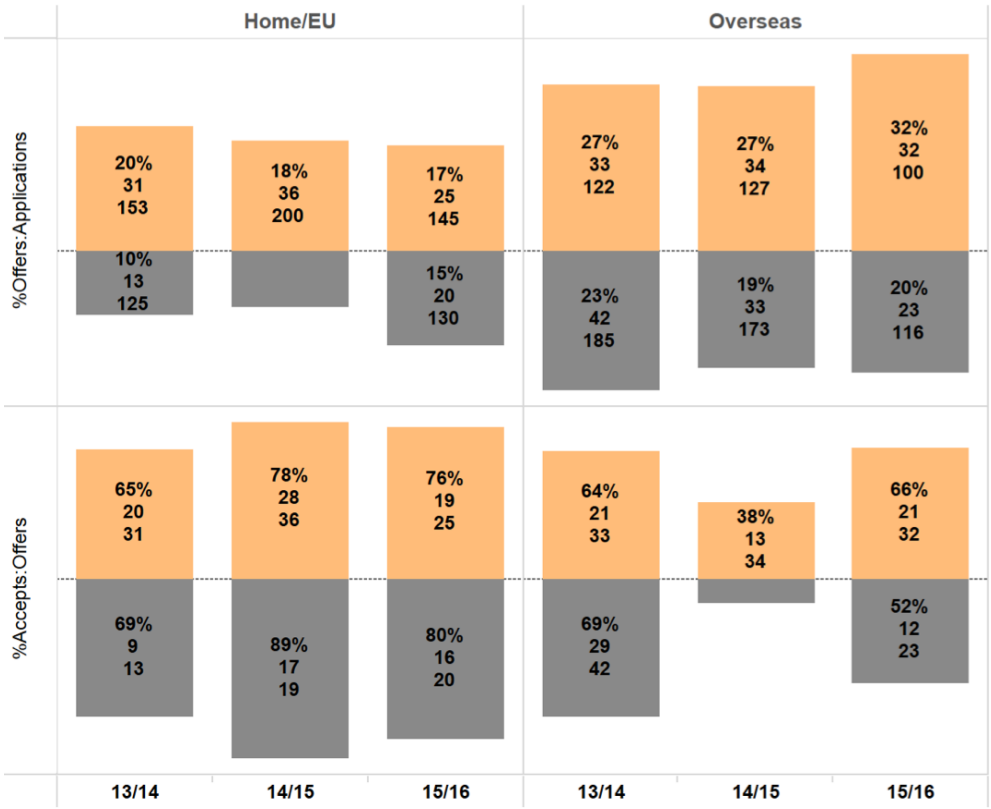


Figure 11. Postgraduate research (PGR) male and female student offers and acceptances. *Data shown for offers made as a percentage of all applications and percentage of offers accepted, plus corresponding absolute numbers, for the School of Biosciences for Home/EU and Overseas students. Male overseas accepts 14/15 12% (4 accepts/33 offers). This is internal, non-benchmarked data. Females, orange; males dark grey.*

	Home/EU				Overseas			
		2013/14	2014/15	2015/16		2013/14	2014/15	2015/16
PhD	**%Offers: Apps**	10% F 5% M	9% F 6% M	9 % F 8% M	**%Offers: Apps**	23% F 21% M	25% F 18% M	29% F 14% M
	%Accepts :Offers	85% F 100% M	93% F 91% M	100% F 100% M	**%Accepts:Offers**	68% F 71% M	44% F 14% M	78% F 57% M
MRes	**%Offers: Apps**	89% F 100% M	91% F 73% M	88% F 92% M	**%Offers: Apps**	67% F 35% M	50% F 42% M	53% F 62% M
	%Accepts :Offers	47% F 50% M	65% F 88% M	57% F 64% M	**%Accepts:Offers**	50% F 63% M	14% F 0% M	33% F 50% M

Table 4. Applications, offers and acceptances for PGR students broken down by PhD or MRes (1-year Masters by Research). *Left: Home/EU student data; right: overseas student data. The ratio of the percentage of offers made to the percentage of applications received (%Offers:Apps) for each and the ratio of the percentage of acceptances received to the percentage of offers made (%Accepts:Offers) is shown for the last 3 years.*

SUMMARY BOX 3

Summary of section 3(b)(v): To ensure we were not masking gender biases in our Bronze student data, Bronze Actions 1.5 and 2.6 committed to monitoring home and overseas student admissions numbers separately and we have achieved this. Our data suggests that there is no bias in our student recruitment procedures that disadvantages women or discourages them from accepting an offer (in fact largely the opposite) and we are perhaps perceived as female-friendly by our overseas PG students. Our Silver Actions 1.6 and 2.2-2.3 will continue data monitoring and better understand PG course choices by gender.

(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.

Bronze Action 1.3 monitored home/overseas UG attainment separately (Fig. 12, Table 3). Similar proportions of UG home female/male students obtain "good honours" (1st or 2i), but far more females obtain 1st class degrees (Fig. 12, Table 3). This continues our Bronze 2009-12 trend which we attributed to changes in entry grades and assessment practice. The numbers for overseas UGs are too small to draw any conclusions.

Silver Action 1.7 will continue data monitoring and, to aid attainment gap understanding, will break data down to examine coursework *versus* exam marks and performance across all 3 or 4 years of study (was part of Bronze Action 1.3, but University systems are only just enabling this), to link/correlate it to student entry grades (**Silver Action 1.6**).

Silver Action 1.8 will run focus groups with home/overseas students to try and understand attainment differences and plan follow-on actions such as mentoring.

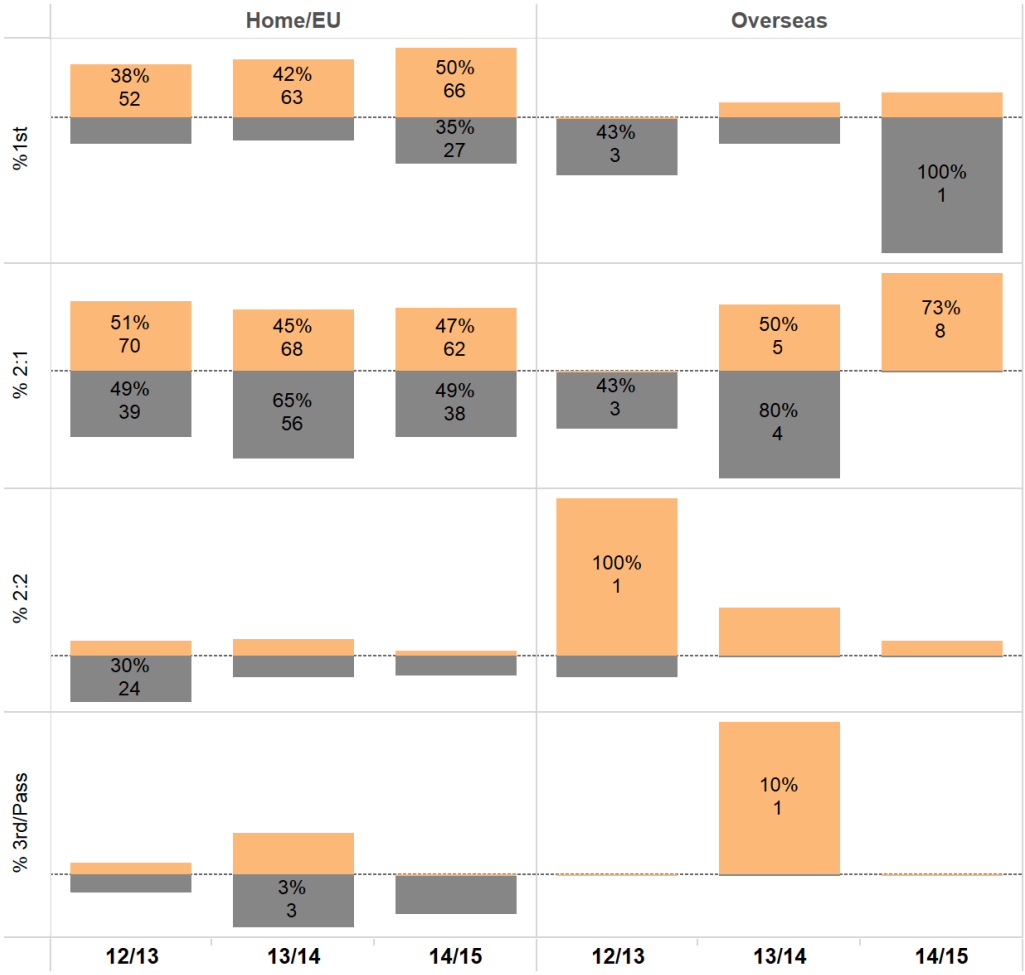


Figure 12. UG degree class attained. *Data shown as percentage and number of students attaining the different degree grades analysed by gender for Home/EU versus overseas students. As no part-time UG students have completed their degree yet, we cannot show FT/PT splits for our attainment data.*
16 (20%) and 15 (17%) Home/EU males got 1st class degrees in 2012/13 and 2014 respectively. 13 (10%), 15 (10%), and 3 (2%) home females got 2.2 degrees in 2012/13, 2013/14 and 2014/15 respectively versus 12 (14%) and 10 (13%) males in 2013/14 and 2014/15. 0, 1 and 2 female overseas students obtained 1st class degrees in 2012/13, 2013/14 and 2014/15 respectively. 1 male obtained 1st class in 2013/14. 1 (100%), 3 (30%) and 1 (9%) female overseas students obtained a 2.2 in 2012/13, 2013/14 and 2014/15 respectively, and 1 male (14%) in 2012/13. 4 or fewer students got 3rd class degrees in any year, gender or nationality. This is internal, non-benchmarked data. Females, orange; males dark grey.

UG A2B attainment is broadly comparable with non-A2B, both overall and in terms of gender ratio (Fig. 13). **Silver Action 1.9** continues monitoring this data.

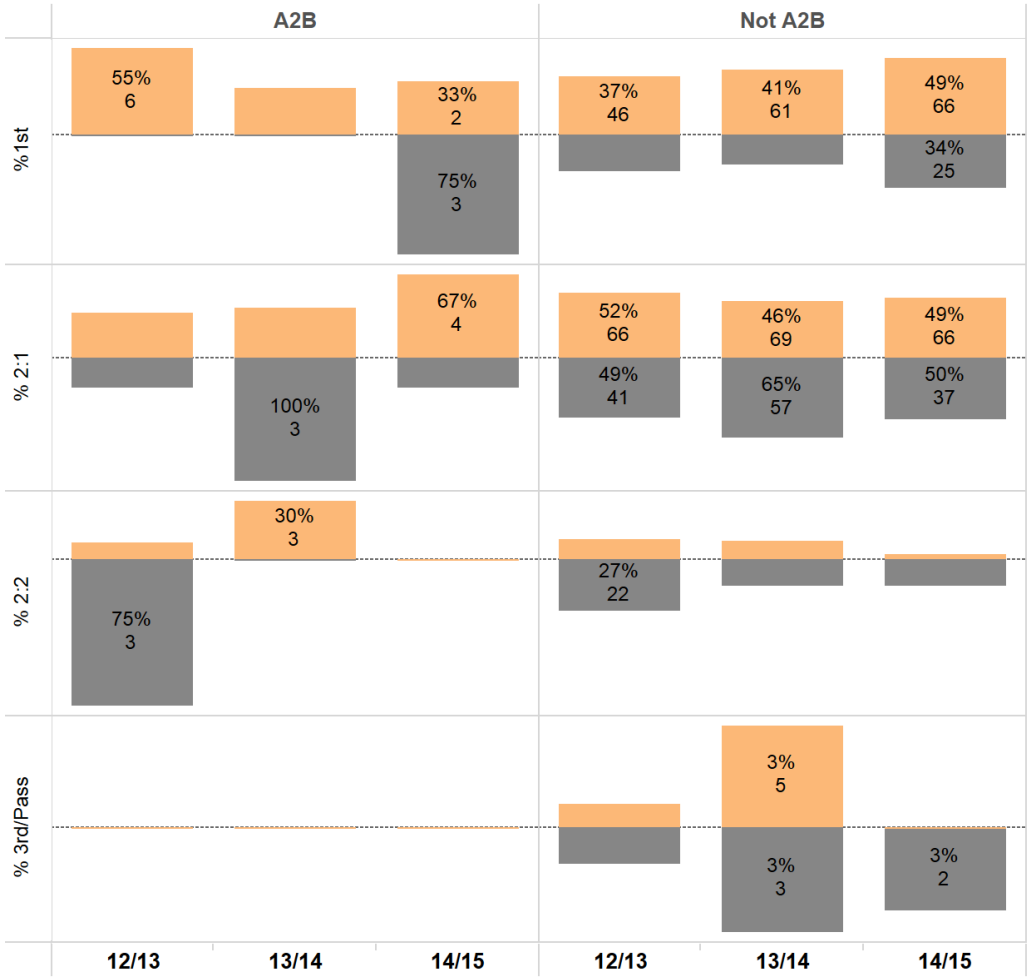


Figure 13. UG degree class attained by A2B and non-A2B students. *Data shown as percentage and number of students attaining the different degree grades. 3 (20%) A2B female students obtained 1st class degrees in 2013/14. 19 (23%) and 16 (28%) male non-A2B students obtained 1st class degrees in 2012/13 and 2013/14 respectively. 4(36% and 4(40%) female A2B students obtained 2.1 degrees on 2012/13 and 2013/14 respectively; 1 (25%) male A2B student obtained a 2.1 in each of 2012/13 and 2014/15. 1 (9%) female A2B student obtained a 2.2 in 2012/13 compared to 13 (10%), 15 (10%), and 4 (3%) non-A2B female students in 2012/13, 2013/14 and 2014/15 respectively. Male non-A2B 2.2 degrees were 12 (14%) and 10 (14%) in 2013-14 and 2014-15 respectively. 1 (1%) female and 1 (1%) male non-A2B student obtained 3rd class in 2012/13. This is internal, non-benchmarked data. Females, orange; males dark grey.*

Silver Actions 1.6-1.9 will monitor data for year-on-year trends and break it down further to allow understanding. Focus groups particularly with overseas students will help us understand the attainment gap more fully.

Bronze Action 2.5 monitored and analysed home/overseas PGT degree results (Fig. 14). A consistently greater percentage of home female students obtain distinctions, but more home females also obtained pass degrees in 2012/13 and 2014/15. Overseas female students generally obtain fewer Pass degrees (small numbers).

Silver Action 2.1 will continue data monitoring, correlating with entry qualifications.

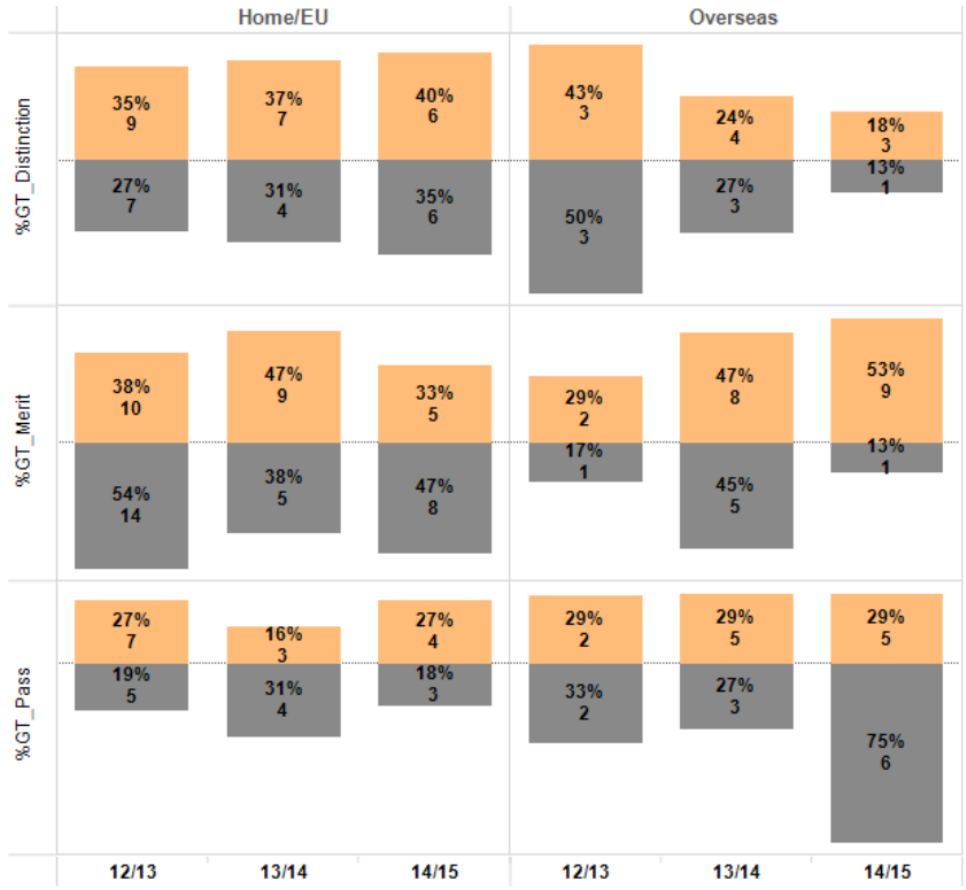


Figure 14. PGT degree class attained. *Data shown as percentage and as number of students attaining the different degree grades, Distinction/Merit/Pass analysed by gender and Home/EU versus Overseas students. This is internal, non-benchmarked data. Females, orange; males dark grey.*

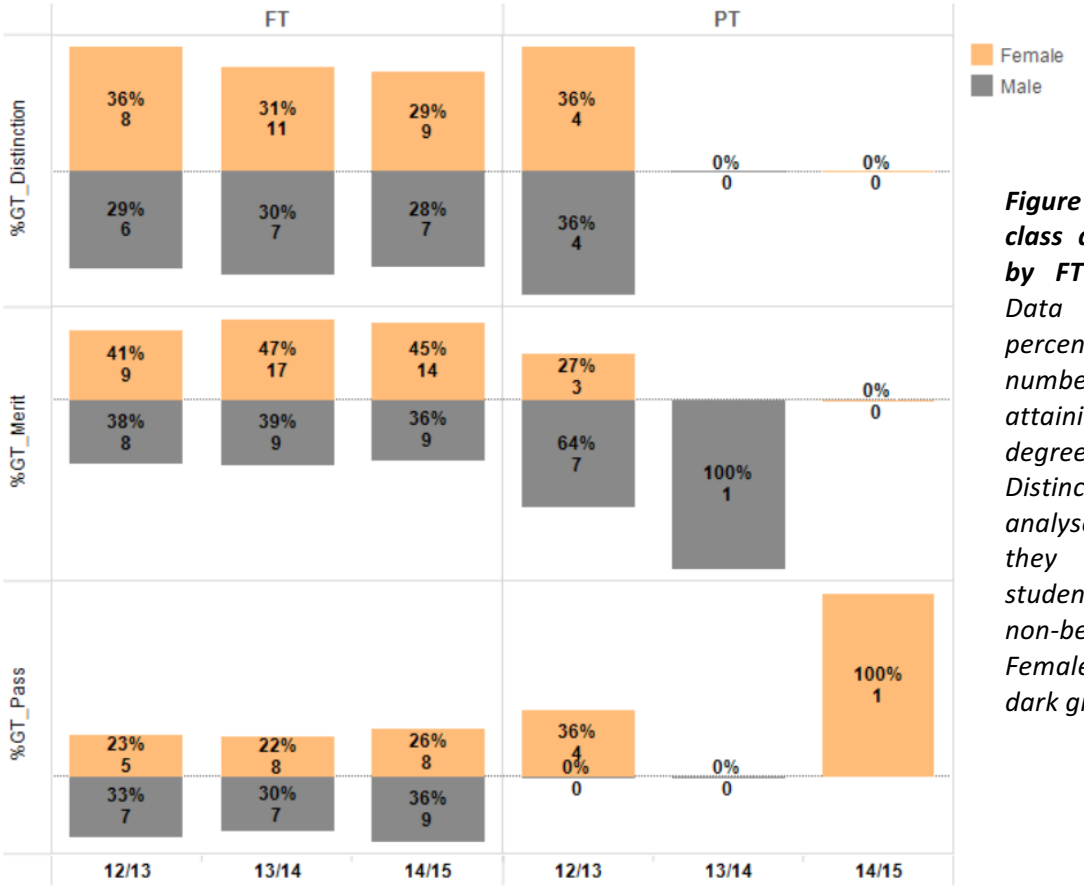


Figure 15. PGT degree class attained analysed by FT and PT status. *Data shown as percentage and as number of students attaining the different degree grades Distinction/Merit/Pass analysed by whether they are FT or PT students. This is internal, non-benchmarked data. Females, orange; males dark grey.*

Our (small) PT PGT student numbers do not suggest that our PGT assessment disadvantages female or male PT students (Fig. 15).

Silver Action 2.1 will continue data monitoring.

SUMMARY BOX 4

Summary of section 3b (vi): To ensure we were not masking gender biases in our Bronze student data, Bronze Actions 1.3 and 2.5 committed to monitoring home and overseas UG and PG student attainment separately and we have achieved this. Our data suggests that there is no bias in our student assessment procedures that disadvantages females or PT students.
Our Silver Actions 1.6-1.9 and 2.1 will continue data monitoring and aim to understand gender attainment discrepancies.

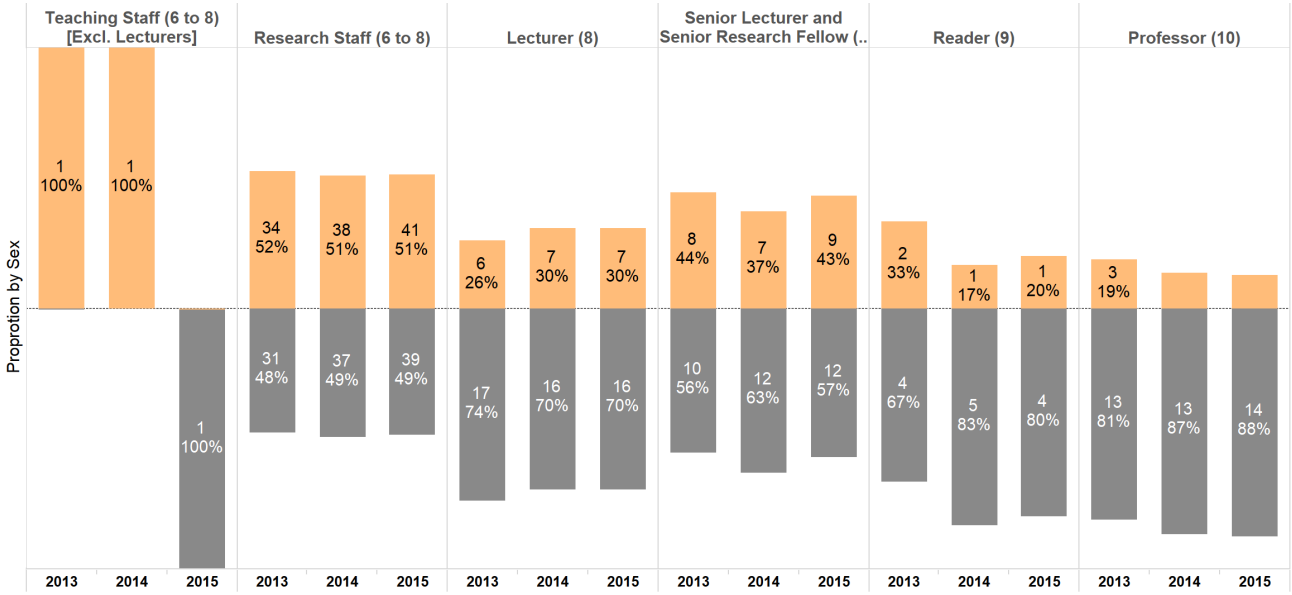
Staff data

(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

Our academic staff are 44% female (Fig. 16), identical to the HESA Biosciences sector average (2013/14) with 29% female staff at lecturer or above. Our percentage of female professors is slightly below the discipline average of 15% but numbers are small (2 out of 16).

We have seen a 7% increase in female research staff in 2013-14 from 44% in 2010-12 (Fig. 16), bringing us in-line with benchmarks (Bronze Action 3.2: HESA 2013/14 research-only Biosciences contract benchmark = 51% female). Our female Lecturer numbers have dropped from 38% (2010-12) to 30%, but this is balanced by a 5% increase in female Senior Lecturers/Senior Research Fellows. Our professorial numbers have not changed since 2010-12, but we have had 1 female promoted to Professor and 1 female retirement. Fig. 16 includes: 7 new female Lecturer appointments (c.f. 5 male appointments), 1 new female Senior Lecturer appointment (c.f. 3 male appointments), 0 Reader appointments and 3 male Professorial appointments: more detail in section 4.1 (a)(i).

Since December 2015 we have appointed 11 females (9 researchers, 1 lecturer, 1 Professor) and 8 males (7 researchers, 1 Professor).



	Teaching Staff (6 to 8) [Excl. Lecturers]			Research Staff (6 to 8)			Lecturer (8)			Senior Lecturer and Senior Research Fellow (..			Reader (9)			Professor (10)		
	2013	2014	2015	2013	2014	2015	2013	2014	2015	2013	2014	2015	2013	2014	2015	2013	2014	2015
Female	1	1	0	34	38	41	6	7	7	8	7	9	2	1	1	3	2	2
	100%	100%	0%	52%	51%	51%	26%	30%	30%	44%	37%	43%	33%	17%	20%	19%	13%	13%
Male	0		1	31	37	39	17	16	16	10	12	12	4	5	4	13	13	14
	0%		100%	48%	49%	49%	74%	70%	70%	56%	63%	57%	67%	83%	80%	81%	87%	88%

Figure 16. Staff ratios by grade and gender for the last 3 years (snapshot data at 31st December each year). *Female staff are shown in orange (will photocopy light grey) and male staff are shown in grey (will photocopy dark grey). Research staff Grade 6-8 encompasses PDRAs, while Birmingham Fellows, our 5-year fellows on a "teaching-light" contract who are expected to transition into a permanent post at the end of their Fellowship are in the Lecturer 8 category. See also section 4.3 (a)(ii). Each percentage represents the percentage of people of a particular gender at each grade, i.e. female plus male adds up to 100% in each year at each grade. We had 2 female professors in 2014 and 2015. Females, orange; males dark grey.*

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

Turnover is very small (Fig. 17) with no obvious gender discrepancies.

Silver Action 4.1 will continue monitoring this data.

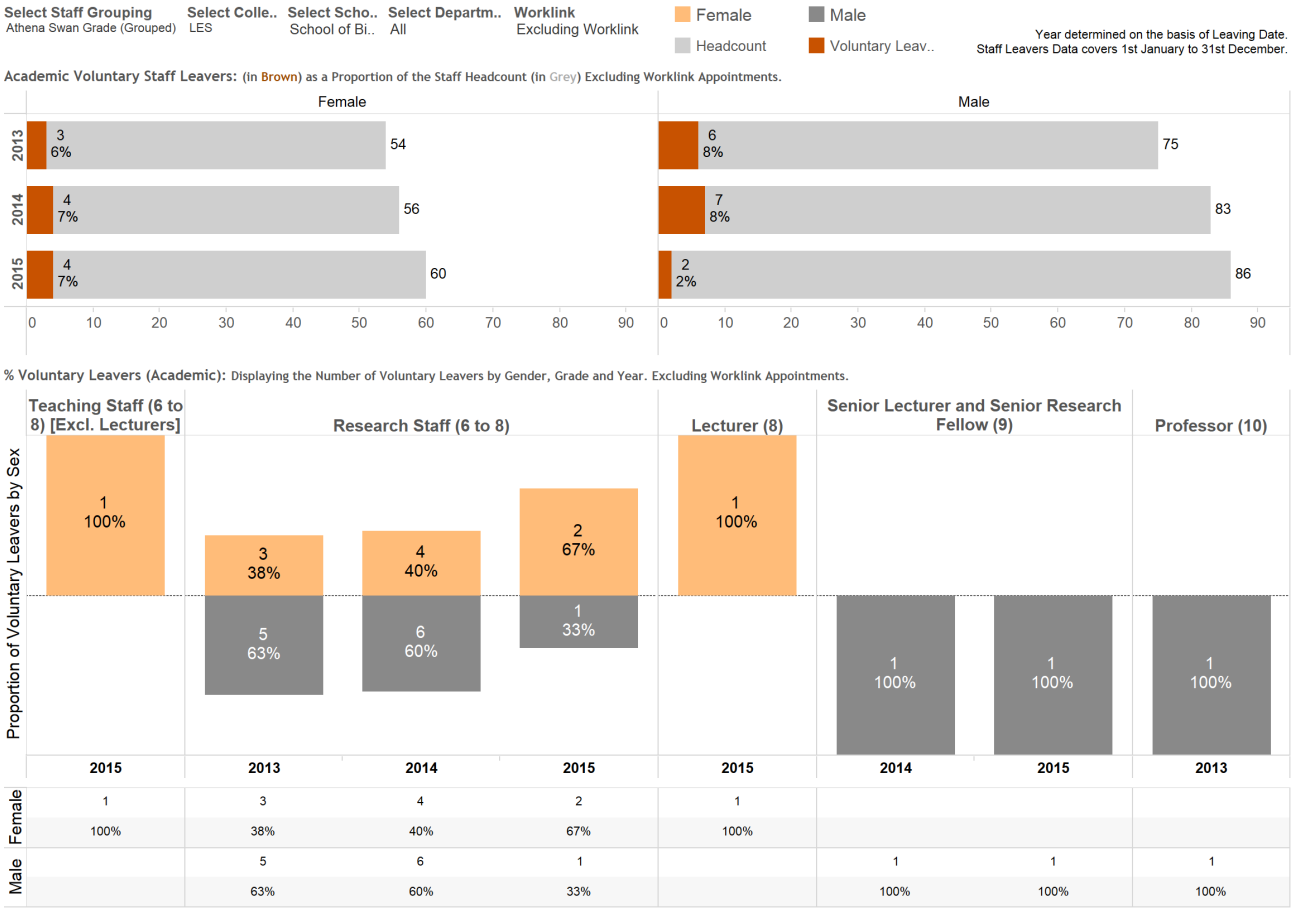


Figure 17. Staff turnover in the School of Biosciences. *In the top panel, the number of voluntary leavers (brown) in the school are shown as the percentage of total head count (light grey) for females (left) and males (right). In the lower panel, the gender split of leavers in each year is shown as a percentage of total leavers, along with absolute numbers. Females, orange; males, grey. These numbers do not include retirement or redundancy.*

SUMMARY BOX 5.

Our Bronze Actions 3.2, 3.4, 4.2 and 4.3 aimed to improve applications from females to staff posts and thus improve our percentage of female staff at all levels. We have also instigated E & D training for staff in the last 3 years. We have seen an increase in female researchers at Grades 6-8 and in female Senior Lecturers since our bronze application. Likely reasons for this will be discussed in section 4 where we will propose our Silver Actions.

2094 words

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

4.1 Key career transition points

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

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

In 2010-12, females accounted for 41% of research staff (PDRA), 18% Lecturer, 14% Senior Lecturer, 33% Reader and 13% Professorial applications. Combining 2013-15 data (Fig. 18) to directly compare with our Bronze data, our **%** female applicants have increased by 1% for PDRAs, 8% for Lecturer and 15% for Senior Lecturer positions. We have only had 2 female Professorial applicants; no reader jobs were advertised. Thus, although females are still less likely to apply for academic posts, we have made significant progress.

Our Bronze application highlighted that females were less likely to apply for jobs and promotion, but those who did apply were more likely to get appointed/promoted than males. Biosciences launched a new initiative within the University (**Bronze Actions 3.4 and 4.2**) to put family-friendly wording on all job adverts for PDRAs and permanent academic staff (Fig. 19). We have received positive comments from PDRA applicants. However, our increase in female research staff (grade 6-8) is not wholly due to a concomitant increase in female applicants (Fig. 18).

Figure 18. Recruitment pipeline. *For each grade, the number of applicants (top panel), shortlisted applicants (middle panel) and appointed applicants (bottom panel) is shown, split by gender. No readerships were advertised or appointed in 2013-15. There were 1 (4%) and 1 (20%) female professorial applicants in 2014 and 2015 respectively. 2 (29%) female grade 9 staff were shortlisted in 2014. Snapshot data taken on 31st December each year.*

Figure 19. Family-friendly job wording used in Bronze Actions 3.4 (blue) and 4.2 (green).

"We welcome flexible and part-time working and have on-campus childcare facilities. We have a postdoctoral researcher mentoring scheme".

"We welcome part-time and flexible working, offer a generous maternity package (subject to qualifying periods of service) and have on-campus childcare facilities".

Female PDRA and lecturer applicants were more likely to get shortlisted and are more successful at being appointed in 2013-15, especially at Lecturer level (Fig. 18). This is an improvement on our Bronze data, where out of 41% female researcher applicants 43% were appointed, and out of 18% female Lecturer applicants none were appointed. However, at Senior Lecturer/Professor level this trend reverses compared to 2010-12 but numbers are very small (Fig. 18). We note with concern the shortage of females shortlisted/appointed at SL level and above.

Going beyond Bronze Actions 4.2 and 4.3, we have improved our E & D training for individuals involved in recruitment and promotion (section 4(a)(ii)), including University-wide mandatory online E & D training, mandatory University-wide "recruitment and selection" training for all recruiters (including unconscious bias), and further unconscious bias training for senior management (academic/professional services) plus willing Biosciences volunteers (School members participated in pilot training as an "early adopter" of the unconscious bias half-day course). This could explain our increase in female Grade 6-8 and SL/SRF staff.

SUMMARY BOX 6

We believe that our application and appointments data demonstrates clear impact of our Bronze actions, as our data for female applications and shortlisting/appointments at Researcher, Lecturer and Senior Lecturer level have all improved since 2010-12 (Fig. 18).

Our Silver Actions around recruitment and appointments will be to:

- **Advertise the diversity of the School and its family-friendly policies more effectively to all staff and visitors, both in the School and on the Biosciences website (Actions 5.1 and 5.2)**
- **Improve staff uptake of Equality and Diversity training in the School (Actions 3.4, 4.3, 4.4)**
- **Improve the recruitment process (Actions 4.5-4.9)**

(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.

Promotion application numbers were low in 2013-15 (Fig. 20). For SL/SRF, the only 2013 applicant was female who was promoted. In 2014, all 6 applicants were males (33% promoted). In 2015, female promotion success was 50% and male success 40%. Combining 2014-2015, 2 females and 1 male applied for reader but only 1 male was promoted. In 2013-15 only 1 male who applied for Professor was promoted, and 1 female was promoted on individual circumstances outside the standard application process.

Our internal survey of the time taken for academic staff to be promoted over the last ~20 years shows that there is a population of male staff who appear to get "fast-track" promoted in ~5 years, not matched by female staff. People of any gender who are promoted most slowly tend to

be those with significant caring responsibilities and/or disabilities. **Bronze Action 4.3** aimed to improve the promotions process by encouraging women to apply for promotion and enabling them to get promoted. We have monitored data (4.3i), initiated open discussion in the School (4.3a&c), changed the academic staff Performance and Development Review (PDR) form to better reflect the range of academic staff activities (4.3b), and advertised opportunities for bonuses/increments by email (4.3g). The University has developed a comprehensive intranet page providing detailed information on the promotions process and criteria, plus CV guidance. The University's Teaching Academy provides specific mentoring/support for teaching-focused promotions (4.3d). College-level Promotions workshops have occurred (part of 4.3e). Staff taking parental leave are now eligible for workload remission upon return. We have gone beyond Bronze Action 4.3 by instigating E and D training (see 4.1(a)(i)) but our Staff Survey results (section 4.1(b)(ii)) demonstrate e.g. that we must do much more to support female promotion applications and to mentor staff (Bronze Action 4.3h). Our School promotions committee comprises 2 women and 4 men, which reflects the gender ratio of permanent academic staff (19 female, 46 male).

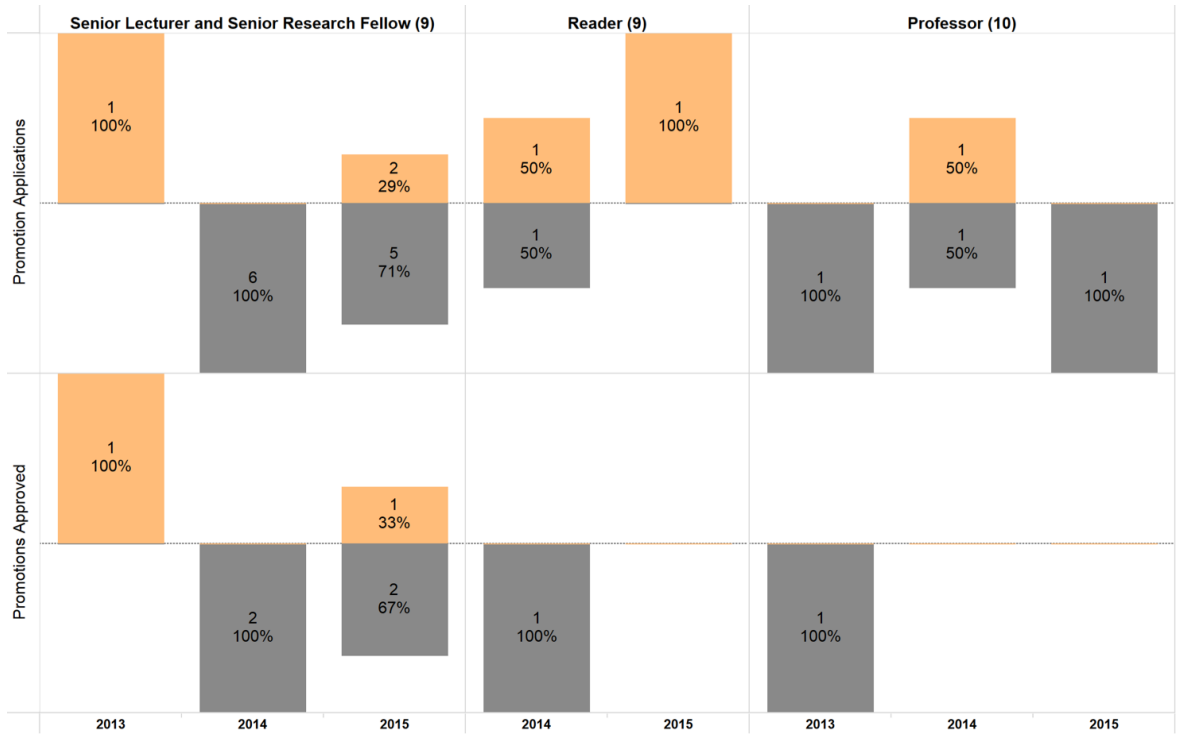


Figure 20. Academic promotions. *Data shown as number and as percentages of each gender for promotions applications (top panel), promotions approved (middle panel) and promotions not approved (bottom panel).*

SUMMARY BOX 7

Our Bronze Actions 4.3a-i plus our additional activities have continued to ensure our promotions process does not negatively affect female success rate. However, applications for promotion have been low, particularly amongst female academics. Our Silver Actions will include:

- **Ensuring an unconscious bias-trained individual sits on every promotions panel (4.10)**
- **Organising School-level promotions workshops (4.11)**
- **Increased informal and formal mentoring around promotion for academic staff (4.12-4.16)**

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

Our data (section 4.1 (a)(i)) show that we still need to do more to get more female applicants to apply for academic posts. Our family-friendly wording (Fig. 19) was not consistently placed in job adverts; University usage of external recruiters led to all Professorial job adverts lacking the wording.

During 2013-16, Biosciences SAT has been instrumental in working with the University SAT, HR and Deputy Pro-Vice Chancellor for E & D to make the recruitment process more female-friendly. This is a University-wide process, still ongoing, so does not yet involve Biosciences-specific actions, but will include fundamental changes in the way UoB is marketed and job adverts are structured and worded.

HR policy includes no single-gender recruitment panels (**Silver Action 4.8** will monitor) and that all recruiters have had mandatory E & D (recruitment and selection) training.

Our local School Silver Actions will be to:

- Advertise the School's diversity and family-friendly policies more effectively to all staff, students and visitors, both within the School and on the Biosciences website (**Silver Actions 3.1, 4.2, 5.1 and 5.2**)
- Improve uptake of E & D and Unconscious Bias training at all levels (**Silver Actions 1.10, 2.5, 2.6, 2.7, 3.4, 4.3, 4.4**)
- Advertise the School's inclusive culture in pre-induction and job further particulars (**Silver Action 4.5**)
- Include family-friendly wording on ALL job adverts (**Silver Action 4.6**)
- Ensure that all Academic Staff interview panels include somebody who has done Unconscious Bias training (**Silver Action 4.9**)
- Include Professional Services in Athena SWAN, embedding Athena SWAN into School and College culture and gathering data/sharing good practice between academic and professional services staff (**Silver Action 5.3**)

(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.

Our data in section 4.1(a)(i) and 4(a)(ii) show a marked drop-off in female staff numbers between PDRA and Lecturer stages and that few female staff have applied for promotion. Our Bronze Actions 3.2, 4.2 and 4.3 tried to address this with some success (section 4.1(a)(i) and 4.1(a)(ii)). Moreover, in the past three years the School appointed two previous female PDRA into academic lecturer positions in open competition, demonstrating the impact of **Bronze Action 3.10.**

Bronze Actions 3.5-3.10 focussed on improving PDRA career support. We have re-implemented PDRA Staff Development Review (SDR; Actions 3.5 & 3.7), where post-doctoral research associates (PDRAs) discuss with an academic how their current performance and CV relates to their career ambition. 61/70 PDRAs have completed the SDR process in the last year demonstrating the success of this action.

We will monitor the success of our actions through our annual staff survey. As part of Bronze Action 3.5, we piloted an informal buddy system within Biosciences. However, there was very low uptake by PDRAs so this was discontinued.

We have raised the profile of PDRAs in the school via seminars, web profiles and committee representation (Bronze Action 3.1), and reviewed and updated the PDRA Concordat (Bronze Action 3.9).

We appreciate that we will not be able to allow all staff, including female staff, within the School to transition to local academic posts. Therefore, the Biosciences SAT has been instrumental in ensuring further development of our PDRA career support network 'PERCAT' (Bronze Actions 3.1, 3.5, 3.6, 3.8, 3.10; full details in Section 5).

In addition to PERCAT, a wide range of in-house training is available to staff at all levels, specific to career stages/roles (e.g. researcher/early career, teaching-focused, managerial and senior leadership), e.g. skills for researchers (making your mark, raising research profile), becoming a research team leader, PG Certificate in Academic Practice (PCAP), the Emerging Leadership Programme and Senior Leaders' Programme. The Aurora Leadership Programme is also available to female staff at lecturer level and equivalent. Staff can access mentoring and coaching support via People and Organisational Development. The majority of courses are free, self-referral and are promoted through specific activities/resources, such as the Birmingham Teaching Academy and PERCAT.

Satisfaction with development opportunities is monitored by the annual University Staff Satisfaction Survey (Fig. 20) and by feedback on individual courses.

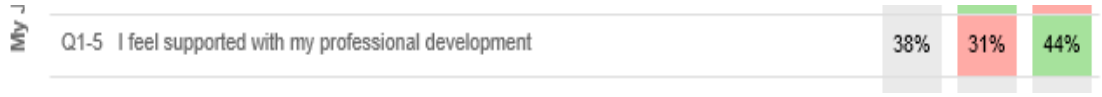


***Figure 20. Staff satisfaction with Professional development in Biosciences (all staff**). There is a marked difference between females (green - 44% of 49 respondents) and males (red - 31% of 45 respondents), with females being more positive, but overall satisfaction being low at 38% (grey).*

However, uptake of training varies by gender and career stage (Fig. 21). More female PDRAs now take training courses (indicating success for PERCAT, Bronze actions 3.1, 3.5, 3.6, 3.8, 3.10) but generally fewer female academic staff do. The exception is unconscious bias training, which more Biosciences females have undertaken. Our **Silver Actions 4.11 and 4.13-4.15** will focus on improving more "tailored" career development/mentoring for permanent academic staff. We will monitor the success of our actions through our annual staff survey.

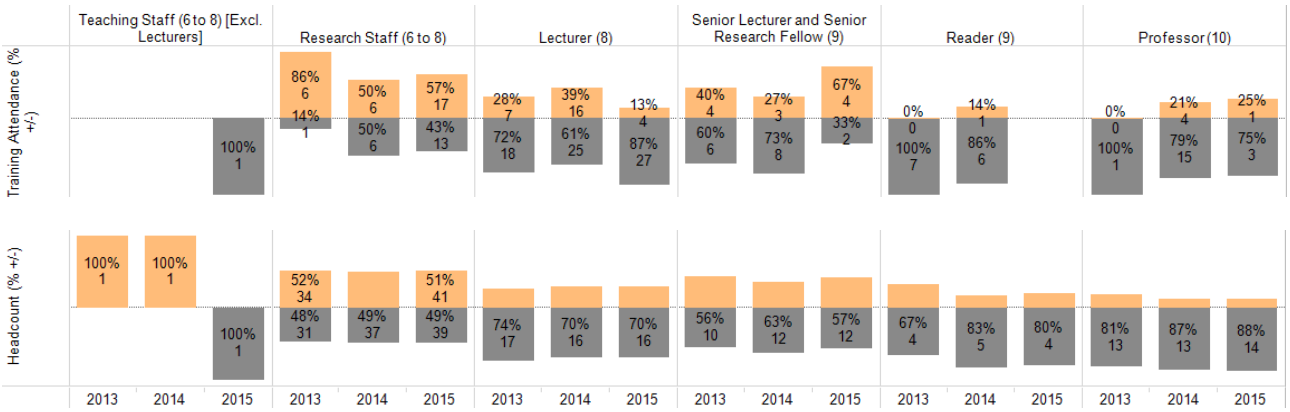


Figure 21. Staff training uptake by gender. *Top row: number and proportion of staff attending University-organised training sessions by gender. Each % represents the total % of staff, i.e. female and male add up to 100%. Note this figure does not take into account whether a single person attended multiple courses. Bottom row: staff numbers and proportions as in Figure 16, for comparison.*

4.2 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?

Our Staff Equality and Diversity Survey (Bronze Actions 3.3, 5.3) has revealed key issues that need addressing around support for PDRA career progression and development (Fig. 22 & 23). Despite some successes with PERCAT/PDRA support (Bronze Actions 3.1-3.10), of the PDRAs that participated in the E & D staff survey, fewer females aspire to be promoted to the next level (Fig. 22), female PDRAs are slightly less aware of the promotion criteria for the next level in their career and feel that promotion is less feasible (Fig. 23).

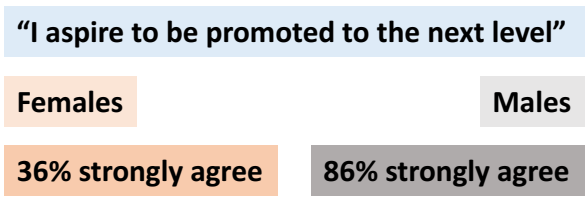


Figure 22. Responses from the Biosciences Staff E & D survey from PDRAs to the questions about promotion aspiration. *Data captured between November 2015 and January 2016.*

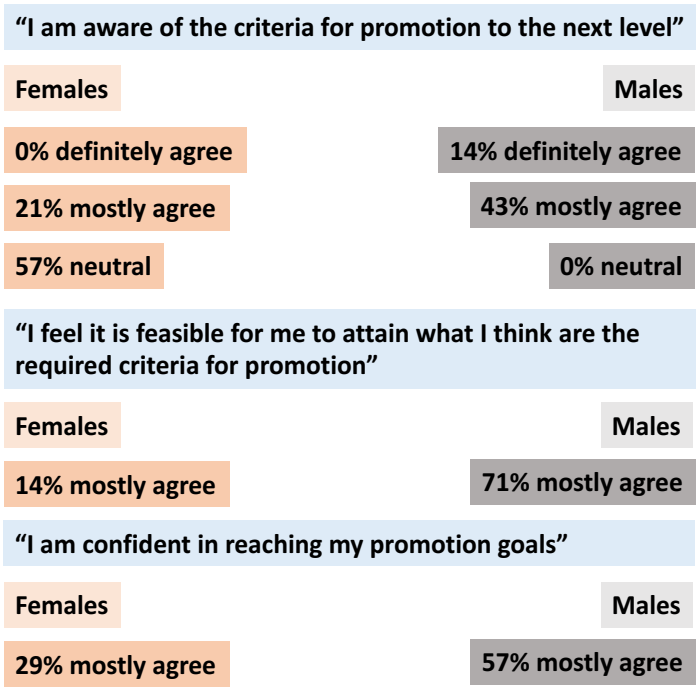


Figure 23. Responses from the Biosciences Staff E & D survey from PDRAs to questions about promotion criteria. *Data captured between November 2015 and January 2016.*

PDRAs of all genders highlighted a lack of mentoring, inability to move location easily, limited job opportunities, insufficient administrative experience, long-hours working culture and caring responsibilities preventing travel to conferences as factors detrimental to their career (Table 5). Female-specific detrimental factors were a lack of role models, an interrupted career/less than full-time working and lack of teaching experience. Moreover, our staff survey and informal discussions with PDRAs revealed a continued lack of community feeling and engagement with available resources. **Silver Action 3.2** will establish an academic PDRA champion in the School while **Silver Action 3.5** will further advertise PERCAT. **Silver Actions 3.1 & 3.3** will better integrate PDRAs into our Biosciences community right from the start of their contract by improving induction and **Silver Action 3.7** will run focus groups to understand gender splits in promotion aspiration. **Silver Actions 5.1 and 5.2** aim to improve visibility of diverse role models in the School, to increase all PDRAs' confidence. Making the promotions process clearer and recirculating the Biosciences PDRA concordat (which highlights "reasonable hours" to line managers) will be tackled by the new PDRA academic champion (**Silver Action 3.2**), by reviewing and improving the PDRA mentoring scheme (**Silver Actions 3.8 and 3.9**) and by including E & D activity in PDRA career progression (**Silver Action 3.10**).

Have any of these factors been detrimental to your career to date	Females	Males
Absence of mentoring	36%	29%
Lack of role models	29%	0%
Limited job opportunities	29%	29%
Long hours working culture	29%	14%
Inability to move location easily	21%	43%
Insufficient admin experience	21%	29%
Insufficient teaching experience	21%	0%
Sustained uncertainty: short term contracts	21%	0%
Interrupted career	14%	0%
Periods of less than full-time working	7%	0%
Caring responsibilities prevent conference travel	7%	14%
Lack of funds for conference travel	7%	30%
Over-heavy admin load	7%	14%
Lack of support staff	0%	14%
Lack of teaching opportunities	0%	14%
Lack of first author publications	0%	14%
High-risk projects	0%	14%
Misleading advice (not Bham)	0%	14%

Table 5. Responses to the Biosciences Staff E and D survey (Bronze Action 3.3) from PDRAs (Grades 6-8) listing the major factors that PDRAs feel are detrimental to their success. *Factors for female respondents are ranked according to the number of times a particular factor was raised (these were tick-box "tick all that apply" options plus space for free text responses). 26% (21/80) of PDRAs responded to the staff survey. Key factors highlighted by F only are in orange; M-specific factors are in grey. Data captured between November 2015 and January 2016.*

Academic staff of all genders, highly ranked lack of mentoring, over-heavy admin load and over-heavy teaching load (although it is reassuring that fewer females (29%) than males (43%) cite this, so we are not discriminating against women) and lack of conference travel funds as factors detrimental to their success (Bronze Action 5.3; results in Table 6). A female-specific detrimental factor, as with the PDRAs, was a lack of role models. All genders see caring responsibilities as detrimental to their career.

Have any of these factors been detrimental to your career to date	Females	Males
Absence of mentoring	38%	35%
Over-heavy admin load	29%	35%
Lack of funds for conference travel	29%	14%
Over-heavy teaching load	29%	43%
Periods of less than full time working	24%	7%
Limited job opportunities	24%	11%
Lack of role models/champions	19%	0%
Caring responsibilities prevent conference travel	19%	14%
Interrupted career	19%	4%
Long hours working culture	14%	25%
Inability to move location easily	10%	21%
Insufficient admin experience	10%	14%
Insufficient teaching experience	10%	0%
Unsupportive colleagues	5%	0%
General caring responsibilities	5%	0%
Difficulty obtaining grant funding	5%	0%
Periods of Illness	5%	0%
No sabbaticals	5%	0%
Only research performance valued	5%	0%
Lack of PhD students	0%	4%
Lack of technician to maintain lab	0%	4%
Discrimination against experienced postdocs (>5-10 years post-PhD) applying for fellowships	0%	4%
Being a 'good citizen'	0%	4%
Not understanding UK system	0%	4%

Table 6. Responses to the Biosciences Staff E and D survey (Bronze Action 3.3) from permanent academic staff (Grade 8-Professor) listing the major factors they feel are detrimental to their success. *Factors for female respondents are ranked according to the number of times a particular factor was raised (these were tick-box options plus free text responses). 61% (49/80) of academic staff responded to the staff survey. Specific factors highlighted by F are in orange; M-specific factors are in grey. Data captured between November 2015 and January 2016.*

Permanent academic staff are more positive than PDRAs in terms of promotion aspiration and knowledge of criteria (Fig. 24 and 25).

Permanent academic staff of all genders have similar views on the feasibility of promotion criteria, although the results do highlight that ~20% of both female and male staff do not think the criteria are feasible (Fig. 25). Female staff were less confident in reaching their specific research promotion goals, while for teaching promotion goals, all staff responded similarly (data not shown). Female staff feel they are being encouraged less by their HoS/senior colleagues to apply for promotion (Fig. 26, 27), do not feel visible within the school and feel less valued (Fig. 28 & 29).

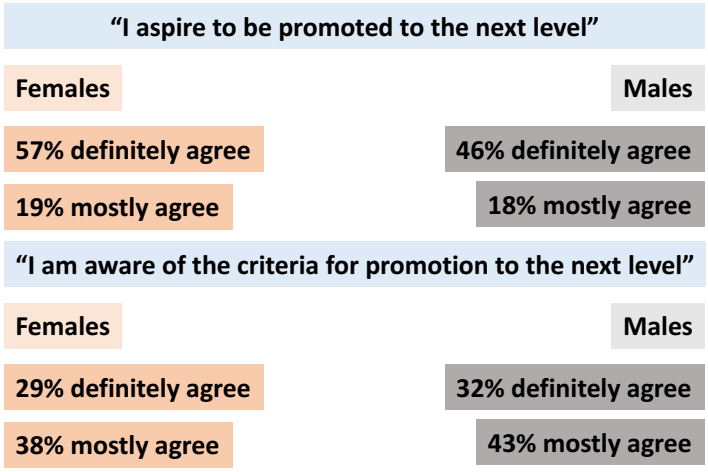


Figure 24. Responses of academic staff (Lecturer Grade 8-Professor) to questions about promotion aspiration and knowledge of promotion criteria. *Data from the Biosciences staff equality and diversity survey (November 2015-January 2016).*

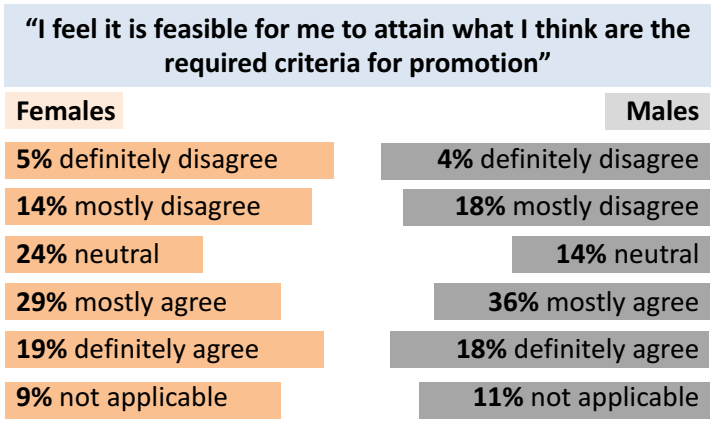


Figure 25. Feasibility of promotion criteria. *Data from the Biosciences staff equality and diversity survey (November 2015-January 2016).*

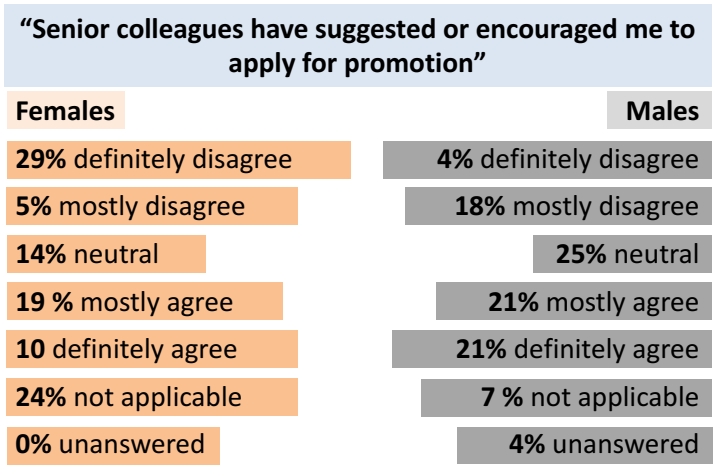


Figure 26. Encouragement for promotion applications. *Data from Biosciences staff equality and diversity survey (Nov 2015-Jan 2016).*

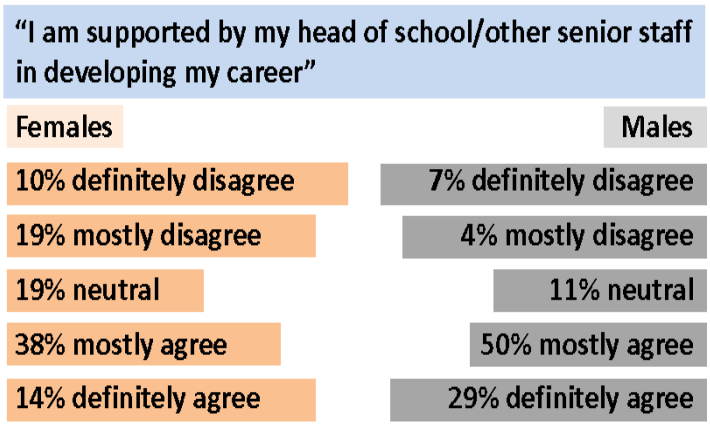


Figure 27. Support from head of school/other senior staff for academics. *When asked to respond to the statement "I am supported by my head of school/other senior staff in developing my career" female academic staff responded more strongly to negative comments. Data from Biosciences staff equality and diversity survey.*

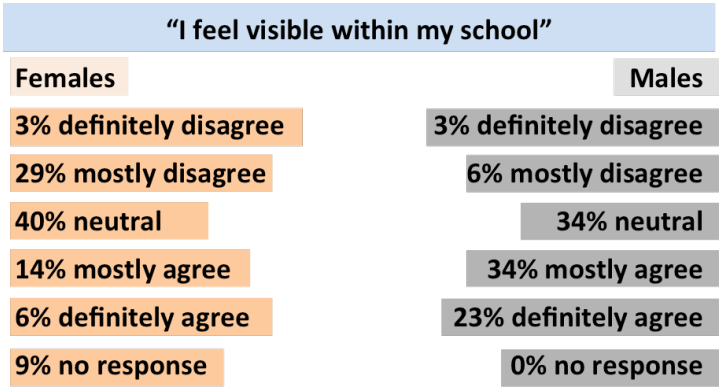


Figure 28. Responses from the staff survey to the statement "I feel visible within my School"

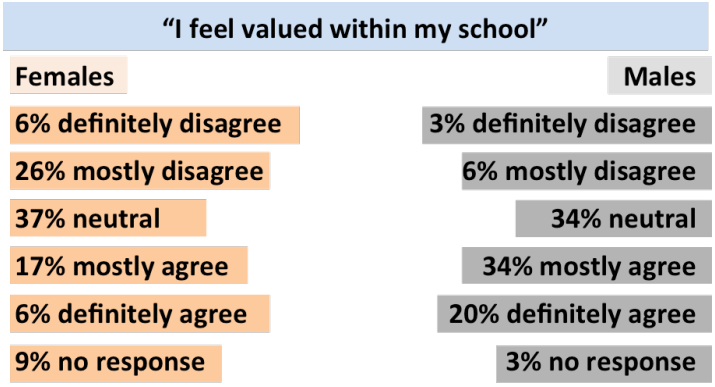


Figure 29. Responses from the staff survey to the statement "I feel valued within my School"

Our **Silver Actions** will: make all staff feel more welcome, valued and visible in the school while highlighting our diversity **Actions 3.1, 4.2, 3.2, 3.6, 5.1, 5.2, 5.5, 5.6**), communicate available PDRA and academic staff support more effectively and understand issues around career progression (**Actions 3.3, 3.5, 3.6, 3.7, 3.8, 3.9, 4.11, 4.12, 4.13, 4.14, 4.15**) and embed E&D into the Staff Development Review and career progression (**Actions 3.4, 3.10, 4.3, 4.4, 4.10**). We will monitor our effectiveness and impact via staff surveys and focus groups (**Actions 5.4, 3.7**).

(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?

The staff induction process has four stages: pre-arrival, local induction, central induction and post-induction. Online resources and details of all stages can be found in a single web link, including checklists for line managers for pre-induction and local induction (which include flexible working).

As part of Bronze Action 3.1, the Biosciences SAT provided advice and comments to help establish a central University induction programme (including an E & D session) for all new starters, which contains information on University services and functions, including training/development and staff support networks (including Parents and Carers' network instigated by JCC, LGBT network, Disabled Staff Network).

New staff must complete an online E & D training programme "Diversity in the workplace" (including gender equality training) as part of their probationary period, which has links to University policies and practices embedded in the training. In Biosciences, 58% of staff have completed this online training, with Professional Services and Academic teaching-focused staff having a much higher completion rate (~80%) than research-based staff and PDRAs (showing only a 40% completion rate). We will therefore embed E & D training into all staff career progression including probation (**Silver Actions 3.4, 4.3**) and monitor Unconscious Bias training uptake (**Silver Action 4.4**). All staff responsible for recruitment and selection must attend University-wide recruitment and selection training before they can recruit staff or sit on interview panels. This is recorded as part of the central HR process.

Post-induction (typically 3 to 4 months), all new starters receive a central questionnaire or are invited to a focus group to feed back on their induction process and identify any additional support they need to feel fully integrated into University life.

Our staff survey data (section 4.2 (b)(i) highlight that we need to improve induction/information for staff and line managers at a local level. Our **Silver Actions 3.1, 3.3, 3.5, 4.2, 4.5** will welcome staff with an additional Biosciences induction package including information crib-sheets (e.g. PERCAT) and a Biosciences website (similar to https://intranet.birmingham.ac.uk/mds/welcome-induction/index.aspx) that will include details of training, key contacts, and the Staff Handbook, which outlines the University's family-friendly working policies. There will be free access to the site before candidates start a job, with additional details upon staff login.

(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.

Undergraduates (UG)

Our Bronze Actions 1.1, 1.2, 4.1, 5.1 aimed to raise awareness of Athena SWAN at all levels from UG upwards and embed Athena SWAN fully within School culture. We have made an excellent start with the UG population completing our Bronze actions 1.1 and 1.2 and going much further.

Both Athena SWAN and wider E & D issues are now introduced to students at the start of the Academic year, discussed at the staff-student committee (Bronze action 1.1) and UG student

representatives have been recruited to the E & D committee. This will continue (**Silver Action 1.11**). In 2016, Athena SWAN has been introduced during the Welfare induction in Welcome week for new first year UGs, including Guild of Students' representation from the Women's Association, LGBTQ associations and Disability Group. This was popular with students and so will continue (**Silver Action 1.12**).

Athena SWAN is now a standing item on Learning and Teaching Committee (Bronze Action 1.2) and proposed Athena Actions relevant to UGs are discussed and approved here by all staff members regardless of gender.

We have embedded Athena SWAN into our UG curriculum via E & D tutorials and careers surveys and an E & D page on Canvas (Virtual Learning Environment; going beyond Bronze actions 1.1 and 1.2). This work has shown us that our female-heavy UG numbers mask differing perceptions of academic careers between female and male students, e.g. visibility of female role models within the School, likelihood of choosing an academic career, family-friendly nature of academia. **Silver Actions 1.13-1.15** aim to address this through further data analysis, improving E & D visibility and dissemination and refining the E & D tutorial. **Silver Actions 1.10 and 1.13** will improve UG uptake of E & D training. **Silver Action 5.1** will make diverse role models (including women) much more visible to UGs.

As all staff are involved via the tutorial system (included in the WAM) this has helped embed Athena SWAN culture in the School (going beyond Bronze Actions 1.1, 1.2, 4.1, 5.2) and we will continue to improve this (**Silver Actions 1.10-1.13**). The majority of our staff are involved in outreach and we plan to make the School's E & D /Athena SWAN activities visible at open days and applicant visit days (included in the WAM; **Silver Action 5.1c**).

Postgraduates (PG)

Our Bronze Actions 2.1 and 2.2 aimed to understand more about our female PGRs' career plans and trajectories, while Bronze Actions 2.3 and 2.4 aimed to gain information about our PT PGs and advertise PT PG degrees widely, which has been successful.

In a sample of 93 PhD students from 2007-2013, of which 64.5% were female and 35.5% male, fewer females (52.5%) compared to males (63.6%) went on to pursue an academic career post-PhD. To address this, we conduct (Bronze Action 2.2; **Silver Actions 2.2 and 2.3**) surveys as a regular part of the PGR review process to assess the primary reasons for wanting to pursue an academic/non-academic career. Our data so far showed that that the males were more concerned with financial restrictions whereas females were more concerned with balancing a career with family commitments. Based on the key areas identified by the surveys, we will develop and implement relevant strategies to tackle problem areas.

To support PG students and their career progression, **Silver Action 2.4** hosts a Postgraduate Forum, a session where all PGRs can discuss careers and to listen to presentations from early-career researchers who have successfully made the transition from PhD to academic, especially those who have other commitments (e.g. familial care). The University has established Westmere Graduate School, which focuses on career development and training for PGRs. We will also implement PG E & D training (**Silver Actions 2.5-2.7**). **Silver Action 2.8** will ensure no single-gender viva panels. A PG satisfaction survey (**Silver Action 2.9**) will monitor the impact of our actions.

4.3 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 committees in the school are shown in Fig. 30 and Table 7.

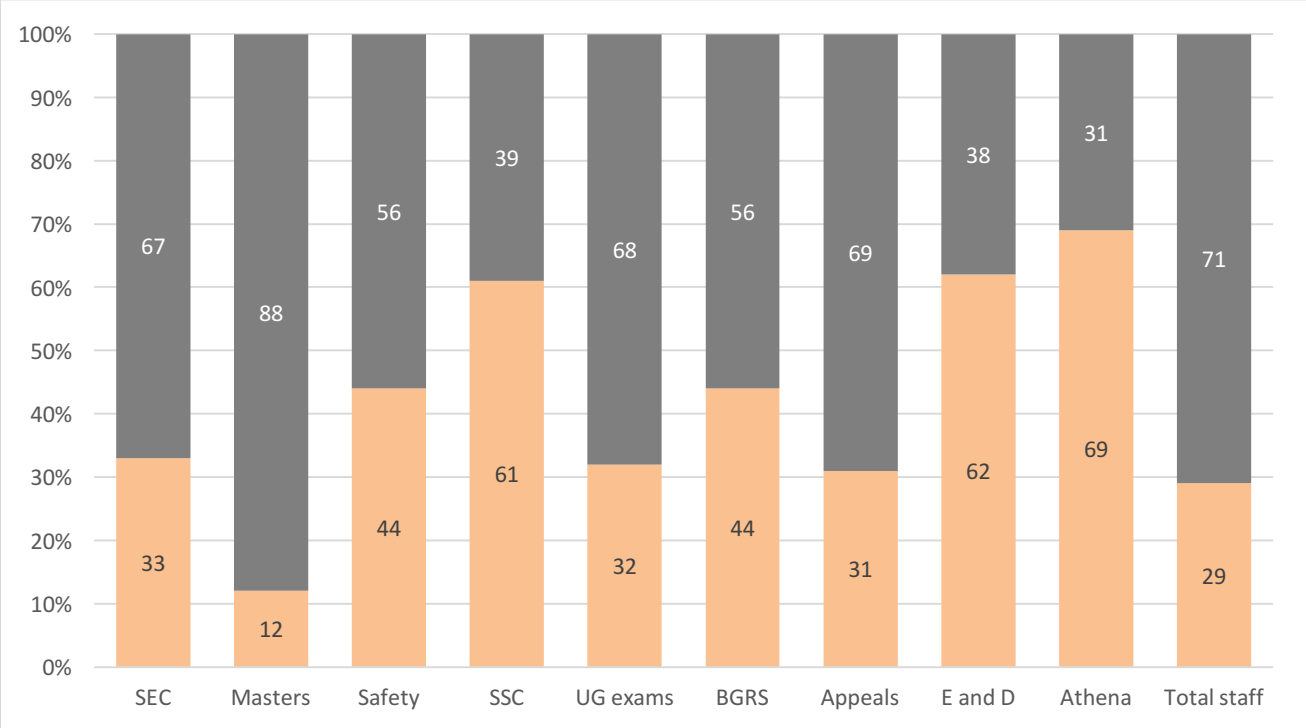


Figure 30. Committee percentage composition compared to total staff gender split. *Females, orange; males dark grey.*

Committee - meeting frequency	Meetings	Staff – total and gender ratio; chairing
School Executive (SEC) – key decision-making committee	weekly 11am	7: 6 academics (2F), 1 Professional services (F). Chaired by Head of School (M). Mirrors total academic gender ratio.
Learning and teaching committee (LTC)	termly; always between 11am-4pm (time slots rotate).	Open to all staff; Chaired by the Head of Education (F).
Biosciences Research Committee (BRC)	monthly, 2pm, Wednesdays	Open to all staff
Masters teaching committee	as required	25 Masters Module Organisers (3F) & Programme leads (4M) plus M chair.
Health and Safety Committee	at least termly	5 academics (2F), 4 Professional Services (2F); M chair.
Staff-student committee (SSC)	termly at 1pm on a Wednesday	UG: 7 first year reps (6F), 7 2nd year reps (2F), 7 3rd year reps (6F); 2 MSci reps (1F). 10 staff including library and careers reps (5F). M academic chair.
Undergraduate exam committees	as required in Semester 2	28 members (9F); mirrors total academic gender ratio. M chair.
Biosciences Graduate Research School committee (BGRS)	termly	9 members (4F); M chair
School Appeals Panel	as required	13 members (4F); M chair; mirrors total academic gender ratio
E & D committee	termly at family-friendly time	21 members (13F); F chair.
Athena SAT	4-6 weekly at family-friendly time	16 members (currently 11F)
School Promotions Panel	yearly	Includes HoS (M), HoE (F), HoR (M), at least one of two Deputy HoS (one F and one M), one non-school senior academic (F in 2016) plus other senior academics if necessary to assess the applications (2016 round not necessary). F deputy HoS could not sit in 2016 - seconded to the college level panel.

Table 7. Committees in the School of Biosciences. *Abbreviations: F-female, M-male, HoS- Head of School, HoE-Head of Education, HoR-Head of Research*

(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.

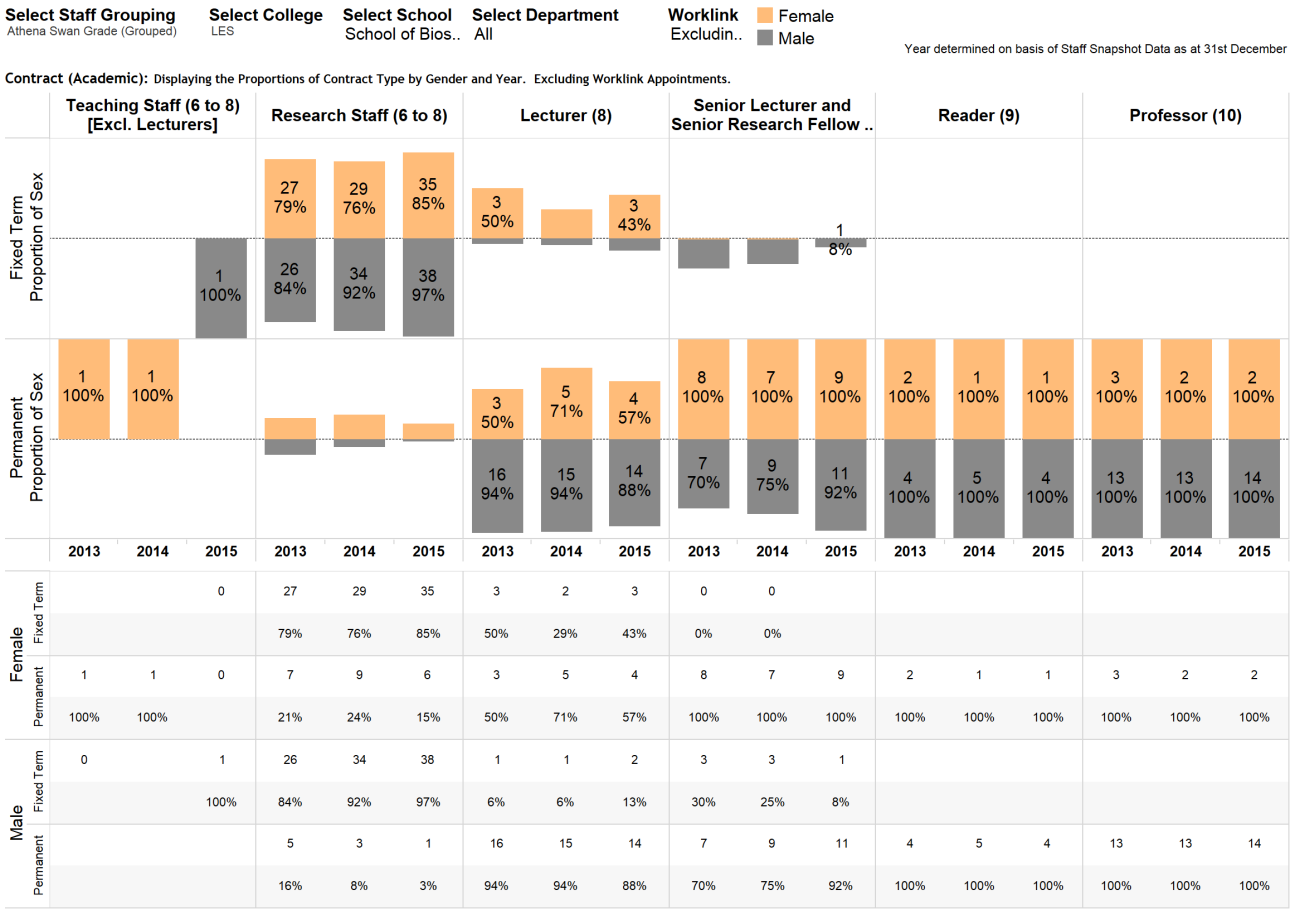


Figure 31. Academic staff shown by fixed-term (top) or permanent (bottom) contract, by grade.

Our fixed-term teaching staff numbers are low (Fig. 31). Most research staff are on fixed-term contracts but we have between 5 and 14% more female staff on fixed term contracts (different years). More of our (small number of) fixed term lecturers are female**: all females are employed as cover for research leave or maternity leave** - we hope that at least 2 of these will transition to permanent posts once the relevant leave ends**.**

All our female SL/SRF are permanent, while we currently have 1 fixed-term male SL/SRF. Our data show that we are roughly in-line with the sector (benchmarks - 38%:62% females:males in permanent jobs; Biosciences 35%:65% in 2015; benchmarks - 50%:50% females:males on fixed-term contracts; Biosciences 48%:52% in 2015).

Fixed-term staff can access the full range of University training and development opportunities, including courses particularly relevant to staff at the start of their academic careers, such as Teaching Enhancement and Research Skills. All staff on a fixed-term contract for more than 4 years are transferred to open contracts, with funding end dates if applicable. The University's redeployment scheme gives first preference on alternative posts to redeployment candidates. The University does not operate zero-hours contracts.

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?

Previously all senior academics were male. In 2012-15 the School actively sought out females for key roles and has placed female staff into several key posts. Females occupy 2 out of the 6 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).

(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.

Biosciences were innovative in developing one of the first teaching workload allocation models (WAM) in the University from 2012, specifically to address Athena SWAN issues. This was updated over the lifetime of the Bronze Action Plan to also include administrative tasks (Bronze Action 4.9). Within Biosciences, the Head of School is responsible for ensuring that workloads are fair across staff.

Our current WAM suggests that female staff are not overall overburdened with teaching (Fig. 32), in agreement with data collected from the staff E & D survey (Fig. 33).

"% of tariff points in our current WAM"	
Teaching	
Females	**Males**
18.8%	**26%**
Admin	
5.8%	**5.9%**
Research	
50.8%	**48.8%**
Citizenship	
24.6%	**19.3%**

Figure 32. Breakdown of time spent on teaching, admin and research by gender according to the current workload allocation model (WAM). *Note: citizenship is a flat rate so % goes up if other work is lower.*

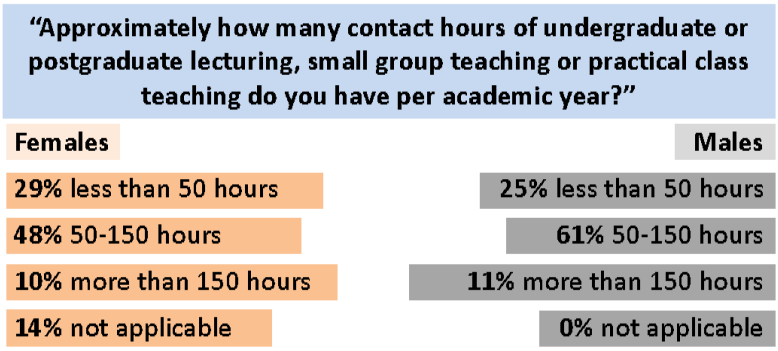


Figure 33. Staff survey question on teaching hours *(Data collected Nov 2015-Jan 2016).*

Silver Action 4.18 will interrogate the updated WAM more closely for gender disparities, by analysing different groups of staff separately.

(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.

Our Bronze Actions 4.10 and 5.4 pledged to "Ensure that the majority of committee meetings are held 10am-3pm." and "ensure that named and inaugural lectures take place at lunchtimes not 5pm", respectively.

We have accomplished action 4.10, with all key meetings (e.g. School Executive Committee, School Meetings, Biosciences Research Club, Exam Boards, Learning and Teaching Committee, Staff-Student Committee, Athena SWAN committee, E & D committee) now held in this window and all minutes are posted on the School Intranet Site. For the few LTCs that start at 2.15pm and are likely to run past 3pm, dates are circulated well in advance.

We were unable to implement Bronze Action 5.4, as the College decided to continue evening lectures accessible to the general public. All our scheduled internal seminars, whether external or internal speakers, are held at 1pm, and occasional short notice/ad-hoc seminars outside this schedule are held in the 10-3 window whenever possible.

(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.

Our Bronze Actions 1.1, 1.2, 2.4, 3.1, 3.3, 3.9, 4.1, 4.4, 4.6, 4.10, 5.1, 5.4, 5.5 promoted awareness-raising of Athena/E & D issues and enabling family-friendly and inclusive working (plus socialising) at all levels. The appointment of females to senior posts and committees within the School has increased the sense of inclusion amongst females and promoted a greater dialogue. Athena SWAN is now a standing item on our key decision-making committees.

We genuinely believe we have made a difference to School culture (and our numerical data backs this up to an extent), but our surveys, tutorials and numerical data tell us that we need to do more. This is why our **Silver Action plan** strives to improve our culture further by understanding our data more fully (**1.1-1.9, 1.14, 2.1-2.3, 3.7, 3.8, 4.1, 4.7, 4.18**), improving E and D training uptake considerably (**1.10, 1.13, 2.5-2.7, 3.4, 3.10, 4.3, 4.4, 4.9, 4.10**), improving diverse role model visibility (**2.4, 3.6, 5.1, 5.2, 5.5**) valuing staff more transparently (**3.5, 3.6, 3.10, 4.12, 4.16, 4.18, 5.1, 5.2, 5.3, 5.5**), supporting career progression (**2.2, 2.3, 3.2, 3.3, 3.5-3.10, 4.5-4.16**) and embedding E and D culture within professional services (**5.3**).

(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 vast majority of academic staff plus PDRA and PhD student volunteers participate in our 6 open days and ~12 Applicant Visit Days (AVDs) throughout the year. This activity is recorded in the WAM for academic staff under "general citizenship". Our "taster lectures" at 2016 open days were given by 50:50 females:males. From 2014-2016, overall representation at open days and AVDs combined was 30% female (PDRAs plus academic staff). 2015-16 AVDs were hosted by 25% female staff and 48% female PhD students, (total academic staff are 29% female; PhDs are 54% female). This indicates female under-representation (but certainly not over-burdening of women with outreach activities). Some Open Days are on Saturdays and the School is mindful of those with family commitments. PDRAs and PhD students can list outreach activities on their CVs and some PhD demonstrators are paid for Open Day/AVD work.

Other outreach activities are not specifically included in the WAM, but all staff are allocated 180 hours a year for general citizenship. Several female staff and students are registered STEM ambassadors. Our recorded 2016 non-open-day outreach activities so far involve roughly equal numbers of female/male staff and students.

4.4 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.

We maintained our 100% maternity 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. However, discussions with staff who had recently gone through the process revealed that necessary information was difficult to access. Therefore, we have recently developed a checklist for expectant parents that explains their rights and entitlements before, during and after parental leave. A corresponding checklist was also produced for managers highlighting their responsibilities. These checklists will be distributed to managers and handed out to expectant staff as one of our silver actions points to improve the availability of information (**Silver Action 4.17**).

(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.

Year	Academic
2013	6
2014	2
2015	2
Grand Total	10

Table 6. Parental leave for all academic staff (including PDRAs) in the School of Biosciences.

Parental leave recorded by central HR is shown (Table 6). There have been 4 maternity leaves and 1 adoption leave amongst permanent academic staff.

Unlike maternity leave, paternity leave is agreed locally between staff and their Head of School and follows the University's policy of 2 weeks paid leave until the change in legislation around shared parental leave in 2015.

In our Bronze application, we identified that male academic staff are not aware of their entitlement to paid paternity leave and often took annual leave instead. We addressed this (Bronze Action 4.8) by advertising a link to the University's eligibility guidelines on our 'Resources for parents and carers' section on the School of Biosciences website. In 2012-15, 3 members of academic staff took paternity leave agreed with the Head of School indicating that we have improved our paternity leave uptake.

To further improve the provision of information on parental leave, we have included this information in our expectant parents' checklist (**Silver Action 4.17**).

(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 that applies to all staff.

Most requests for flexible full-time working in the School are arranged on a one-to-one basis for academic/research staff via the Head of School or Principal Investigator, respectively (Section 4.4 (b)(i)). It is recognised that academic staff have greater "informal" flexibility than other staff groups with many staff working flexibly as a matter of course or as an informal arrangement.

1 member of academic staff works flexibly (as well as part-time) on a formally agreed basis (JCC; Section 7).

There are currently 7 academic staff (10% of total) and 7 research staff (9%) working part-time on a formally-agreed basis. This is an increase of 4 staff (3 academic and 1 research) taking up part-time arrangements since 2010-12. To our knowledge, no requests for part-time working have been turned down. Our full-time staff are 38% female and our part-time staff are 71% female, in line with sector benchmarks (FT 40% female; PT 67% female).

More female staff take up part-time work at all levels (Fig. 32). However, the overall proportion of both female and male staff on part-time contracts has increased to an average of 24% and 8% in

2013-2015, respectively, (up from 21% and 3% in 2009-2012). Thus, we have increased the uptake of part-time working in Biosciences.

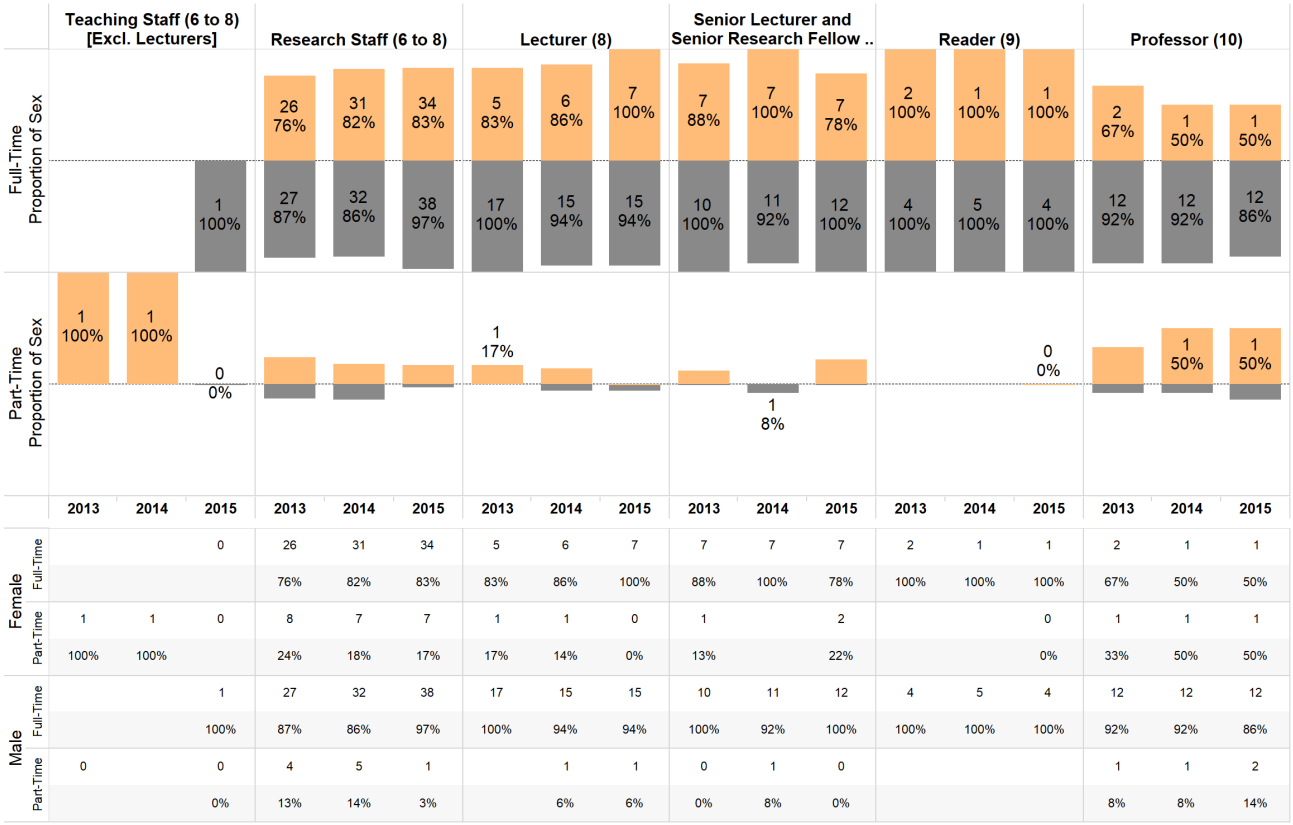


***Figure 34**: 2013, 2014 and 2015 staff data on part-time working arrangements within the School of Biosciences. Note that there was only one member of female teaching-only staff in 2013/2014 who was working part-time, and there were no female teaching staff in 2015. There were no male teaching-only staff in 2013/2014 and one male member of teaching staff in 2015 on a full-time working arrangement. This, therefore, explains the seeming bias to female part-time working staff in this category. Between 2013 and 2015 we did not have any staff at reader level – female or male – working part-time. This can be explained with the overall low staff numbers in this category.*

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

(i) **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.

Section 4.4(a)(iii) presents formal part-time/flexible arrangements. However, we have also a well-established informal system allowing full-time staff to have flexible working hours. There are several instances where staff work from home at least one day a week (independent of staff category).

When asked in our Staff Survey (Bronze Action 5.3) "Do you work flexibly, for example in your hours of work or place of work?" 60% of both female and male staff responded "Yes". Hence, our

headline data underestimate flexible working patterns, especially where male staff are involved in caring responsibilities during traditional working hours. However, we acknowledge that female staff might feel more "obliged" to use a part-time working arrangement, rather than using flexible working hours, than male staff.

Our Bronze Actions (3.4, 3.7, 3.9, 4.2, 4.6, 4.10) aimed to raise awareness of, and support, part-time and flexible working arrangements and we believe this has been successful.

To raise further awareness of our commitment to support part-time and flexible working, **Silver Action 4.17** will highlight part-time and flexible working in our newly developed Biosciences maternity check lists while **Silver Actions 4.2, 4.5, 4.6** will improve our family-friendly job adverts and dissemination to current staff.

Silver Action 4.1 will continue monitoring part-time working arrangements to ensure equal opportunities for staff. **Silver Action 5.4** will include specific questions in our next School staff survey to identify potential constraints for both female and male staff on taking up part-time and/or flexible working. This will inform future Action planning.

(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.

The School of Biosciences SAT played an instrumental role in working with senior management including the deputy Pro-Vice Chancellor (dPVC) for E & D, HR and the University SAT to develop a new University-level policy for maternity support, which was implemented in 2014. This enabled us to complete our Bronze Action 4.4, introducing paid teaching cover for women on maternity leave plus reduced teaching/admin load on return. To date, 3 female members of Biosciences staff have benefited from this new policy.

The University's new system for supporting staff before, during and after maternity leave is outlined below, with aspects introduced as a result of working with Biosciences highlighted in orange:

1) Once a pregnancy is announced, a manager ensures that the individual completes a risk assessment to identify any aspects of work that need to be adjusted to protect the woman's health during pregnancy. Laboratory-based staff may need to work to amended protocols depending on the materials/processes involved. The individual is referred to HR, who will explain their entitlement to leave and pay.

2) A central fund is available to meet the costs of leave so that Schools can budget for and arrange cover for maternity leave.

3) Staff are encouraged to use their entitlement of 'keeping in touch days' (KITS), to stay in touch with developments within their Department/School/College - plans for these should be discussed before and during maternity leave.

4) Upon return from maternity leave, all academic staff employed on three-legged contracts are entitled to a term of workload remission (from either teaching, or research, or administration), to enable them to re-focus their research/teaching as appropriate.

5) Where the quantity of academic outputs has been impacted as a result of leave, part-time working arrangements or restrictions on activities due to breast-feeding (e.g. laboratory work), this will be recognised and taken into account in the promotions processes, REF and any other exercise that uses quantity of outputs as a performance measure. The individual's plans for their return-to-work are usually discussed with them before they take their leave if the individual has clear intentions, although obviously these may change after the baby's arrival or when child care arrangements have been finalised. Those returning from leave have the right to request part-time or flexible working. Staff on three legged academic contracts returning from leave who subsequently work part-time must be allocated work that balances all aspects of a three-legged contract, with the exception of the term of remission as detailed above.

We plan to further improve our support by adapting good practice to ensure that expectant parents are aware of the University's policies (**Silver Action 4.17**). To do so, we are developing short information sheets for expectant parents as well as their line managers, which will be provided as soon as a staff member declares a pregnancy. The Head of School has also drafted an information letter that summarises the support by the School (**Silver Action 4.17**).

5164 words

5. Any other comments: maximum 500 words

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

Pay gap

Our gender pay-gap is small apart from for Professors. The average pay (100%FTE equivalents) of our 14 female lecturers (Grade 8) is £44,421, compared with £45,778 for 19 male lecturers. We have more new junior female appointees, perhaps explaining this discrepancy. At Grade 9 (SL/Reader), our 8 female staff average earnings are £56,125 compared with £55,875 for 14 male staff.

PERCAT – PDRA career support.

After a hiatus year in 2015 due to lack of funding we re-established PERCAT in an extended form covering the Colleges of LES and EPS. The programme is directly driven by PDRA and early-career scientists, supported by administrative staff and chaired by Professor David Hannah, College Director of Research (LES) and Professor Jon Binner, Deputy Head of College (EPS), allowing our PDRAs to benefit from this interdisciplinary approach. We have since also developed online resources comprising information to support PDRA career development and networking. These websites are regularly updated with new resource information and advertise our ongoing interactive Training and Development programme of courses and workshops. In addition, we disseminate this programme to all PDRA and early career researchers via email. Examples for this series of workshops and events are our Career Development Competition and our annual PERCAT Gala offering networking opportunities. In addition, we also offer workshops on fellowship and grant writing, planning your career, networking and public engagement.

Intersectionality

In 2014 the School instigated an E & D committee (of which the Athena SAT is a subgroup) with members from UG to Professor plus professional services so that Athena good practice around inclusivity could be shared and extended to other protected groups where appropriate. We are using our Athena SWAN experiences and data collection to inform other areas of our evolving school E & D activity, which is gaining considerable momentum thanks to University-wide support including from the dPVC for E & D and her team.

We are aware that gender is not a binary concept. All our surveys enable people to declare gender as "Female/Male/Other". JCC liaises with the University's staff Rainbow Network (supporting LGBTQ+ staff) and the student LGBTQ+ groups and Women's Network to include them in induction activities where appropriate. JCC has also engaged in University-wide work on an LGBTQ+ - inclusive teaching curriculum including work on the use of personal pronouns.

385 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**.

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

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

Juliet Coates

Juliet has been a University Athena SAT member since its inception in 2011 and on the Biosciences SAT since its inception in 2012, chairing from when the deputy HoS retired in 2012. Her story demonstrates enormous improvements in School culture in the last 12 years. In her own words:

"I joined the School as a full-time Lecturer in November 2004. My son was born in December 2007 and I took 6 months' maternity leave. I returned to work part-time (80%) 4 days a week. My experience of returning to work post-maternity was negative (but not unusual at the time). I was immediately asked to run and teach a new Masters module and to take on other new teaching. I quickly found I was working full-time hours to juggle the teaching and admin load while trying keeping my research group afloat. I did not feel that my part-time working was taken into consideration, and my research suffered as a result.

I suffered from depression for 3 years during and after my pregnancy, which I did not disclose at work until 2011, as I was afraid of being viewed negatively by senior staff. My invitation to take a lead in the University's Athena SWAN activity prompted me to feel more comfortable to speak out

about my illness and my workload overload. I started to openly discuss these issues with senior staff at School- and University-level, so that we could work towards improved support for parents, carers and other people who may struggle with work-life balance.

In March 2012 I became a single parent; in September 2012 my son started school. The School of Biosciences was very supportive. I was enabled to work 80% time 5 days a week on a very flexible "split shift" pattern, with "short days" on campus and home-working in the evening, plus time off/home-working as required in the school holidays. My working pattern is formally agreed, meaning I can drop off and pick my son up from school nearly every day and look after him in the holidays: I effectively work ~80% time over the course of the year. I can accommodate most of my teaching between 9.30am and 2.30pm, and can organise ad-hoc childcare on the occasions I am needed on campus outside those times. The School pays for childcare if I am required to attend events e.g. graduation when I would usually be caring for my son.

In 2013-14 I was awarded a Royal Society-Leverhulme Trust Senior Research Fellowship in recognition of my need for a period of full-time research due to my family commitments and part-time working. This covered all my teaching and admin (although I continued my Athena/E & D role, maintaining momentum from the School's successful bronze application awarded just as my Fellowship started). During 2013-14 I finished and submitted several publications that had been 'on-hold' due to lack of time for experiments and writing. I was promoted to Senior Lecturer in 2015.

I contracted an autoimmune disease early in 2015 and am now registered as a disabled employee. This does have an impact on the amount of work I can physically do. The School of Biosciences has been both empathetic and supportive – I work actively with the Head of School to try and keep my workload manageable and I have been given computer software in the office and at home that helps to reduce pain and fatigue. The academic workload is still not always easy to control, but I now work in an environment where I am happy to have open, honest discussion about this, and to encourage others to do the same."

Helen Cooper

Helen joined UoB in 2003 as a Wellcome Trust Value-in-People Fellow. She was subsequently awarded a Wellcome Trust University Technology Fellowship to develop high-performance mass spectrometry methods for biomedical research. In 2010, she became Senior Lecturer and was promoted to Professor of Mass Spectrometry in 2013. In 2016 she was elected a Fellow of the Royal Society of Chemistry.

A mother of two, Helen has appreciated the flexibility afforded to her by the School regarding her working practice, permitting her to engage with her children's school careers including "being there when her daughter is involved in an assembly" and being at "all but one sports day for both children". Helen also appreciated the UoB child-care voucher scheme that permitted wrap-around care when required.

However, Helen's personal observations are that despite this flexibility and support for parenting/childcare there was a tendency by the School's senior management to notice only those who made a 'song-and-dance' about themselves. The leadership was not seen to actively seek to understand who was doing a great job and who should be rewarded with recognition, personal development and promotion. 'Tiara Syndrome' is defined as 'keeping your head down, delivering excellent work and hoping that the right people will notice — and place a tiara on your head'.

Whilst it may be for sociological reasons that women more frequently follow the Tiara Syndrome, Helen points out that childcare management and delivering teaching and world-class research often leave little time for self-marketing.

Helen reports that the appointment of Prof. Myra Nimmo as Head of College in 2014 marked a change in approach and culture. One of the first things Myra did was to visit Helen. As a result, Myra recommended Helen for the Universities Senior Leadership Programme. Upon his appointment to HoS by Prof. Nimmo, Prof. Chris Bunce asked Helen to join the SEC and to become Deputy HoS. Helen has also been given a cross-college role as Academic lead for Mass Spectrometry within the University's 'Enabling Technologies Programme'. Helen recognises that this change in her circumstances and influence within the school is not a 'one-off', with other female staff being been given senior roles in the school, including Dr Julia Lodge (Head of Education), Dr Susannah Thorpe (Academic Research Theme Lead - Biosystems and Environmental Change) and new recruit Dr Eleanor Cull (Programme lead for Human Biology Undergraduate Degree).

995 words