



Athena SWAN Gold Department award renewal application

Name of institution: Queen's University Belfast

Date of application: 29th April 2016

Department: School of Biological Sciences

Contact for application: Dr Nessa O'Connor and Prof Aaron Maule

Email: n.oconnor@qub.ac.uk; hos.biolsci@qub.ac.uk

Telephone: 048 90972127/ 048 90972298

Departmental website address:

<http://www.qub.ac.uk/schools/SchoolofBiologicalSciences/>

Date of previous award: Silver Award in 2009 and Gold Award in 2013

Date of university Bronze and/or Silver SWAN award:

Silver SWAN award since 2006 and renewed in 2015.

An Athena SWAN Gold award renewal recognises a significant sustained progression and achievement by the department in promoting gender equality and to address challenges particular to the discipline. Renewal applications should demonstrate that clear progress has been made since the previous award, measured against the original Gold department award application and action plan.

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. Where the departmental unit that made the original application has changed, it is up to the new unit for submission to decide whether a renewal

application is appropriate or whether a new award application should be made. If in doubt, contact the Athena SWAN Charter Coordinator well in advance to check your eligibility.

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

At the end of each section state the number of words used.

Click [here](#) for additional guidance on completing this template.

Table of abbreviations

AS	Athena SWAN
BBSRC	Biotechnology and Biological Sciences Research Council
BEER	Biological Excellence Experimentation and Research
DE	Director of Education
DEL	Department for Employment and Learning, Northern Ireland Executive
DKB	David Keir Building
DR	Director of Research
EBS	Ecosystem Biology & Sustainability (research cluster)
ECR	Early career researcher
ECU	Equality Challenge Unit
FdSc	Foundation Degree
FSN	Food Safety & Nutrition (research cluster)
FEB	Faculty Executive Board
GRI	Global Research Institute
HEIDI	Higher Education Information Database for Institutions
HoS	Head of School
IAFLU	Institute of Agri-Food & Land Use
IGFS	Institute of Global Food Security
IRC	Irish Research Council
MBC	Medical Biology Building
MPB	Microbe & Pathogen Biology (research cluster)
MSc	Master of Science Degree
MSci	(Undergraduate) Master in Science Degree
NERC	Natural Environment Research Council
NI	Northern Ireland
NITC	Northern Ireland Technology Centre
NSS	National Student Survey
PGCHET	Postgraduate Certificate in Higher Education Teaching
PGR	Postgraduate researchers
PGT	Postgraduate Taught
PLS	Primary Life Sciences
QUB	Queen's University Belfast
QGI	Queen's Gender Initiative
REF	Research Excellence Framework
RCUK	Research Councils UK
SBS	School of Biological Sciences
SBS-SAT	School of Biological Sciences Self-Assessment Team
SFI	Science Foundation Ireland
SMB	School Management Board
SSCC	Staff-Student Consultation Committee
STEM	Science, Technology, Engineering and Mathematics
WAM	Work Allocation Model

Pay Grades

Grade	Research Staff	Academic Staff
6	Researcher	-
7	Research Fellow	Lecturer
8-9	Senior Research Fellow	Senior Lecturer or Reader
Professorial Band	-	Band 1, 2 or 3

Data

Data sources

Data on staff and student numbers within the School of Biological Sciences were sourced directly from the University. We have obtained and analysed data from two academic staff surveys, 2014 and 2015 and surveyed ECR staff specifically in 2015 and 2016. Baseline UK data were sourced from two data sources, the higher Education Information Database for Institutions (HEIDI) and the Equality Challenge Unit (ECU). UK baseline data from HEIDI was available for the academic years 2007/08 to 2014/15. Given the broad scope of disciplines within the degree pathways at QUB SBS, the benchmark data were averaged across comparative Biological Sciences-based disciplines in the UK; including the following subjects; nutrition, biology, botany, zoology, genetics, microbiology, molecular biology, biophysics, biochemistry, animal science, agriculture, food & beverage studies, agricultural sciences, others in veterinary sciences, agriculture & related subjects, science of aquatic and terrestrial environments, and planning (urban, rural & regional). Where appropriate benchmarking data were not available through the University from HEIDI (e.g. full and part-time data) data were obtained from the Equality Change Unit through the Athena SWAN website (<http://www.ecu.ac.uk/equality-charters/athena-swan/athena-swan-resources/data/>). These datasets were available for the academic years 2011/12 to 2013/14. Data presented here incorporate data from equivalent courses in the categories of “Biological Sciences” and “Agriculture and related courses” in these datasets. Finally, data describing staff-turnover in biosciences were based on HESA staff leaver rates for 2012-13 and 2013-14 and were provided by [REDACTED] (Oxford Research and Policy).

Data representation

Data in the report are shown as full person equivalent for both the UK and Queen’s University Belfast. Figures and analyses of Queen’s University student data are based on the longest available datasets to capture long-term trends in the data and provide sufficient data for statistical analyses. Where only three years of data is available for UK benchmarking (e.g. PhD completion times), only the last 5 years of QUB data are used for comparison to provide contemporaneous data.

Data Analysis

Generalised Linear Models (GLMs) were used to examine differences between trends within the School of Biological Sciences and comparable UK institutions. Models were fitted using a binomial distribution with a logit link function suitable for analysing proportional data. Where over-dispersion was evident in model residuals (residual deviance/residual degrees of freedom > 2) models were refitted using a quasibinomial distribution. The only exception to this is the analysis of the number of years taken to complete post graduate research programs which is fitted with a Poisson distribution suitable for count data (no over-dispersion was evident). In all cases p-values should be interpreted with caution due to small datasets and multiple model testing. All models were fitted using the software R version 3.2.3 (R Foundation for Statistical Computing, Vienna, Austria).

29th April 2016

Dear Dr Gilligan,

As Acting Head of School for Biological Sciences I offer my strongest possible support for this application for an AS Gold Award renewal. Led by previous Heads of School we made very significant progress in first recognising, and then beginning to address, the major issues associated with gender balance, efforts that resulted in the School achieving an AS Gold Award (2012). I feel privileged to be able to contribute in a small way to the ongoing evolution in our School's philosophy and working practices as we seek to embed and grow our AS activities and make our School a great place to work for everyone.

One key goal is to address the disparity between the percentage of females taking our degrees (54%) and the percentage in permanent academic positions (32%), with an associated challenge being our shortage of senior female staff. Although we lost our two female Professors (one returned to USA; one won a Deanship elsewhere) our Action Plan has been successful in encouraging females to apply for positions and for promotion within our own institution, e.g. we achieved parity in the total numbers of females and males who were promoted (8 females, 62% success rate; 8 males; 31% success rate). Pleasingly, one of our most recent female promotions was a Senior Lecturer who was promoted to Professor, the first staff member to successfully leap-frog Reader grade in our School in over a decade. Further, we are now starting a major recruitment drive for new staff with prominent family friendly policies.

The School's flagship for research is the new Institute for Global Food Security. With this in mind, we developed a novel, gender-friendly, membership model that encourages collegiality and team-working and which takes a holistic view of performance to include research, teaching, administration and outreach activities. This has had a profoundly positive influence on the success of our female staff in attaining membership (success rates: 100% females; 62% males). The impact has resonated widely such that the membership model has now been adopted across our Faculty, including the new Institute of Health Sciences, a medical based institute that tends to be very male dominated.

This application comes in the midst of the most significant changes to our University's structure in decades, presenting new challenges, but also opportunities for our AS activities to be hard-

wired into our culture and processes. Our culture is continuing to evolve, our flexible working activities are now embedded, and we have engaged in a diverse portfolio of beacon activities both internally and externally. Indeed, our success in winning a Gold award was used to help guide our School of Psychology to AS Gold and stimulated a new University drive to achieve institutional AS Gold Award status.

In spite of our success we are very conscious of the need to keep moving forward. The next exciting phase of our journey is outlined in our Action Plan and encompasses a wide range of specific and measurable activities that are geared towards redressing imbalances in gender and diversity.

Yours sincerely,

A handwritten signature in blue ink that reads "Aaron Maule".

Prof Aaron Maule
Head of School



(500 words)

2. The self-assessment process – maximum 1000 words

Describe the Self-Assessment Process. This should include:

- a) a description of the self assessment team: members' roles (both within the university and as part of the team) and their experiences of work-life balance, flexible working and parental leave etc;

The School of Biological Sciences Self Assessment Team (SBS-SAT) was established in 2007 to prepare AS submissions (Silver award, 2009; Gold award, 2013). SBS-SAT reports to the School Board, and our workload model credits member participation. The SBS-SAT comprises 10 women and 6 men, representing PGR students, postdocs, lecturers, directors of research, administrators, technical staff and senior academics including the Head of School:

 <p>Nessa O'Connor Senior Lecturer</p> <ul style="list-style-type: none">- SBS AS Champion; SAT Co-chair- [REDACTED]- [REDACTED]- [REDACTED]- [REDACTED]- [REDACTED]- [REDACTED]- [REDACTED]	 <p>Edel Hyland Lecturer</p> <ul style="list-style-type: none">- SBS AS Champion and SAT Co-chair- [REDACTED]- [REDACTED]- [REDACTED]
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Jenny Williamson
School Manager

- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]



Aaron Maule
Professor

- School Director of Research until appointment as Acting Head of School in March 2015
- Ensures that recommendations are adopted by the School
- [Redacted]
- [Redacted]



Moira Dean
Professor

- Long-standing member of SBS-SAT
- Background in Social Science provides unique and important perspective for committee
- [Redacted]
- [Redacted]



Andrew Meharg
Professor

- Acting Director of the Institute for Global Food Security
- [Redacted]
- [Redacted]



John Dalton
Professor

- Director of Microbes and Pathogens Research Cluster
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]



Mark Emmerson
Professor

- Director of Ecosystems Biology and Sustainability Research Cluster
- Chair of School Research Committee
- [REDACTED]
- [REDACTED]
- [REDACTED]



Brian Green
Senior Lecturer

- Member of SBS academic staff [REDACTED]
- Provides input/experience as member (and former chair) of School Research Ethics committee.
- [REDACTED]
- [REDACTED]



Katerina Theodoridou
Lecturer

- Appointed as a lecturer in [REDACTED]
- [REDACTED]



Billy Hunter
Leverhulme Fellow

- Joined Queen's in [REDACTED]
- [REDACTED]
- [REDACTED]
- Co-organiser of Belfast Bright Club; uses stand-up comedy as a public engagement tool
- [REDACTED]
- [REDACTED]



Emma Gorman
Research Technician

- Based at QUB Marine Laboratory, Portaferry) and joined QUB [REDACTED]
- Provides support to researchers and students with boat and diving work in Strangford Lough.
- [REDACTED]
- [REDACTED]





Emily McDermott
Teaching Laboratory Technician

- Joined QUB in [REDACTED]
- Environmental champion, achieved gold status in the Green Impact awards
- [REDACTED]
- [REDACTED]



Lydia Luise Bach
PGR

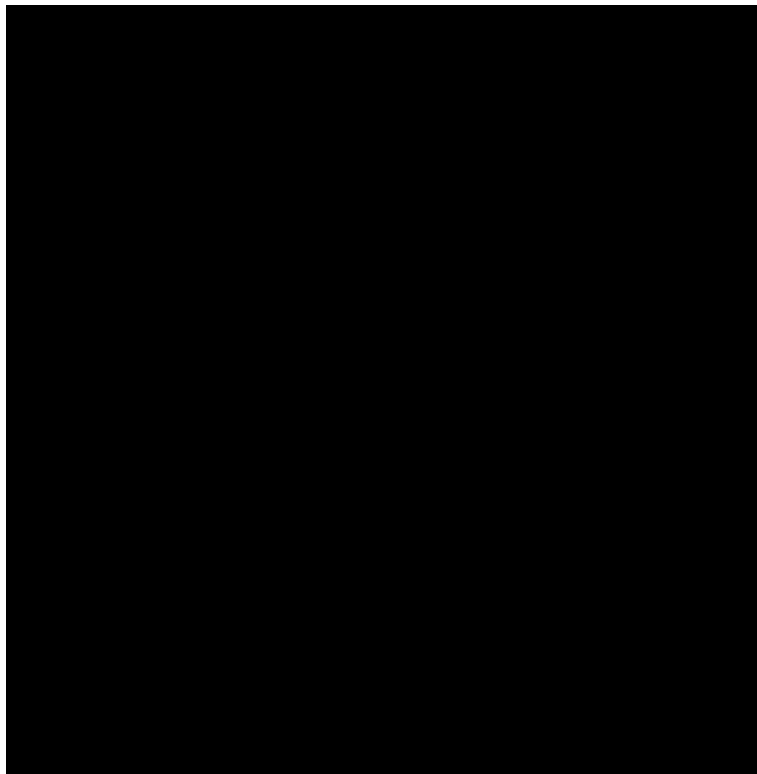
- [REDACTED]
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- [REDACTED]
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- [REDACTED]
- [REDACTED]

 <p>Hannah Hoskins PGR</p> <ul style="list-style-type: none"> - [REDACTED] - Involved in a peer training initiative for statistics and R programming 	 <p>Jenna Shiels PGR</p> <ul style="list-style-type: none"> - [REDACTED] - Lead Peer Mentor at QUB Summer Student Research Programme at Centre for Infection and Immunity
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- b) an account of the self assessment process, with reference to year-on-year activities since the original Gold award application, details of the self assessment team meetings, including any consultation with staff or individuals inside or outside of the university, and how these have fed into the submission;

The SBS-SAT convenes meetings every three months; subgroups meet more frequently to follow up on actions. The SBS-SAT reports at every School Board and some research cluster meetings. The Head of School is a permanent member of the SAT and the AS Champion became a member of the School Management Board in 2015. The SBS AS Champion is also a member of both the undergraduate and postgraduate Staff-Student Consultative Committees. Our AS Champion also attends monthly meetings with all QUB AS champions facilitated by the QUB Gender Initiative and Equal Opportunities Unit. In 2015, it was agreed to appoint two SBS AS Champions.

Dr [REDACTED] (postdoc) was seconded to assist with data collation and analyses for this renewal. External consultant ([REDACTED] and [REDACTED]) completed a review of good practices and their impact in the School (2014) and provided feedback. The SAT were assigned 'critical friends' within the University ([REDACTED]) who also provided feedback. All staff were surveyed in 2014 and 2015, ECR staff again in 2016, and several discussion groups with key staff (e.g. female ECRs and DRs) facilitated consultation.



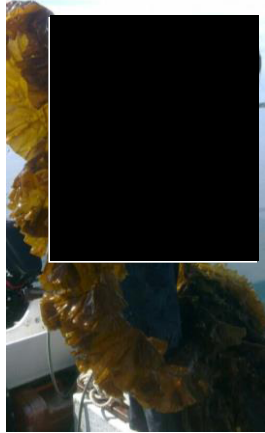
Dr [REDACTED] and her team of future biochemists

- c) plans for the future of the self assessment team, such as how often the team will continue to meet, any reporting mechanisms, and how the team will continue to engage with SET departments to encourage them to apply for awards.

The SBS-SAT will meet $\geq 4x$ per year with additional subgroup meetings as required. Current members serve for 1-2 years. Several new members have just started management roles and will be involved in recruitment and workload management. To ensure continued development of our AS Action Plan, the DR for each research cluster will serve on the committee. Rotating membership will reinforce our policies and culture widely, broadening awareness and increasing engagement with actions undertaken by the SAT. Highest turnover is expected among the PGRs and postdocs. As we encapsulate a broad research area across several sites, we have student representatives from different research clusters. Committee membership is flexible to meet the demands of the revised Charter, e.g. we expect to include the School's Disabilities Officer from the next academic year and have added representatives from the professional and technical staff. [REDACTED] has applied to ECU to be a panellist to review applications and most SAT members are expected to apply in future. It is anticipated that following the expansion of AS into the Republic of Ireland coupled with our experience of both Irish and UK research and higher education

systems, that SBS-SAT will offer valuable advice to other STEM departments in Ireland and the UK.

(999 words)



Dr [redacted] (BBSRC Fellow) harvesting seaweed

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 changes since the original application.

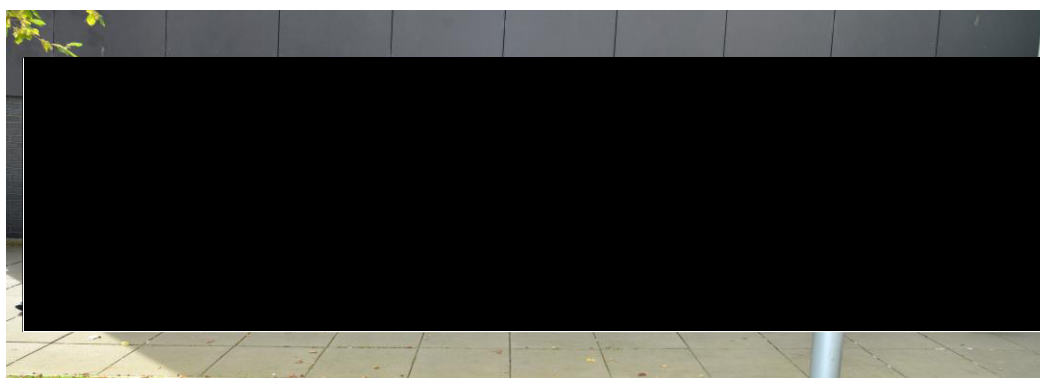
Queen's University Belfast School of Biological Sciences (QUB-SBS) has evolved from a series of mergers among departments. In 1992, the Departments of Botany, Zoology and Biochemistry fused into SBS, with 38 academic staff; 9% were women. In 1996/7 7% of academic staff were female and by 2004 this was still <10%. In 2005, the Institute of Agri-Food & Land Use (IAFLU) merged with SBS, which increased our proportion of female academics to 24% of 41 staff. Since then our proportion of female academics has continued to increase, to 30% of 60 (lecturer and above) in 2012/13. Since 2012, QUB has undergone re-structuring with a large proportion of personnel changes in key roles. Nevertheless, female academics at lecturer grade or above are now 32% (of 62) and we have set ambitious targets to increase this in our new Action Plan. Since 2012, there have been personnel changes in nearly all key managerial roles including the SBS AS Champion, Head of School, School Manager, Directors of Research, Directors of Education and the Research Institute Director; QUB human resources department now operates at Faculty level. Some of these changes are reflected in our current SWAN Committee. We work closely with QGI and the QUB Equality Office.

Currently, SBS has 56 academic (lecturer and above) and 60 research staff (41% female) located across three sites (Medical Biology Building (MBC) and David Kier Building (DKB) both in Belfast and our Marine Laboratory at Portaferry). We are currently in the advanced stages of planning a new state-of-the-art building which will house the school on one site in Belfast by Spring 2018. Academic staff members have diverse teaching and research interests ranging from cell biology to environmental economics. Each year we teach ~700 undergraduate students and 400 postgraduate and PhD students. Our degree disciplines encompass *Biological Sciences*, *Biochemistry*, *Food Quality, Safety and Nutrition*, *Land Use and Environmental Management*, *Microbiology*, *Marine Biology* and *Zoology*. We offer 14 undergraduate courses and 10 MSc/ MPhil courses (with/without professional studies year options). In the Sunday Times league table (2016), our courses were ranked 3/14 in the UK for Agriculture and 23/99 for Biology; our NSS scores are high with overall satisfaction ranging from 91-97% in the last three years. The School also has

collaborative teaching arrangements in place for a number of courses, e.g. Agricultural Technology BSc is delivered in part by colleagues at CAFRE, a rural college located at Greenmount, County Antrim with all formal examinations and the final year of their degree on the QUB campus

In 2013, the Institute for Global Food Security (IGFS) was launched and became a University Global Research Institute in 2015 (one of four). Most research at SBS is aligned with IGFS (ranked 1st for research intensity in Agriculture, Veterinary and Food Science in REF 2014). In 2015, our research clusters were redefined as: Ecosystem Biology & Sustainability (EBS); Food Safety & Nutrition (FSN); and, Microbe & Pathogen Biology (MPB).

- b) Provide data and a short analysis for at least the past five years (where possible with clearly labelled graphical illustrations) on the following with commentary on their significance, how they have been affected by actions taken under the previous action plan, how they have impacted on current action planning, and any changes and progress made since the original application and implication for initiatives for the future.



Staff of the School of Biological Sciences, 2015

Student data

- (i) **Undergraduate male and female numbers** – full and part-time
- In each of the last nine years >50% of SBS undergraduate students were female (Fig. 1). Since 2012, the number of our undergraduate students has increased (33% for women; 36% for men). The percentage of female undergraduates at SBS is in line with national trends from 2007/08-2014/15;

where datasets show a marginal decline in percentage of female students towards 50% parity¹.

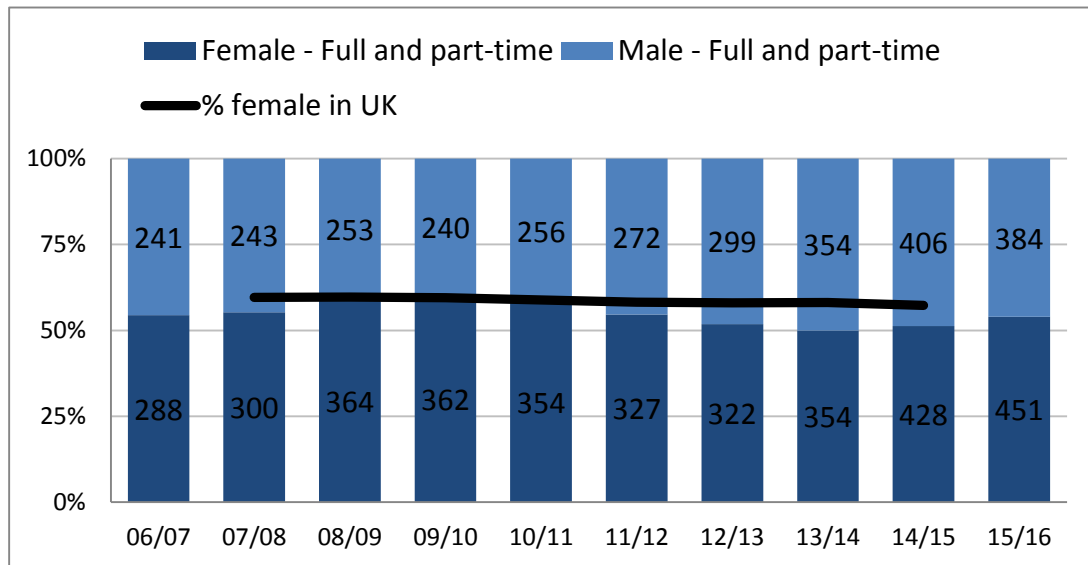


Fig 1. Number of female and male students enrolled on undergraduate degree courses at SBS between 2006 and 2015. Solid black line shows percentage of female students in comparable courses across the UK (source: HEIDI).

- Most pathways have >50% females (Fig. 2). Food science courses are popular with females; only 4 SBS undergraduate pathways are >50% male, of these *Microbiology* and *Agricultural Technology* have recently increased female representation (from 7% to 46% and from 20% to 28% since 2011 respectively). Female representation on *Land Use and Environmental Management* has dropped (from 52% to 27%), which is being addressed in our Action Plan.

¹ Quasibinomial GLM – Difference in mean between QUB and UK: $z = 1.016$, $df = 1,14$, $p = 0.327$
 Difference in trend between QUB and UK: $z = 1.021$, $df = 1,14$, $p = 0.324$
 Overall trend: $z = -2.141$, $df = 1,14$, $p = 0.050$

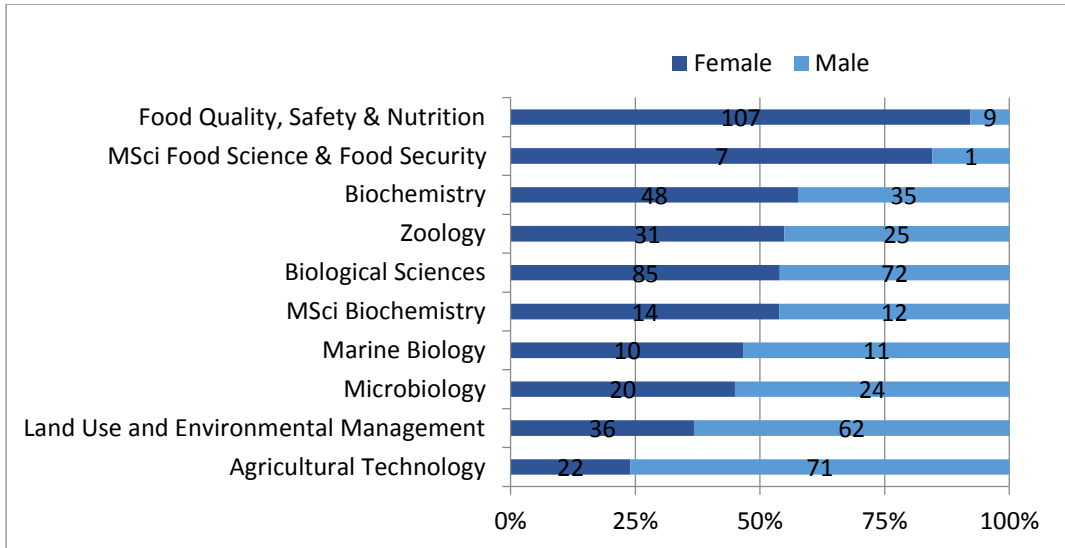


Fig 2. Number of female and male students enrolled on the different undergraduate degree pathways at SBS between 2011 and 2015.

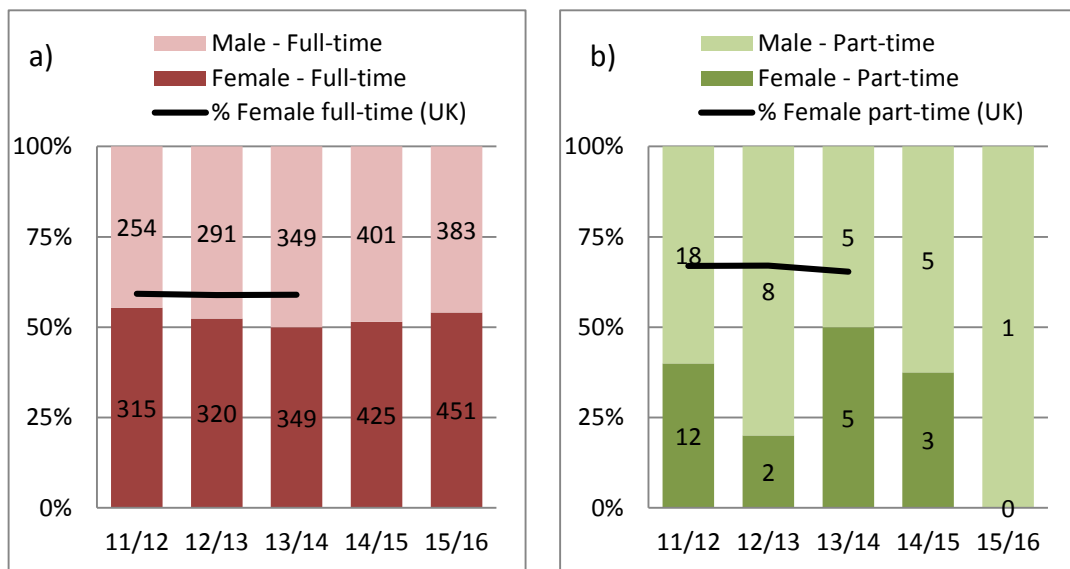


Fig 3. Number of female and male students enrolled on: a) full-time and b) part-time undergraduate degree courses at SBS between 2011 and 2015. Solid black line shows percentage of female students in comparable courses across the UK (source = ECU).

- Ratio of females:males on full-time courses has remained constant over the last 5 years (Fig. 3a).
- Since 2012, the number of full-time undergraduate students has increased (~570 students to >800) and the number of part-time students has declined in line with national trends; whilst external economic drivers may be

responsible, we will investigate this through student interviews (see **Action Plan**).

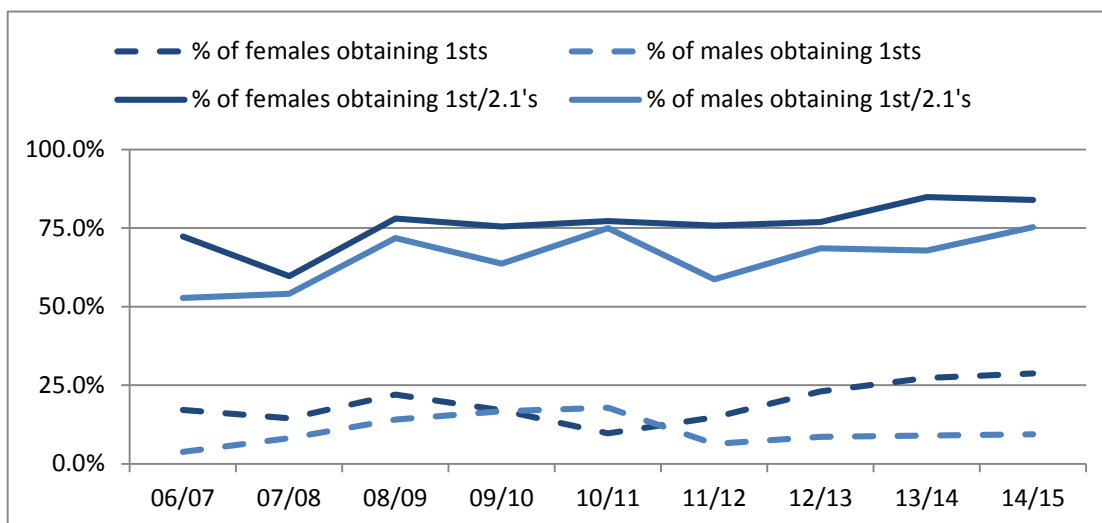


Fig. 4 Percentage of female and male undergraduate students obtaining 1st class and 2.1 degree qualifications at the SBS, 2006-2014.

- 2006-2014, female students were more likely to achieve 1st class degrees than males (19% of females, 10% of males attained 1st class degrees; Fig 4)². A similar pattern is observed in students attaining either 2.1 or 1st class degrees (76% female, 65% of male students³; Fig. 4); female performance is slightly higher than UK averages (between 2011-2013; 18% of females, 14% of males obtained 1st class degrees; 54% of females, 46% of males obtained 2.1's).
- In 2016/17 SBS will commence a new 2-year FdSc in Biological Sciences in conjunction with Belfast Metropolitan College. Currently, 27 female (48%) students have applied for this inaugural year.
- SBS offer a FdSc in Energy, Environment and Sustainability in partnership with South West College in Omagh, where it is delivered, which is an articulation route to our BSc Honours *Land Use and Environmental Management* degree. This course has lower female participation than males over the last 5 years (14-31%)⁴. Here the total number and percentage of part-time female students fluctuates widely (0 to 50%), as the overall number of students choosing the part-time option declines (1-15 students

² Binomial GLM – Difference in mean female and male: $z = -4.251$, $df = 1,16$, $p < 0.001$

³ Binomial GLM – Difference in mean female and male: $z = -3.007$, $df = 1,16$, $p = 0.008$

⁴ Binomial GLM, - Difference in proportion of female students at SBS and UK: $z = 6.97$, $df = 1,6$, $p < 0.001$

over last 5 years), reflecting national trends. We are endeavouring to identify barriers to females taking the course and are assessing the effectiveness of improved marketing strategies.

- Although >50% of our undergraduate students are female, we will continue to increase the visibility of females as successful scientists to highlight the further career progression and potential opportunities for our student population to address the leaking pipeline further down the line.

(ii) **Postgraduate male and female numbers on and completing taught courses – full and part-time**

- Our postgraduate taught MSc courses have consistently higher percentage of female students than similar courses in the UK (2007-2014⁵; Fig. 5). From 2006-2015, the percentage of females on postgraduate taught courses ranged from 62-73% (compared to 50-60% for undergraduate courses) and there is a similar pattern in part-time courses (Fig. 6).

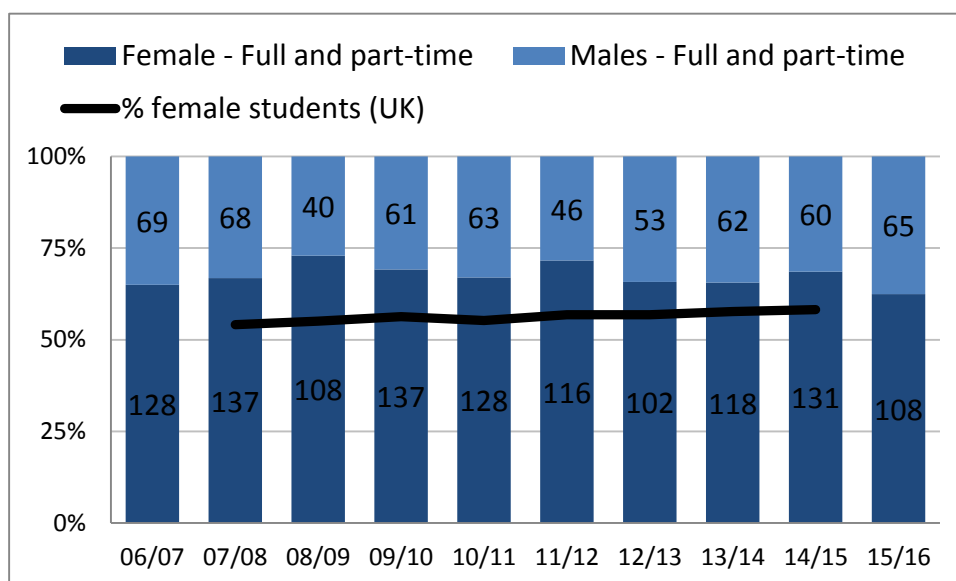


Fig. 5 Number of female and male students enrolled on post graduate taught courses at SBS between 2006 and 2015. Solid black line shows percentage of female students in comparable courses across the UK (source: HEIDI).

⁵ Binomial GLM – Difference in mean between QUB and UK: $z = 1.923$, $df = 1,14$, $p = 0.054$
 Difference in trend between QUB and UK: $z = -1.909$, $df = 1,14$, $p = 0.056$
 Overall trend: $z = 0.701$, $df = 1,14$, $p = 0.484$

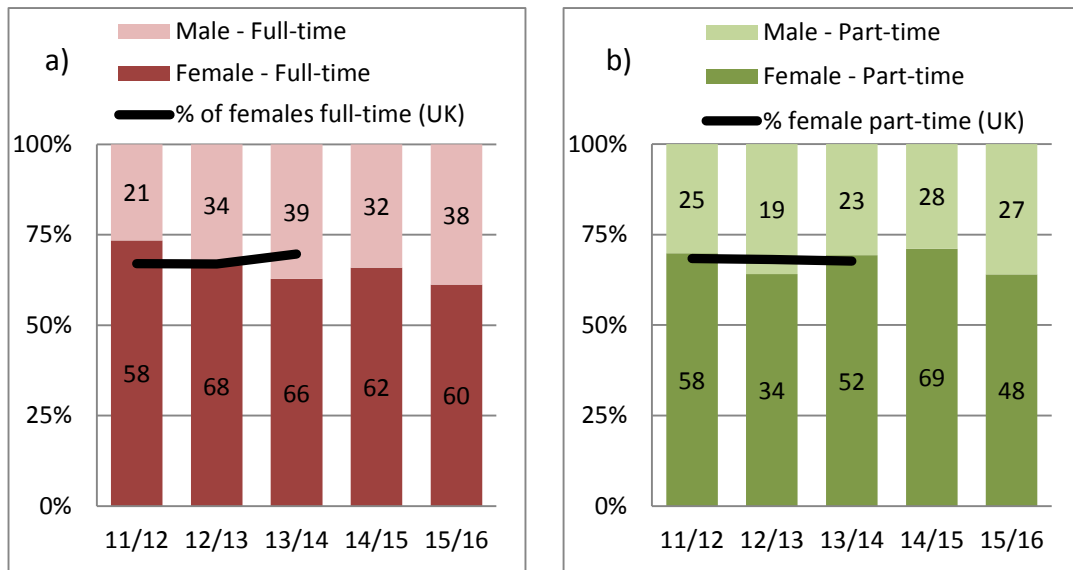


Fig. 6 Number of female and male students enrolled on a) full-time and b) part-time post graduate taught courses at SBS between 2011 and 2015. Solid black line shows percentage of female students in comparable courses across the UK (source: ECU).

- Taught MSc Completion rates show a similar picture with 67% of postgraduate degrees awarded to females (2010-2014⁶; Fig. 7).

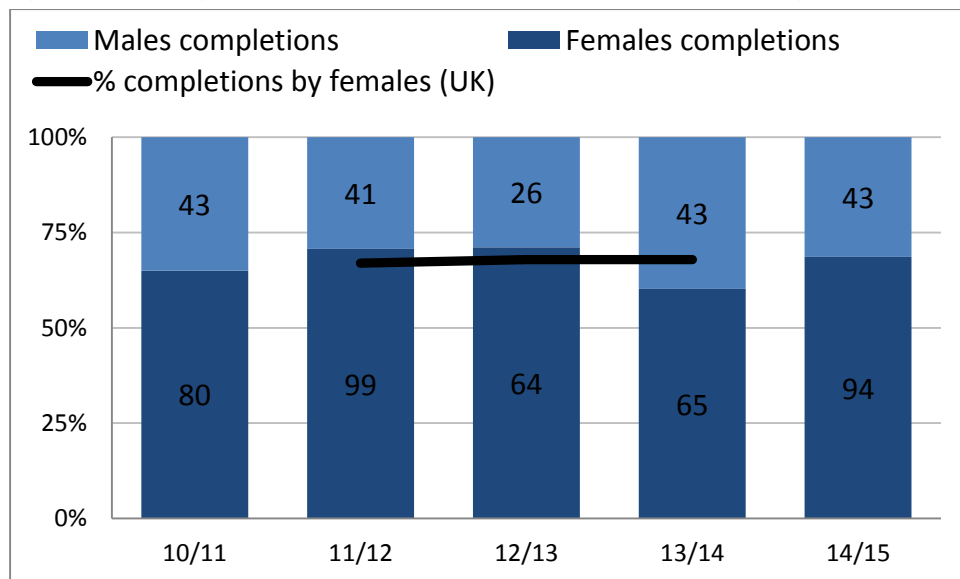


Fig. 7 Number of male and female students completing post graduate taught courses at SBS between 2010 and 2014. Solid black line shows percentage of completions awarded to female students in comparable courses across the UK (source: ECU).

⁶ Binomial GLM – Difference in mean between QUB and UK: $z = -0.509$, $df = 1,4$, $p = 0.844$
 Difference in trend between QUB and UK: $z = -0.509$, $df = 1,4$, $p = 0.611$
 Overall trend: $z = 0.701$, $df = 1,4$, $p = 0.197$

(iii) **Postgraduate male and female numbers on and completing research degrees and completion times – full and part-time**

- Between 2008-2015, female PGR students ranged from 51-59%, comparable to similar biological sciences PGR courses in UK (51-53%, 2008-2014; Fig. 8)⁷ and the percentage of full-time female PGRs (51-62%) has not varied significantly (Fig. 9(a)). The considerable variation in percentage of part-time female PGRs is driven by the very low numbers involved and students switching to part time towards time of completion (Fig. 9(b)).

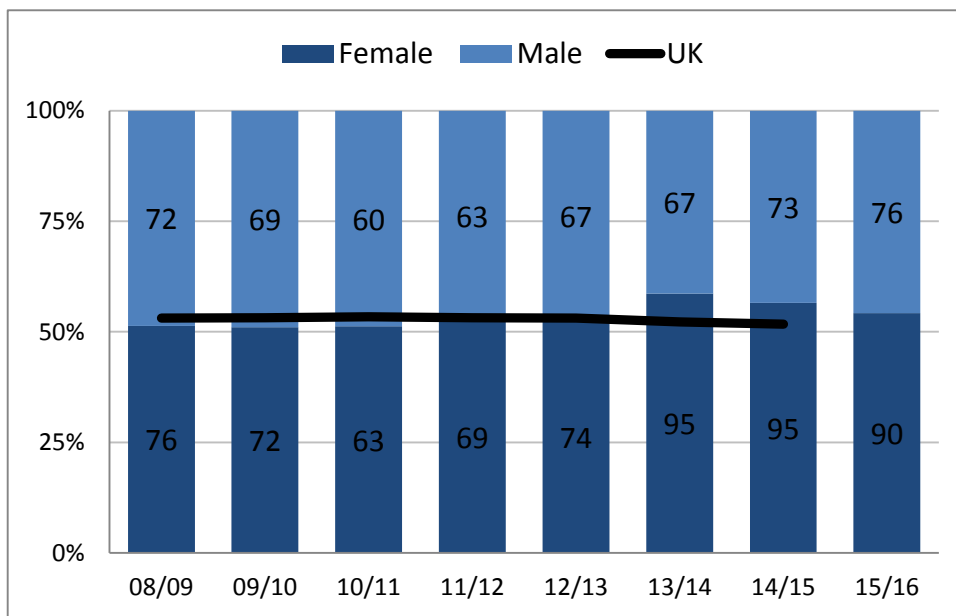


Fig. 8 Number of female and male students enrolled on post graduate research programmes at SBS between 2008 and 2015. Solid black line shows percentage of female students in comparable courses across the UK (source: HEIDI).

⁷ Binomial GLM – Difference in mean between QUB and UK: $z = 1.683$, $df = 1,11$, $p = 0.093$
 Difference in trend between QUB and UK: $z = -1.683$, $df = 1,11$, $p = 0.092$
 Overall trend: $z = 1.325$, $df = 1,11$, $p = 0.185$

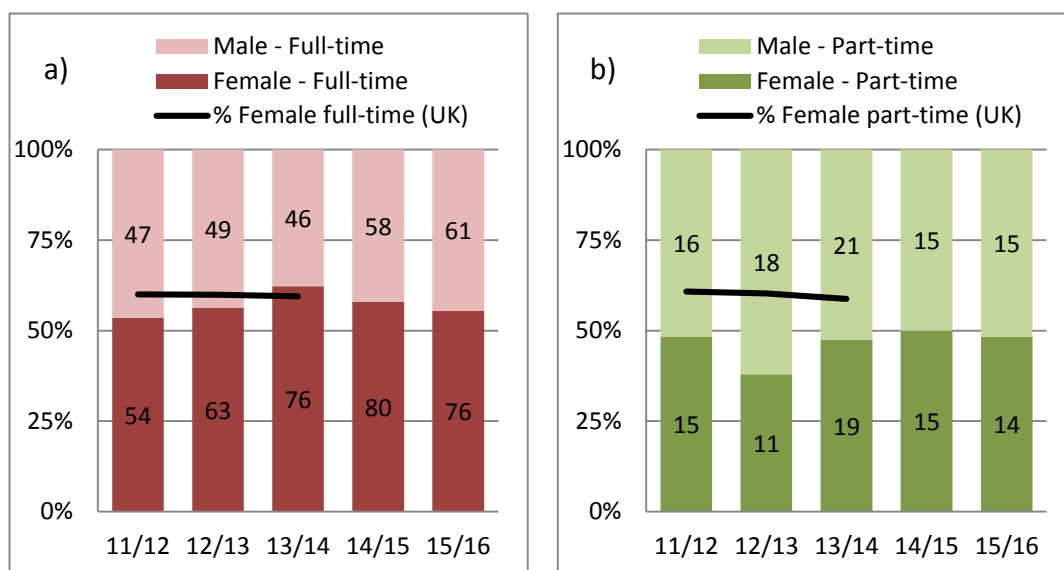


Fig. 9 Number of female and male students enrolled on a) full-time and b) part-time post graduate research programmes at SBS between 2011 and 2015. Solid black line shows percentage of female students in comparable courses across the UK (source: ECU).

- Postgraduate completions by female students were 43-61% (2010-2014; Fig. 10), which is similar to UK averages on similar courses (2011-2013; 60-61%) and consistent among years⁸. The percentage of completing female PGRs was slightly lower between 2013-2015 (49-55%), because of a previously lower female intake (45-53%; 2008-2010) and the associated time-lag.

⁸ Binomial GLM – Difference in mean between QUB and UK: $z = -0.398$, $df = 1,4$, $p = 0.690$
 Difference in trend between QUB and UK: $z = 0.400$, $df = 1,4$, $p = 0.689$
 Overall trend: $z = -0.518$, $df = 1,4$, $p = 0.605$

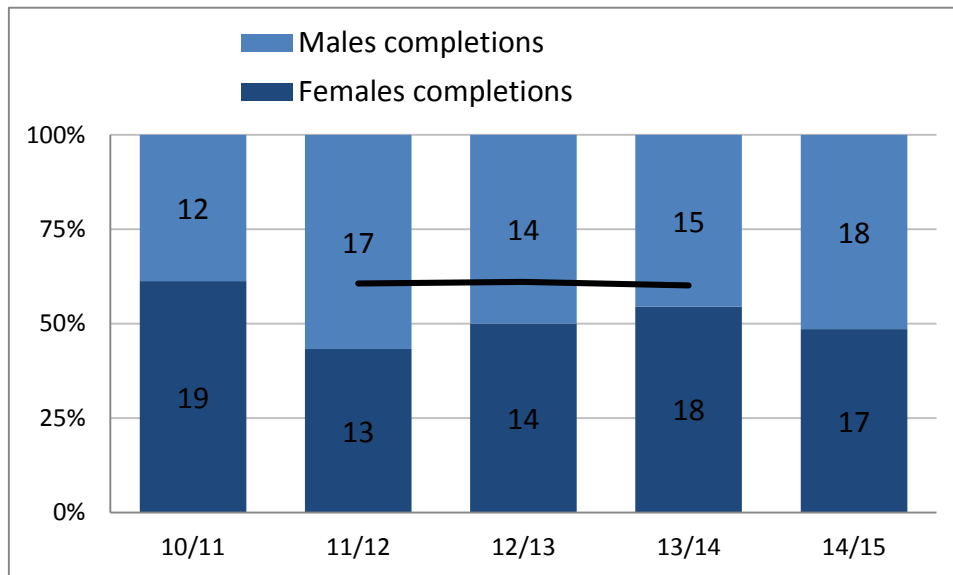


Fig. 10 Number of male and female students completing post graduate research programs in each year at SBS (2010 and 2014). Solid line shows percentage of completions by female students in similar courses across the UK (source: ECU).

- Between 2008-2015, at SBS, 218 PGR students graduated and the average time taken to complete was similar for females and males (Fig. 11)⁹. 73% of women completed within 5 years compared with 63% of men, however, this was not statistically significantly different¹⁰.

⁹ Poisson GLM – Difference between female and male – $z = 0.266$, $df = 1$, 216 , $p = 0.790$

¹⁰ Binomial GLM – Difference between female and male – $z = 0.600$, $df = 1$, 216 , $p = 0.549$

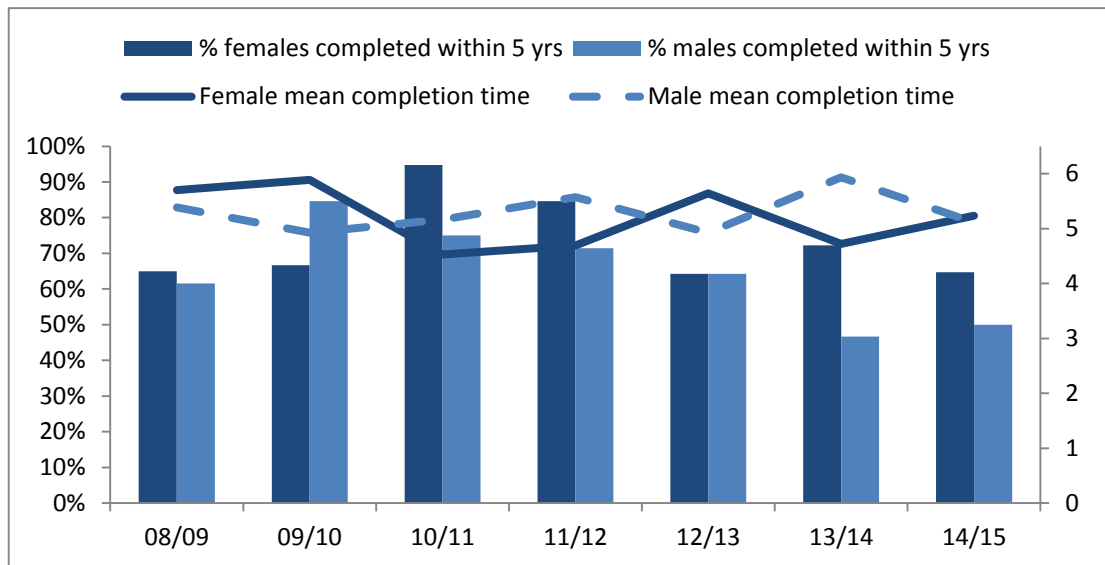


Fig. 11 Percentage of students completing their post graduate research programmes within 5 years and average number in years taken to complete, for female and male student at SBS between 2008-2014.

- Since 2012, female enrolment at undergraduate and postgraduate courses at SBS remain ~54% and grades at undergraduate and completion rates in postgraduate taught programs are higher for females.
- We are introducing new actions to further increase visibility of females to all students (see **New Action Plan**) to highlight further careers in science.

(iv) **Ratio of course applications to offers and acceptances by gender for (ii), (iii) and (iv) above**

(ii) Between 2010- 2014, 9,358 students applied for our undergraduate courses, and offers were made to 8,166 of these students, of which 1,384 were accepted. The proportion of female applicants receiving offers ranged from 0.85-0.90, similar to that for male applicants (0.84-0.91; Fig 12a)¹¹. The proportion of offers accepted by female/male applicants was also similar (0.17-0.18 and 0.15-0.18, respectively; Fig 12b)¹².

¹¹ Quasibinomial GLM – Difference between female and male: $z = -0.353$, $df = 1,8$, $p = 0.733$

¹² Binomial GLM – Difference between female and male: $z = -1.389$, $df = 1,8$, $p = 0.165$



Fig 12 Ratio of: (a) course offers to applications and (b) applications to acceptances, on undergraduate courses from 2010 to 2014.

(iii) Between 2011- 2014, 1,797 students applied for our PGT courses, and offers were made to 1,541 students, of which 765 were accepted. The proportion of female applicants receiving offers of places on PGT courses ranged from 0.88-0.92, and was consistently and significantly higher than the proportion of successful applications from males (0.69-0.87; Fig 13a)¹³ and the proportion of offers accepted was similar (Fig 13b)¹⁴.

¹³ Quasibinomial GLM – Difference between female and male: $z = -0.791$, $df = 1,8$, $p = 0.012$

¹⁴ Quasibinomial GLM – Difference between female and male: $z = -1.930$, $df = 1,8$, $p = 0.090$

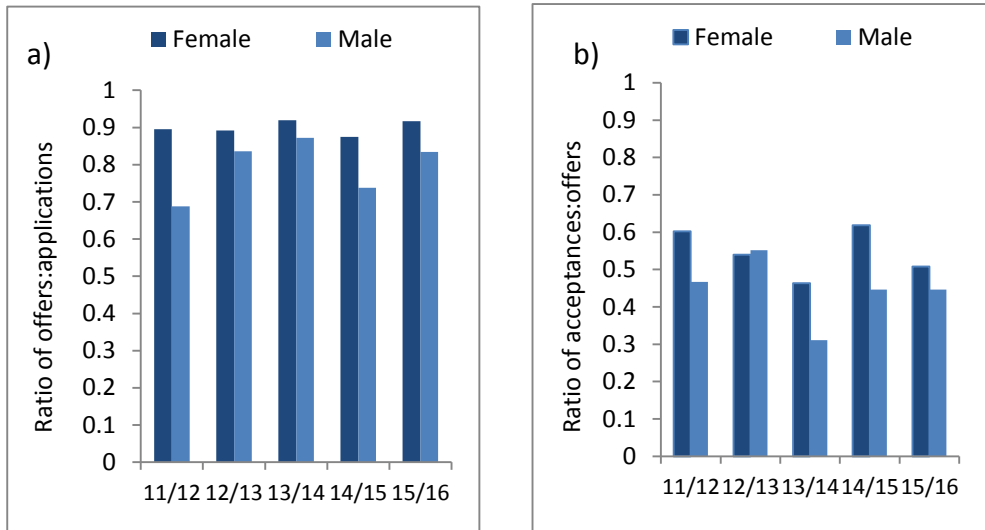


Fig 13 Ratio of: (a) course offers to applications and (b) applications to acceptances, on postgraduate taught courses from 2010 to 2014.

(v) Between 2011- 2015, 1,333 students applied for our postgraduate research programmes, and offers were made to 520 students, of which 245 were accepted. Offers were made to similar proportions of female and male applicants (Fig. 14(a))¹⁵. There was no difference in the proportion of female and male students who accepted PGR places (Fig. 14(b))¹⁶.

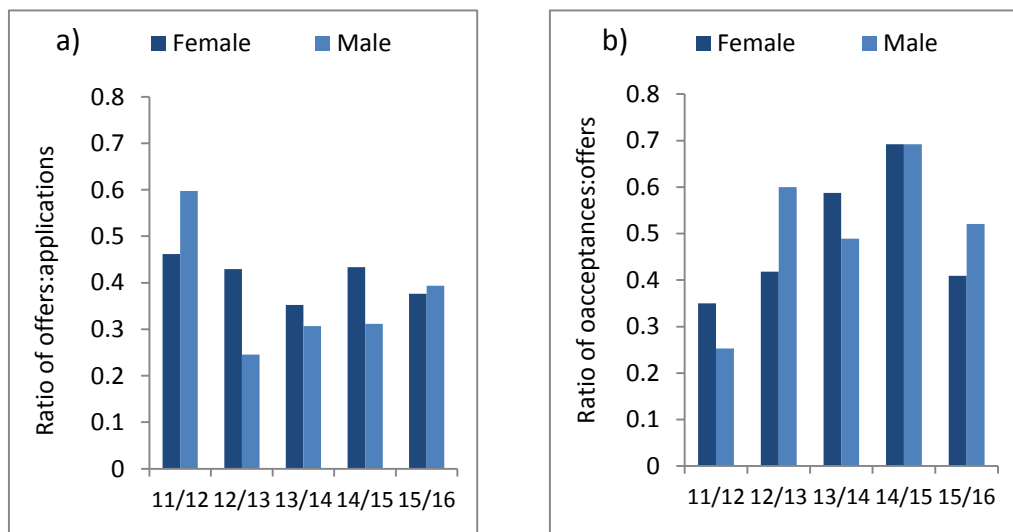


Fig 14 Ratio of: (a) course offers to applications and (b) applications to acceptances, on postgraduate research programmes from 2011 to 2015.

Staff data

¹⁵ Quasibinomial GLM – Difference between female and male: $z = -0.497$, $df = 1,8$, $p = 0.633$

¹⁶ Quasibinomial GLM – Difference between female and male: $z = -0.182$, $df = 1,8$, $p = 0.860$

(vi) **Female:male ratio of academic staff and research staff –** researcher, lecturer, senior lecturer, reader, professor (or equivalent).

- Since 2006, SBS has grown substantially and the proportion of female academic staff has risen continually from 32-41% (Table 1; Figure 15)¹⁷.

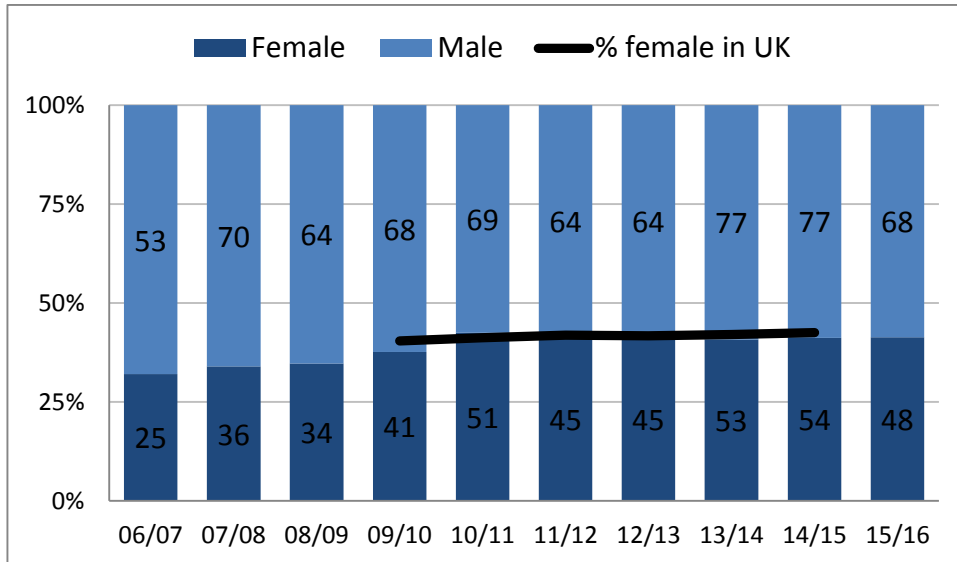


Fig. 15 Percentage of female academic staff at the School of Biological Sciences between 2006 and 2015. Solid black line shows benchmark % of female staff within similar departments across in the UK (data from HEIDI).

Table 1. SBS staff gender breakdown by grade over ten years, 2006-2015.

	Title	Female		Male		Total
		N	%	N	%	N
2006/2007	Researcher	17	48.6%	18	51.4%	35
	Lecturer	5	22.7%	17	77.3%	22
	Senior Lecturer/Reader	1	7.7%	12	92.3%	13
	Professor	2	25.0%	6	75.0%	8
	Total	25	32.1%	53	67.9%	78
2007/2008	Researcher	26	45.6%	31	54.4%	57
	Lecturer	6	22.2%	21	77.8%	27
	Senior Lecturer/Reader	2	15.4%	11	84.6%	13
	Professor	2	22.2%	7	77.8%	9
	Total	36	34.0%	70	66.0%	106
2008/2009	Researcher	24	46.2%	28	53.8%	52
	Lecturer	6	26.1%	17	73.9%	23
	Senior Lecturer/Reader	2	14.3%	12	85.7%	14
	Professor	2	22.2%	7	77.8%	9
	Total	34	34.7%	64	65.3%	98
2009/2010	Researcher	29	50.9%	28	49.1%	57

¹⁷ Binomial GLM – Difference in mean between QUB and UK: $z = 1.175$, $df = 1,13$, $p = 0.240$
 Difference in trend between QUB and UK: $z = -1.172$, $df = 1,13$, $p = 0.241$
 Overall trend: $z = 1.863$, $df = 1,13$, $p = 0.062$

	Lecturer	8	28.6%	20	71.4%	28
	Senior Lecturer/Reader	2	13.3%	13	86.7%	15
	Professor	2	22.2%	7	77.8%	9
	Total	41	37.6%	68	62.4%	109
2010/2011	Researcher	33	55.9%	26	44.1%	59
	Lecturer	8	28.6%	20	71.4%	28
	Senior Lecture/Reader	8	34.8%	15	65.2%	23
	Professor	2	20.0%	8	80.0%	10
	Total	51	42.5%	69	57.5%	120
2011/2012	Researcher	28	58.3%	20	41.7%	48
	Lecturer	7	25.9%	20	74.1%	27
	Senior Lecture/Reader	8	36.4%	14	63.6%	22
	Professor	2	16.7%	10	83.3%	12
	Total	45	41.3%	64	58.7%	109
2012/2013	Researcher	27	55.1%	22	44.9%	49
	Lecturer	9	33.3%	18	66.7%	27
	Senior Lecturer/Reader	8	36.4%	14	63.6%	22
	Professor	2	15.4%	11	84.6%	13
	Total	46	41.4%	65	58.6%	111
2013/2014	Researcher	34	54.0%	29	46.0%	63
	Lecturer	9	30.0%	21	70.0%	30
	Senior Lecturer/Reader	8	34.8%	15	65.2%	23
	Professor	2	14.3%	12	85.7%	14
	Total	53	40.8%	77	59.2%	130
2014/2015	Researcher	35	52.2%	32	47.8%	67
	Lecturer	9	31.0%	20	69.0%	29
	Senior Lecturer/Reader	8	38.1%	13	61.9%	21
	Professor	2	14.3%	12	85.7%	14
	Total	54	41.2%	77	58.8%	131
2015/2016	Researcher	29	51.8%	27	48.2%	56
	Lecturer	10	31.3%	22	68.8%	32
	Senior Lecturer/Reader	8	50.0%	8	50.0%	16
	Professor	1	8.3%	11	91.7%	12
	Total	48	41.4%	68	58.6%	116

- Since 2006, the percentage of female post-doctoral researchers has fluctuated (46-58%) while the percentages of female lecturers (23-31%), senior lecturers and readers (8-50%) have risen sharply. The increase in female senior lecturers reflects an increase from 2 to 8 resulting from procedures put in place as part of our original AS Action Plan.
- The increase in percentage of females at senior level was partly driven by male retirements (2015-2016). The number of female professors was consistent from 2006-2014, but declined recently from 33-14%. In 2015, we lost one full-time female professor (appointed [REDACTED] [REDACTED] and a 0.2 female professor ([REDACTED] [REDACTED] however, one female was promoted to professor in 2016 and we plan to make several new high-level appointments this year.

(vii) **Turnover by grade and gender**

- Between 2011-2015, our average annual turnover of research and academic staff was 18.7% with highest turnover among contract researchers (30.5%; 31.7% females, 28.9% males; Fig 16); UK baseline data (2012/13 and 2013/14) show lower turnover rates in biosciences (22.5% females, 21.5% males). This difference is most likely the result of NI government cutbacks that ended a long-standing contract, resulting in ECR redundancies in 2015.
- Between 2011-2015, 25 academic staff left (7 females; 28%), and our total academic staff turnover of 8% during this period remains in line with the UK benchmark of 6% (bioscience leavers on teaching/research contracts 2012-13 and 2013-14). The slightly elevated levels in SBS are explained by high staff turnover in senior positions in 2015 (28.5% at senior lecturer/reader level and 30.7% of professors) following an early retirement scheme at QUB in response to government cuts (Fig. 16, 17, 18). We have included data for professorial level for completion (Fig. 19).

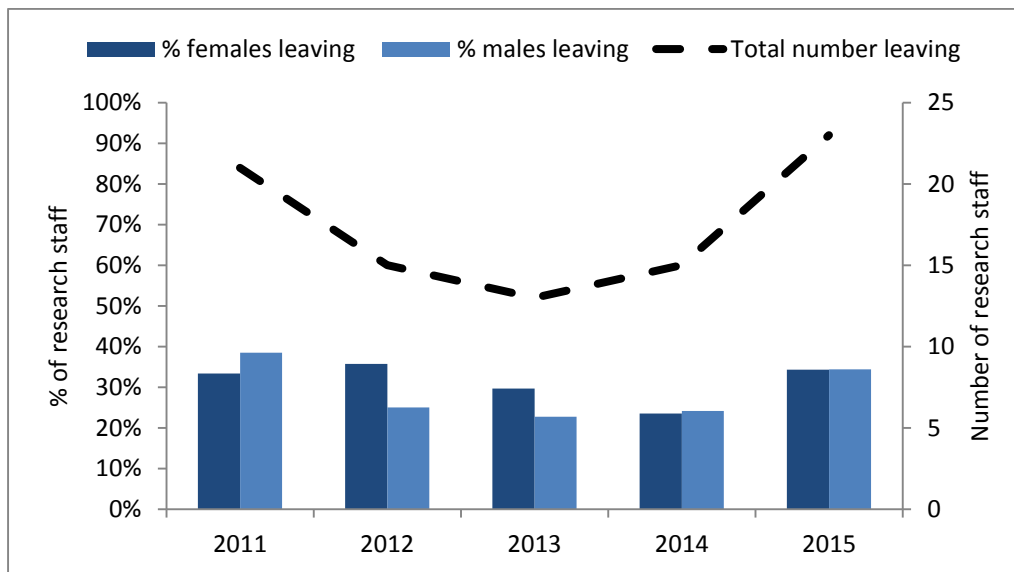


Fig. 16 Percentage research staff turnover and number of research staff who left School of Biological Sciences 2011-2015.

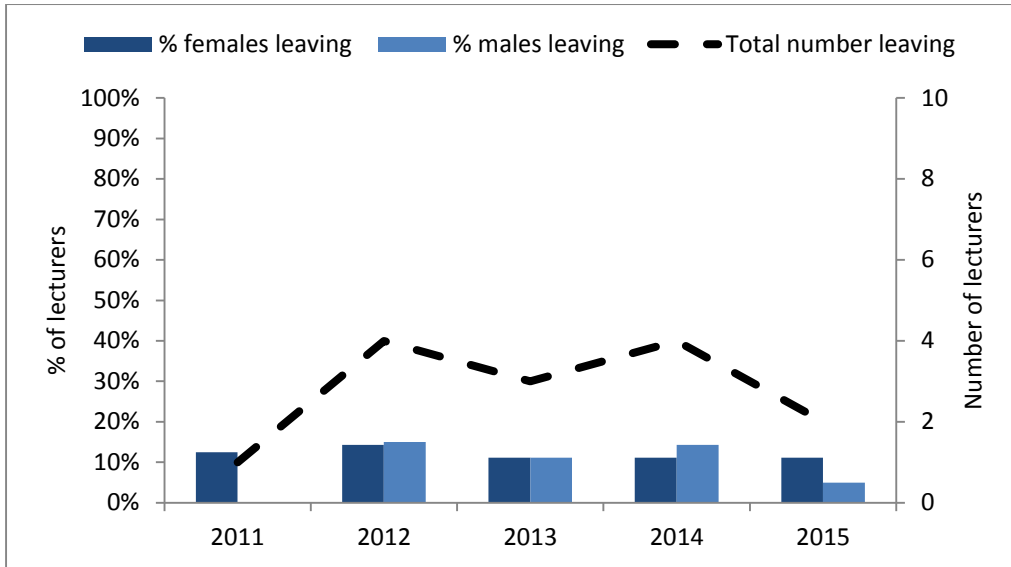


Fig. 17 Percentage lecturer staff turnover and number of lecturers who left School of Biological Sciences 2011-2015.

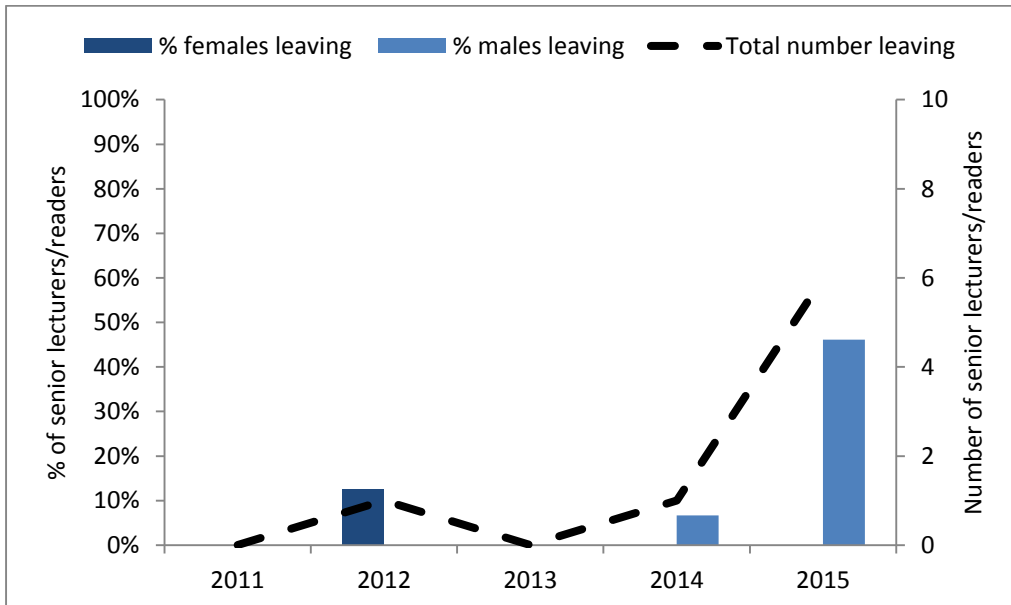


Fig. 18 Percentage senior lecturer/reader staff turnover and number of senior lecturers/readers who left School of Biological Sciences 2011-2015.

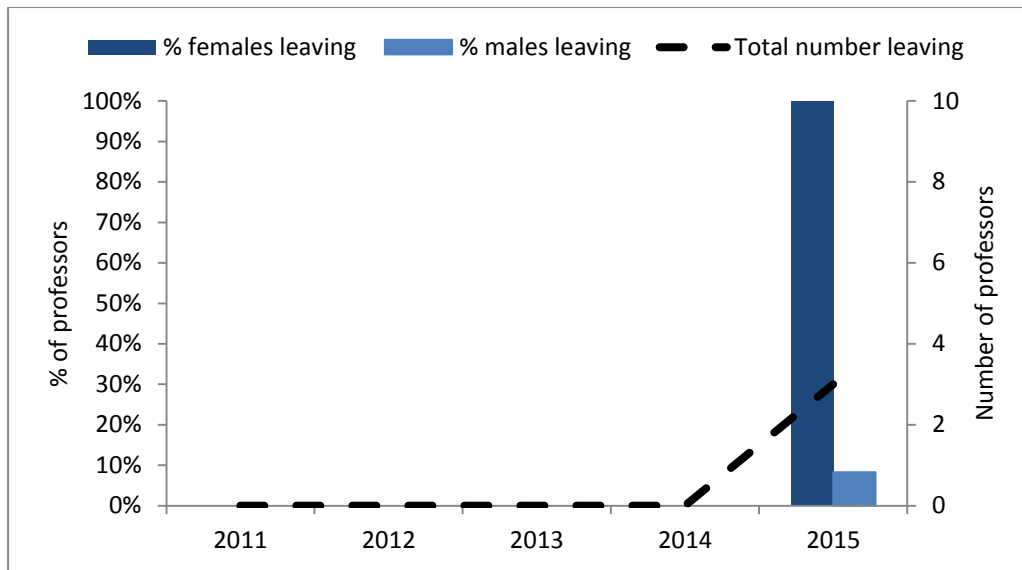


Fig. 19 Percentage professorial staff turnover and number of professors who left School of Biological Sciences 2011-2015.

- Despite the challenging economic environment, with more severe cuts than elsewhere in the UK, we maintained a 41% female complement of academic staff. The gender structure of SBS is changing - females now comprise 52% of 56 researchers, 32% of 33 lecturers, 50% of 16 senior lecturer/readers and 8% of 12 professors (Table 1). We are addressing the lack of female professors by recruiting 8-12 posts, and hope to appoint several women at senior level, as part of a major University investment in 2016.
- Our previous plan was successful in increasing the number of women appointed and promoted to more senior grades (detailed below). Many of these actions are now embedded in everyday practice at the school. Recommendations from our Action Plan have recently been agreed at Faculty Executive Board (FEB) level and will become standard policy across the Faculty.

(1,797 words)

Supporting and advancing women's careers – maximum 5000 words

Please provide a report covering the following sections. Within each section provide data and a short analysis for at least the last five years (including clearly labelled graphical illustrations where possible) on the data sets listed, commenting on changes and progress made since the original application, and including details of successes and where action have not worked.

Please also attach the action plan from your last application with an additional column indicating the level of progress achieved (e.g. zero, limited, excellent, completed).

4. Key career transition points

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

- Between 2011-2015, SBS has shown approximate gender equality in staff appointed, as 54% of new staff have been female (55% of new research staff, and 37% of academic staff (lecturer and above)). The percentage of new staff who are female fluctuates because of the low numbers hired in each year (Fig. 20 and Fig. 21).

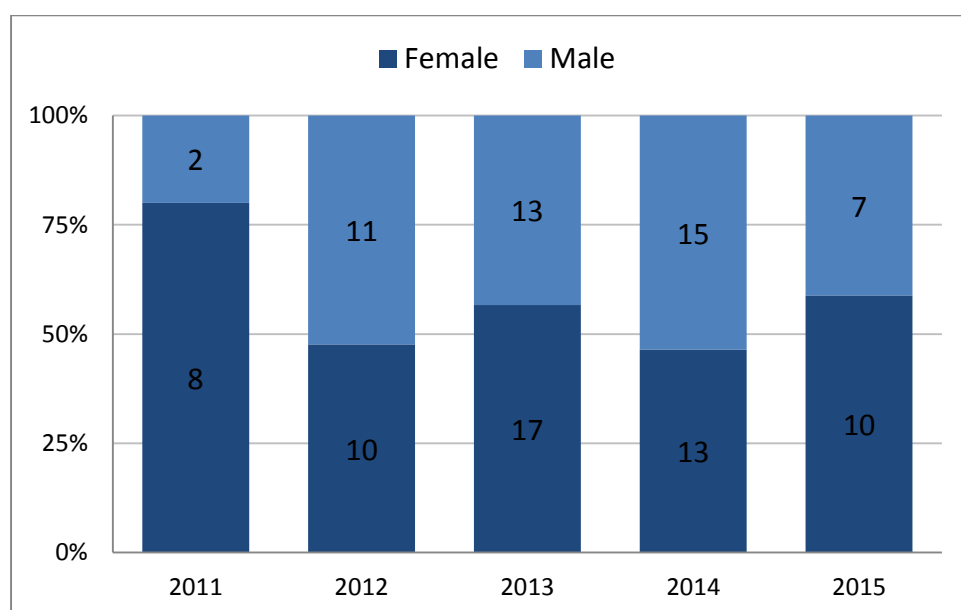


Fig 20 Number of new research staff of each gender, 2011-2015.

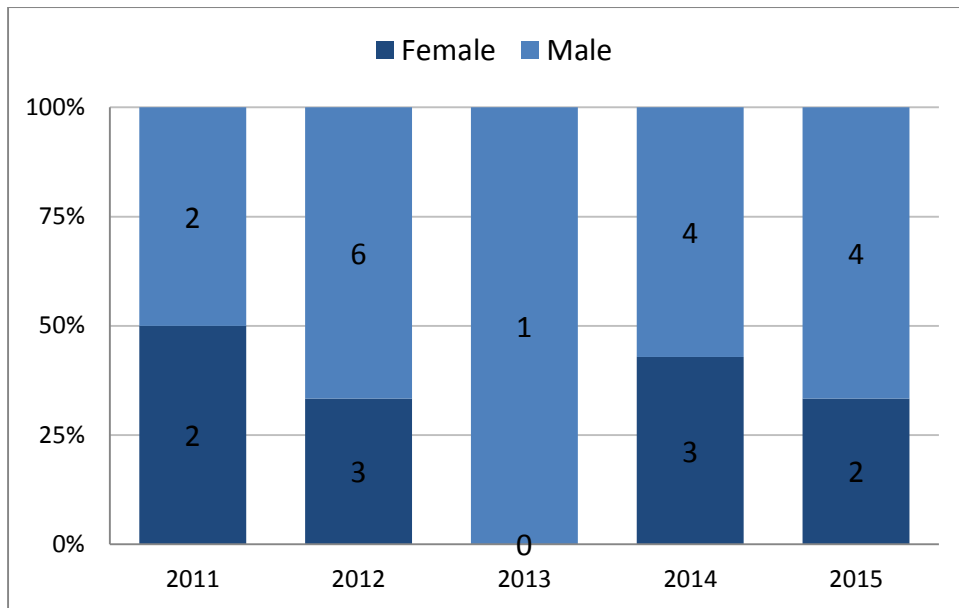


Fig. 21 Number of new academic staff at lecturer level and above of each gender, 2011-2015.

- Since 2012, our data indicate that the Action Plans have been effective in maintaining similar **success rates** for females (5.5%) and males (4.9%) for both research and lecturer positions (Figs. 22, 23).

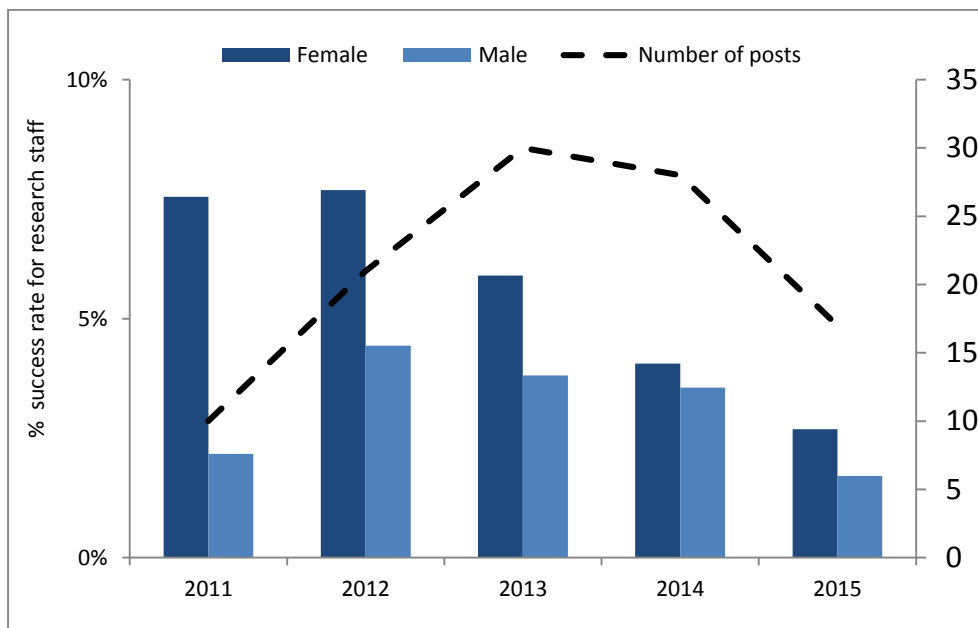


Fig. 22 Percentage success rates of applicants for research positions in SBS, 2011-2015.

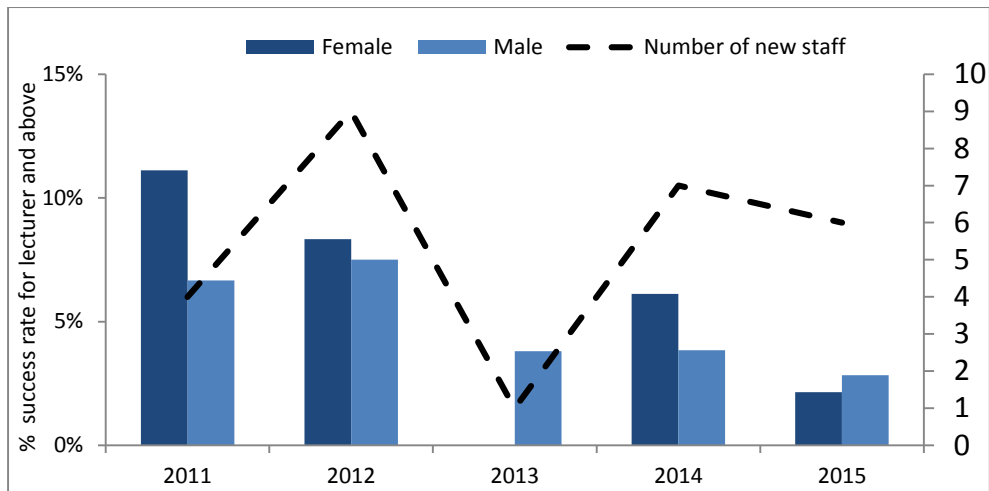


Fig. 23 Percentage success rates of applicants for positions at lecturer level and above in SBS, 2011-2015.

- Since 2012, application success rate for lectureship positions was 5.8% for women and 5.5% for men. Similarly, to research applications, success rates varied widely between years and were not consistently higher for either male or female candidates over the last 5 years (Fig. 23).
- Since 2012, one new Professor (male), one new Reader (female) and one new Senior Lecturer (male) were appointed from open academic recruitment.
- The % of females applying for academic posts at SBS is increasing. In 2015, 40% of all applicants were female, up from 34% in 2012 (Table 2). We have not reached 50% female application rates yet but there were fewer opportunities for appointment in this period than was originally anticipated. For example, owing to unforeseen budget constraints it was not always possible to advertise all posts in multiples.
- In 2016, we plan to recruit 8-12 new academic posts and we hope to appoint several women at senior levels. All staff are required to complete a one-day Selection Interview training course before joining any recruitment panel and we hope to integrate **mandatory unconscious bias training** with this scheme (**New Action**). We are producing a new IGFS brochure, which highlights current female staff, includes our AS achievements, and information about living and working in Belfast (NHS, excellent education systems and reasonable living costs) because most of our recent female

appointments came from overseas. Also, our SBS AS Champion is on the IGFS recruitment search team.

Queen's University Belfast

Academic Opportunities within the Institute for Global Food Security

Candidate Information April 2016

STAFF PROFILES

Professor Jayne Woodside
 Professor Woodside is currently Acting Deputy Director of IGFS, as well as Deputy Director of the Centre of Excellence for Public Health (Northern Ireland), and she leads the Nutrition and Health Grand Challenge within IGFS. Jayne joined QUB in 2003, following previous positions or periods of study at the University of Oxford and University College London. Jayne's research interests lie in the context of human nutrition intervention studies with whole foods and whole diets examining clinically relevant endpoints, the development of biomarkers to better measure dietary intake, and also in the development of behaviour change interventions to promote long term dietary change. She has published widely in the nutrition field, and is currently Editor in Chief of Nutrition Research Reviews and Chair of the Irish Section of the Nutrition Society.

Professor Andy Meharg
 Professor Andy Meharg, FRS, is Chair of Plant & Soil Science at the University. His research focuses on how nutrients and trace elements cycle within terrestrial systems, focusing on biotransformation, plant and microbial physiology and human exposure. Much of his work has been on understanding how the classic carcinogen heterocyclic aromatic amines (HCAs) becomes elevated in rice, and how that relates to dietary intake and subsequent biomonitoring using urine characterization. He also has considerable interests in selenium, cadmium and lead cycling in agronomic and natural ecosystems. His research is based around high-end analytical techniques to separate and localise elements in biological media such as C, N, P, S and selenium based micro-XRF. Professor Meharg works extensively in developing countries including Bangladesh, India, Sri Lanka, Tanzania, Ghana, Brazil and China on issues regarding rice nutrition. He has published ~300 papers and has an ISI h-factor of 42.

Dr Nessa O'Connor
 Dr Nessa O'Connor is an ecologist with special interests in biodiversity, ecosystem functioning relationships, coastal ecology, aquaculture and habitat restoration. Her research interests include the sustainable development of coastal resources (such as mussels, oysters and seaweed) and understanding the impacts of global change on the functioning and stability of marine ecosystems. She is a member of several academic networks and consortia including the innovative UK BBSRC-funded Sea Gas project, NERC/Delta-funded Marine Ecosystems Research Programme (MERP), NERC funded Coastal Biodiversity and Ecosystem Services Sustainability (CBES), Resources Aquaculture Outlets (RAO) and the Zostera Experimental Network (ZEN). Dr O'Connor has won several awards for her research including the EU Marie Curie Network Award for Excellence in Marine Biodiversity Research and she currently chairs the British Ecological Society Aquatic Group. Her research at QUB is funded by NERC, BBSRC, Interreg, the Royal Society and the Northern Ireland Environment Agency, Department of Agriculture and Rural Development and Department of Employment and Learning.

Dr O'Connor is a graduate of Trinity College Dublin (Environmental Science) and holds an MScAgr (Environmental Resource Management) and PhD (Ecology) from University College Dublin. Prior to her appointment at Queen's, she held several postdoctoral fellowships and carried out research at the University of North Carolina at Chapel Hill, University College Cork, University of Guelph and University College Dublin.

Dr Moira Dean
 Dr Moira Dean is a senior lecturer in consumer psychology and food security. Moira joined Queen's in 2007, appointed to the post of Lecturer within the School of Biological Sciences. She has carried out research into consumer food choice, food safety risk perceptions and food supply chain management in the area of organic.

WE ARE QUEEN'S UNIVERSITY BELFAST
We are exceptional!

Draft pages from new IGFS brochure (in press, April 2016)

Table 2 Breakdown of application to appointment pathway for all academic and research posts in SBS, 2013 – 2015. Showing success in short-listing, job offers and appointments made to female applicants.

Position	Applications received					Shortlisted					Offers					Appointees					Success rate	
	Female		Male		Total	Female		Male		Total	Female		Male		Total	Female		Male		Total	Female	Male
	n	%	n	%	n	n	%	n	%	n	n	%	n	%	n	n	%	n	%	n	%	%
2013 Researcher	288	45.8%	341	54.2%	629	57	45.6%	68	54.4%	125	18	54.5%	15	45.5%	33	17	56.7%	13	43.3%	30	5.9%	3.8%
Lecturer	4	14.3%	26	87.5%	30	2	22.2%	7	77.8%	9	1	33.3%	2	66.7%	3	0	0.0%	1	100.0%	1	0.0%	3.8%
Senior Lecturer	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Reader	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Professor	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total	292	44.3%	367	55.7%	659	59	44.0%	75	56.0%	134	19	52.8%	17	47.2%	36	17	54.8%	14	45.2%	31	5.8%	3.8%
2014 Researcher	320	43.1%	422	56.9%	742	46	44.7%	57	55.3%	103	15	48.4%	16	51.6%	31	13	46.4%	15	53.6%	28	4.1%	3.6%
Lecturer	49	30.5%	104	69.5%	153	12	33.3%	24	66.7%	36	3	42.9%	4	57.1%	7	3	42.9%	4	57.1%	7	6.1%	3.8%
Senior Lecturer	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Reader	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Professor	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total	369	41.2%	526	58.8%	895	58	41.7%	81	58.3%	139	18	47.4%	20	52.6%	38	16	45.7%	19	54.3%	35	4.3%	3.6%
2015 Researcher	372	47.6%	409	52.4%	781	49	47.1%	55	52.9%	104	14	66.7%	7	33.3%	21	10	58.8%	7	41.2%	17	2.7%	1.7%
Lecturer	93	39.7%	141	60.3%	234	13	39.4%	20	60.6%	33	2	28.6%	5	71.4%	7	2	33.3%	4	66.7%	6	2.2%	2.8%
Senior Lecturer	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Reader	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Professor	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total	465	45.8%	550	54.2%	1015	62	45.3%	75	54.7%	137	16	57.1%	12	42.9%	28	12	52.2%	11	47.8%	23	2.6%	2.0%

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

- Since 2012, 7 female academics have been promoted, five from Lecturer to Senior Lecturer, one Senior Lecturer was promoted to Reader and another was promoted to Professor (Table 3). This reflects the advancing career progression of the increased number of female academics at SBS since our previous award. The promotion success rate for women since 2009, is 62% (based on 13 women), compared to 31% for men (based on 26 men). Furthermore, over the last 5 years a slightly higher percentage of eligible female staff have been applying for promotion than eligible male staff (18% and 15% respectively), demonstrating that actions to support women applying for promotion have been effective.

Table 3. Breakdown of the number of applications for promotion from lecturers, senior lecturers and readers, 2011-2015.

Position	Applications received					Promotees					Success rate	
	Female		Male		Total	Female		Male		Total	Female	Male
	n	%	n	%	n	n	%	n	%	n	%	%
2011/12 Lecturer	1	50%	1	50%	2	1	100%	0	0%	1	100%	0%
Senior Lecturer	0	0%	1	100%	1	0	0%	1	100%	1	NA	100%
Reader	0	0%	2	100%	2	0	0%	1	100%	1	NA	50%
Total	1	20%	4	80%	5	1	33%	2	67%	3	100%	50%
2012/13 Lecturer	3	75%	1	25%	4	2	100%	0	0%	2	67%	0%
Senior Lecturer	0	NA	0	NA	0	0	NA	0	NA	0	NA	NA
Reader	0	NA	0	NA	0	0	NA	0	NA	0	NA	NA
Total	3	75%	1	25%	4	2	100%	0	0%	2	67%	0%
2013/14 Lecturer	2	25%	6	75%	8	1	50%	1	50%	2	50%	17%
Senior Lecturer	0	0%	1	100%	1	0	0%	1	100%	1	NA	100%
Reader	0	NA	0	NA	0	0	NA	0	NA	0	NA	NA
Total	2	22%	7	78%	9	1	33%	2	67%	3	50%	29%
2014/15 Lecturer	1	20%	4	80%	5	1	33%	2	67%	3	100%	50%
Senior Lecturer	1	50%	1	50%	2	1	100%	0	0%	1	100%	0%
Reader	0	NA	0	NA	0	0	NA	0	NA	0	NA	NA
Total	2	29%	5	71%	7	2	50%	2	50%	4	100%	40%
2015/16 Lecturer	1	100%	0	0%	1	1	100%	0	0%	1	100%	0%
Senior Lecturer	2	67%	1	33%	3	1	100%	0	0%	1	50%	0%
Reader	0	NA	0	NA	0	0	NA	0	NA	0	NA	NA
Total	3	75%	1	25%	4	2	100%	0	0%	2	67%	0%
Grand total	11	38%	18	62%	29	8	57%	6	43%	14	73%	33%

(iii) Impact of activities to support the **recruitment of staff** – 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. In particular comment on changes to the process and the impact of these changes.

- We have made progress since 2012 and the gap is narrowing, however, women are still less likely to apply than men even-though success rates are similar (around 5-6% for both). We addressed the need to encourage more women to apply in several ways since 2012 (see **Action Plan Progress Report**) and have developed these actions in response to employment

opportunities. For example:

- AS logo is displayed on our website and all promotional material. Previously, we reported '*discussion with appointees suggests that this is an important early indicator of the School's culture and supportive approach to female staff*'. Since 2012, most females were recruited from overseas and were not familiar with AS. We have added more text describing our commitment to the Charter and its aims on all recruitment material and on our new website (due April 2016).
- We have increased visibility of women on all promotional material (See Organisation and Culture section).



Dr [redacted] featuring in IGFS Facebook Page

- We advertised all posts in multiples where possible and we appointed one couple to two separate posts in 2013. Owing to unforeseen financial constraints and a limited recruitment capacity during this reporting period not all posts were advertised in multiples, however, 8-12 new posts will be advertised together in 2016.
- (iv) Impact of activities to **support staff at key career transition points** – interventions, programmes and activities that support women at the crucial stages including work on the Concordat, such as personal development training, opportunities for networking, mentoring programmes and leadership training. In particular comment on recent initiatives and their impact.
- We identified two key career transition points as: (i) the step from contract researcher to permanent academic position (**2012 Action Plan Theme 3**);

and (ii) the promotion of women to senior academic roles (**2012 Action Plan Theme 2**). Examples of how these actions are now ingrained in routine practice at SBS include:

- Reflecting management restructuring at QUB, there is now a faculty-wide Postdoctoral Society, which was invigorated and re-launched in 2016.
- SBS-SAT have held many sessions aimed at providing research staff with pertinent career information and support, for example, workshops were held on 'REF, Citations and Research Output' in 2013, 'Career Management – The How to Guide' in 2013, and 'Grants and Fellowships' in 2015. These are additional to events organised by our Faculty Research and Development Officer, e.g. European Research Council Grants workshops, which are promoted by SBS-SAT.
- Previously, we invited noted career coach, [REDACTED] to help with personal development, with sessions specifically targeted at helping women in science with career progression. We will have a focus group in 2016 to help female Postdoctoral staff identify barriers for women progressing in their scientific careers.
- We amended our formal mentoring policy - new staff are assigned an additional mentor who is not a member of their probationary committee. This mentor provides impartial advice independent of their probationary committee and can also remain involved as a mentor for future career hurdles.
- The increasingly important role of mentoring is recognised and SBS-SAT, with the School Manager, will ensure that all mentoring within and outside the school is recorded in the new WAM.
- Steps to encourage staff to prepare for promotion is now part of formal annual appraisal.
- Our previous gold Action Plan proposed a work-shadowing scheme for female academics to help women understand senior management roles in QUB and encourage applications for academic management positions. Two women availed of this opportunity. One lecturer shadowed the SBS Deputy HoS and another lecturer shadowed the HoS. Both reported that the experience was insightful in terms of witnessing management policies being implemented but also stressed the benefits of spending time with senior academics

discussing their administrative roles and the networking opportunity this experience provided (See **Action Plan Progress Report**). One of these lecturers was subsequently promoted to senior lecturer. Our new Action Plan aims for at least one female to take up this offer in each of the next three years. However, we will also be reviewing the practicality of this scheme and its implementation. This scheme was probably not promoted as widely or frequently as it should have been and this will be addressed in our new Action Plan.

- Management training is now promoted to suitable females during formal appraisals, e.g. QUB offer courses on *Excellence in Leadership* for managers and in *Management and Leadership in a Research Role*.

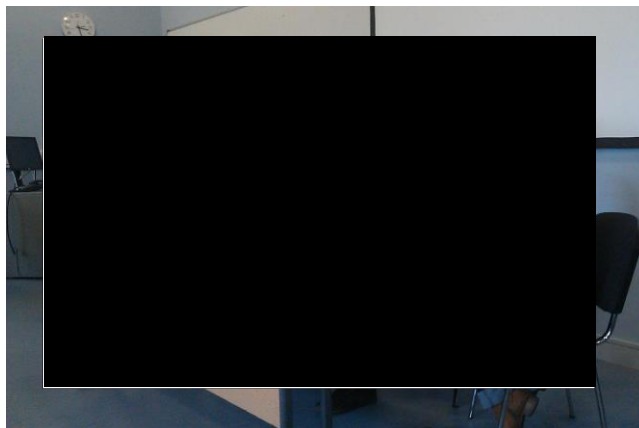
5. Career development

- (i) Impact of activities to support **promotion and career development** – appraisal and career development process, and promotion criteria.
 - We consider equality of opportunity very broadly, in line with recommendations of the RCUK Concordat to Support the Career Development of Researchers, and draw on review and reports by the ECU and initiatives, such as Vitae's '*Every Researcher Counts*'.
 - We previously identified research staff and PGR career support as priorities and introduced several Actions to improve the School's provision of this support. The overall focus of these Actions was to foster independence and the development of individual research directions for those of our research staff hoping for an academic career (2012 Theme 3). These actions are now standard practice, however, the SAT will continue to work with the new Postdoctoral Society to ensure these practices continue.
 - We are building on a strong foundation and good track record of encouraging women to apply for Fellowships and external awards. For example, we have several female recipients of EU Marie Curie Fellowships, L'Oreal Women awards, the London Materials Society award and Daphne Jackson Trust Fellowship (for STEM researchers to return after career break of two or more years for family, caring or health reasons). Many more female ECRs have submitted applications for Fellowships (e.g. Royal Society, Leverhulme, NERC, SFI, IRC) and been Co-Investigator on successful (e.g.

Dr. [REDACTED] [REDACTED] project) and unsuccessful project grants. Although some were unsuccessful, those involved have indicated that the application process has given them the confidence to try again in future years and an appreciation of the nature of academic career progression.

- We realise that there is a danger that academic careers receive too much kudos within our School at the expense of other, equally valuable, STEM careers. Accordingly, we understand that not all researchers need, nor want, to follow an academic career (based on recent survey results) and we aim to respond to all the career needs identified by our ECR community. When planning training activities, we focus on an awareness of transferable skills and the value of other STEM careers.
 - [REDACTED] SBS-SAT member, plays a vital role representing our school at the new faculty-wide Postdoctoral Society. In this capacity, the Society has negotiated a new appraisal proforma, which was designed specifically for contract researchers. Prior to this all teaching and research and research only staff were appraised with the same form. The new 'researcher appraisal' was proposed by the Postdoc Soc. and has been approved by FEB and will be used from next academic year.
- (ii) Impact of activities to support **induction and training** –support provided to new staff at all levels, and any gender equality training.
- The strong employment prospects of our staff testify to the general effectiveness of these programmes. SBS supplements QUB training and mentoring programmes (e.g. *Diversity Now* training course), with targeted events that are particularly appropriate to biologists and to ECRs.
 - New academic staff have a formal induction and we are currently updating the SBS staff handbook, which will be re-instated following discussions with new staff. The new handbook will include details of the teaching training courses that new lecturers are required to attend, e.g. PGCHET, Research Supervision Training, start-up grants [the university provides all new academic staff at lecturer-level with £10,000; SBS provides these appointees with an additional £17,000 support and a PhD studentship worth £60,000], probationary criteria and meetings, mentoring and all policies

- relating to flexitime, maternity leave etc.
- All contract research staff were members of SBS's Postdoctoral Forum and have been invited to participate in the new Faculty's Postdoctoral Society. SBS-SAT are closely involved with assisting the development of this new wider initiative for our ECRs.
 - We respond to the needs of ECRs and appreciate the transient nature of this group, thus, it may be necessary to repeat certain events annually and to continue to monitor awareness of our policies and the activities in place to ensure awareness among cohorts. This is being addressed explicitly in a new theme (**2016 Theme B**) added to our plan to avoid complacency and sustain excellence in gender and equality practices.
 - In 2015, ECR survey showed that 84% of respondents requested training in the preparation of grant and fellowship applications and SBS-SAT organised a very well-received workshop with experts from RCUK, EU Marie Curie and L'Oreal Award panels.



Panel at ERC Fellowship Writing Workshop

- In 2016, ECR survey respondents were overwhelmingly positive in their assessment of the school's efforts to create and maintain an equitable workplace for contract researchers. We identified a degree of disengagement: as one third of males and close to half (44%) the female ECR staff did not complete the questionnaire - most likely owing to survey-fatigue. We identified a continued desire for training in grant and fellowship writing and noted that female respondents sought a broader range of training opportunities than males and were more likely to seek training in support of careers outside of academia (Fig. 24).

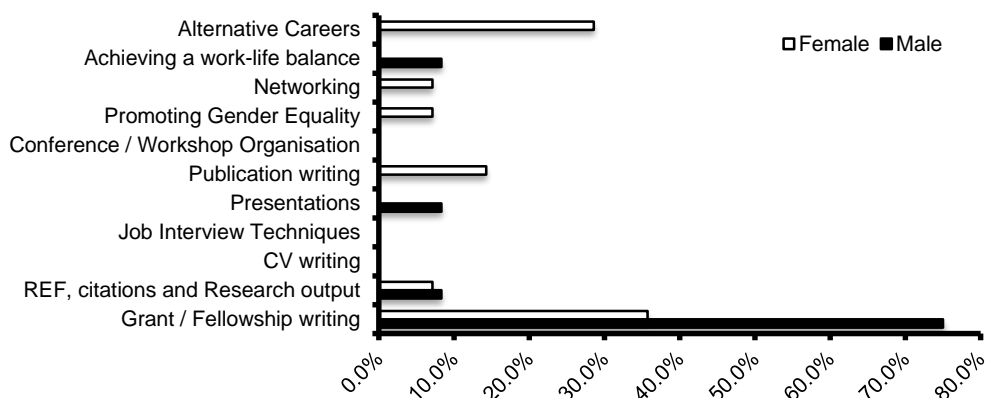


Fig. 24 Career development needs identified by contract research staff surveyed in 2016

- Staff and PGR students were surveyed with the HE STEM Gender Equality Culture Survey in 2014 and 2015. Results were positive with the majority of respondents agreeing or strongly agreeing with positive statements in each of the key areas (61% in participation and promotion, 73% in workplace culture, 76% in leadership and management and 67% in social responsibility). Other respondents stated that they “Didn’t know” rather than choosing to agree or disagree (e.g. 20% in participation and promotion, 17% in workplace culture, 7% in leadership and management and 11% in social responsibility) and this is being addressed in the 2016 Action Plan (**Theme B**).
- SBS-SAT and all members of the SMB were asked to complete unconscious bias testing online (Harvard University). We aim to have this added to the compulsory training for all staff at QUB.
- (iii) Impact of activities that **support female students** –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.
- **Postgraduate Induction** welcomes new students, provides orientation and clarifies the pros and cons of research and academic careers.
- We have a formalised **Personal Tutor** scheme for all undergraduates. Contributions to this scheme are embedded into the Stage 1 syllabus and staff contributions are recognised accordingly in our WAM (probation,

appraisal and promotion).

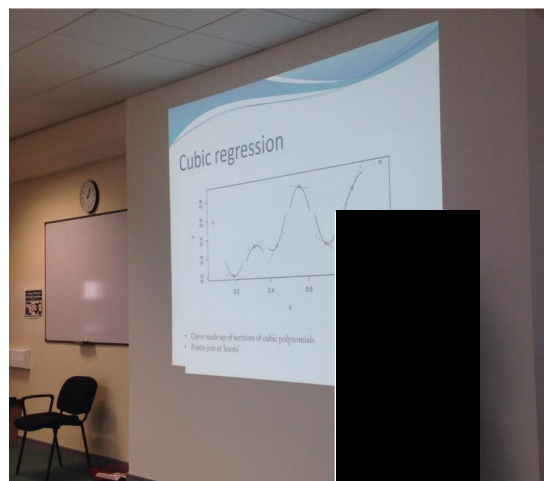
- Any student may request a female tutor (this will be stated explicitly in the next student handbook (**New Action Plan Theme B**)).
- We engage with students directly, via the undergraduate and postgraduate Staff-Student Consultative Committees (SSCCs). Both SSCCs meet regularly during the academic year and report to both the School Board and Students Union Council. SBS AS Champion is a permanent member of both SSCCs and AS updates are a fixed item on their agenda (**2016 Action Plan Theme B**).
- The SBS SU representative chairs the undergraduate SSCC and attends School Board Meetings, with a view to our expanding remit when we adopt the post-2015 AS charter.
- We have PGR students from each stage and representing different research clusters on SBS-SAT.
- Although we have more females at undergraduate level, we aim still to increase the visibility of females to students to showcase their continuing careers in STEM, e.g., by **balancing gender on all teaching modules** (currently very few modules have all-female or all-male teaching teams), monitoring the gender ratio of all **external examiners** (encouraging increased female participation) and encouraging the use of **texts** produced by females on all curricula (where appropriate) (**New Action Plan Theme B**).
- Currently, 20% of all external examiners are female (24% of PhD external examiners) and we aim to increase this by promoting our new Action Plan to all staff in 2016. We now also have two **Directors of Education** in the school (one female and one male).
- 2015 PGR student survey (45 responded from 166) showed that 97% were considering a career in research. 92% were 'very satisfied', 'satisfied' or 'neutral' with their opportunities to learn new skills and 95% were 'very satisfied', 'satisfied' or 'neutral' with their access to conferences/ networking opportunities.

- All PGR students have at least **two supervisors** at SBS and their progress is reviewed by **independent academics** (not members of their supervisory team), at 3 months (initial review), for formal differentiation (from MPhil to PhD candidate) at 9 months, and have annual reviews until thesis submission.
- Our students run a **peer-mentoring** scheme, the current chair (and previous two chairs) were both female SBS-SAT members.



Prof [redacted] at PGR welcome reception

- Our strong culture of female mentoring among PGR and ECRs is exemplified by the female-led leadership of our R clinic (statistics and coding support group) - a traditionally male-dominated topic.



6. Organisation and culture

(i) **Male and female representation on committees** – provide a breakdown by committee.

- Of the 12 core committees, 6 are chaired by women, one is chaired jointly by a man and a woman and 5 are chaired by men, highlighting the key role women are playing at SBS (Table 4).
- Currently, 79% of the 19 female lecturing staff are on committees and 80% of the 41 males. To avoid potentially over-burdening individual women with administrative responsibilities, all committee-work is included in our WAM and reported explicitly in probationary and promotion reports.

Table 4. Gender ratio of committee members and chairs at SBS in 2015/16

Committee name	Female	Male	%Female	Female chair (Y/N)
Education Committee	8	19	30%	*
Ethics committee	1	7	13%	Y
Exceptional circumstances committee	3	5	38%	Y
Internationalization committee	2	7	22%	N
Promotions panel	1	4	20%	N
Research committee	1	5	17%	N
Safety	4	4	50%	Y
School Management Board	4	8	33%	N
School Student Support (Post graduate)	3	7	30%	Y
SWAN SAT	10	6	40%	Y
Undergraduate/Staff Student Consultative	6	9	62%	N
Postgraduate/Staff Student Consultative	8	13	38%	Y
Total numbers/ mean %	51	94	35%	-

* Education committee has one male and one female chair who alternate between meetings.

(ii) **Female:male ratio of academic and research staff on fixed-term contracts and open-ended (permanent) contracts**

- Prior to our first Action Plan, the ratio of women on fixed-term vs. permanent contracts (roughly 2:1) was significantly higher¹⁸ than for men (roughly 1:1). By 2012, women and men both had a ratio of almost 1:3¹⁹. Currently, the vast majority of academic staff at lecturer level and above are employed on

¹⁸ Chi-square test, $X^2 = 4.0$, $df = 1$, $P = 0.04$.

¹⁹ T-test, $t = -5.48$, $df = 4$, $P < 0.01$.

- (iv) **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 transparent, fairly applied and are taken into account at appraisal and in promotion criteria.
- Since 2012, we have implemented the school's work allocation model (WAM). Initial contact hours were estimated originally by staff surveys matched with data collected from module timetables and student records. This model was considered by Deloitte, during the University's internal audit of its operation plan, and was determined to be transparent. The overall goal of the WAM is to limit the allocation of teaching and administration for all research-active staff to a maximum of 60% of the working week to allow staff space and opportunity to carry out research, develop their careers and contribute in other ways.
 - Current data also show that there are no significant differences in time allocated to the core categories of teaching and research based on gender (Fig. 25). For example in 2014-2015, the average teaching contact hours (unadjusted) for the 19 female academic staff ([REDACTED]) of all grades was 57 hours compared to 55 hours on average for 44 male academic staff across all grades.

STAFF DETAILS		PhD/MPhil SUPERVISION		RESEARCH GRANTS EXPENDITURE		PGT SUPERVISED PROJECTS (Hours)	
Surname:	██████████	No.:	5	2008-09	£0.00	Advanced Food Safety	0
Forename:	██████████	Principal	250	2009-10	£0.00	Animal Behaviour and Welfare	0
Staff Number:	██████████	Secondary	100	2010-11	£0.00	Ecological Management and Conservation Biology	0
Grade:	Lecturer	Tertiary	36	2011-12	£7,824.43	Molecular Biology and Biotechnology	0
Under Probation:	No	Total Hours	386	2012-13	£42,331.80	Leadership for Sustainable Rural Development	0
MODULE COORDINATION				Avg 2008-13	£10,031.25	Total Number of PGT Projects Supervised	0
Module Name	Level	Semester	Share	Total 2008-13	£50,156.23	HONOURS SUPERVISION	
Biology 101	2	2	1			No. Students	Credit Hours
Biology 102	2	2	1			Agricultural Technology projects (20 CAT)	0
TEACHING						Biological Sciences (40 CAT)	3
Module Name	Module Code	Level	Semester	No. Students	Lectures	Practicals	Tutorials
Biology 101	BY101	2	2	14	22	0	1
Biology 102	BY102	2	2	30	22	18	1
Biology 103	BY103	3	1	12	2	11	3
				Total hours spent in teaching:		110	418.8
		All-staff	Excluding staff under probation:	Staff under probation:			
No.:	59	No.:	52	No.:		7	
School avg. teaching hours (raw):	65.5	School avg. teaching hours (corr):	251.6	School avg. teaching hours (raw):		47.9	
				School avg. teaching hours (corr):		157.9	
				School avg. (admin.) hours:		257.8	
				(excluding HoS, Directors, Probationary staff)			

Module Co-Ordination		Total Hours		Total		Average		3 Year Average	
Module Name	Level	Semesters	Share	660,067.79	345,184.00	110,011.30	49,312.00	140,002.67	98,849.00
Advanced Food Bioanalysis	Msc	1	1						
Teaching Hours	Module Code	Level	Semester	No. of Students	Lectures	Practicals	Tutorials	Seminars	Class Test
Food Policy	ALU 3010	2	2	30	0	0	0	0	0
Global Issues in Agriculture	ALU 3041	3	1	38	2	0	0	0	0
Food Safety, Health and Disease	ALU 8001	MSc	1	13	4	0	0	0	0
Advanced Food Bioanalysis	ALU 8002	MSc	1	12	16	12	3	5	0
Biochemical Basis of Disease	BBC 3045	3	2	23	4	0	0	0	0
				School average teaching hours 64.71(12/13)					
								Page 47 of 59	
								Biological Sciences	
								Food Quality, Safety and Nutrition	
								2	
								36	
								Total number Projects supervised/hours	
								2	
								90	
								Administration	
								School Board	
								11	
								School Forum	
								10	
								Module Co-ordinator	
								50	
								72	

Sample WAM output for senior academic staff member

- In 2015, a new WAM Faculty Project was initiated. Time allocations will now be standardised across the Faculty. We are working closely with other QUB schools and liaising with schools at Universities of Glasgow, Limerick and York. SBS School manager, ██████████ has been invited to join a UK University working group to identify best practice with WAM. We will be including recommendations from the University of Salford's Report²¹ which will be presented to our Faculty Executive Board for formal approval and ratification along with the new Faculty-wide WAM. Faculty Pro-Vice Chancellor, ██████████ agreed that all templates for WAM will

²¹ Promoting Positive Gender Outcomes in Higher Education through Active Workload Management ECU, 2013

incorporate gender to enable better equality of treatment and greater transparency with regard to workload. The new WAM is currently being piloted across the School with female and male staff at different grades providing an excellent opportunity for the SBS-SAT to influence policy beyond the School.

- The role of SBS AS Champion/ Committee Chair is now shared between two posts since the implementation of the previous WAM in recognition of this increasing workload.

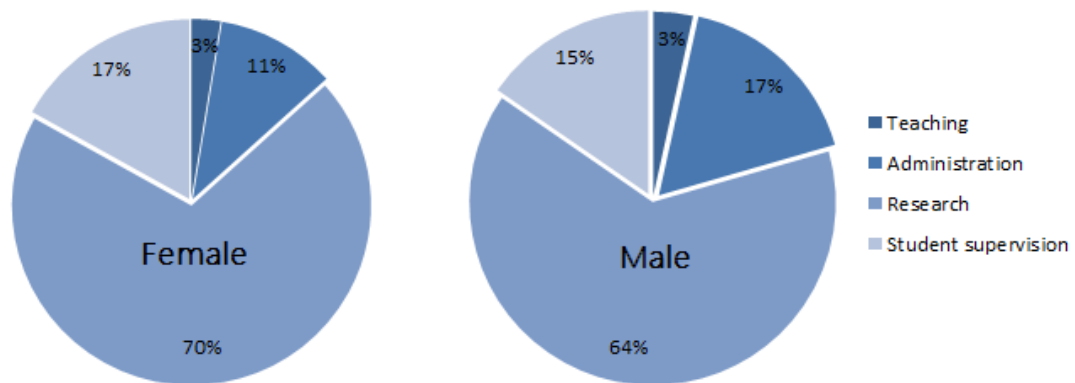


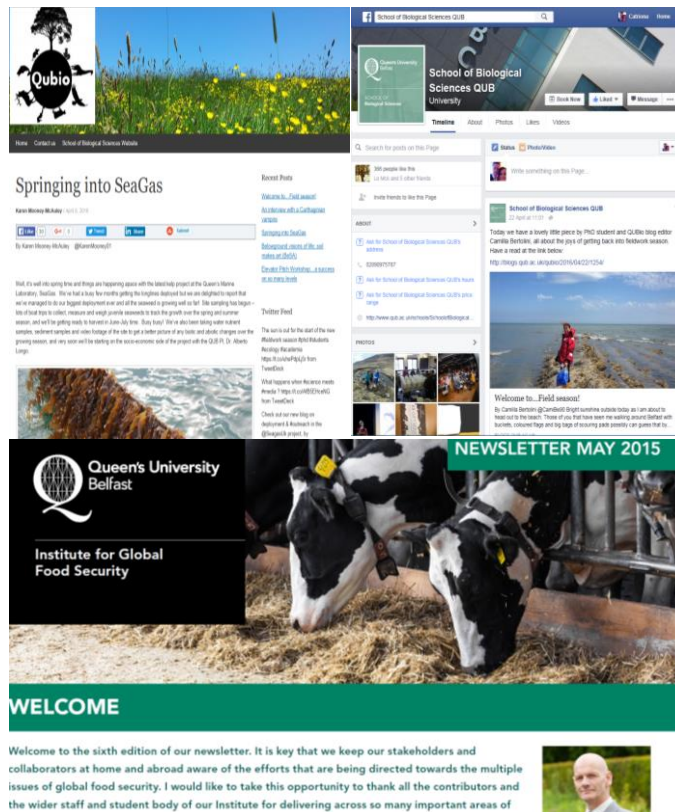
Fig. 25 WAM of time of female staff and male staff spent on core duties (raw data) for the year 2015/16.

- (v) **Timing of departmental meetings and social gatherings** – evidence of consideration for those with family responsibilities, for example what the department considers to be core hours and whether there is a more flexible system in place.
 - School policy is that key meetings take place within core hours (10.00 – 16.00 hours), Monday-Thursday. There are some exceptions, such as exam boards, are often on Fridays because they are determined by external examiner commitments and constrained by the required short reporting periods. These meetings are scheduled early in the academic year so that part-time staff can plan accordingly well in advance.
 - Core hours were identified as extremely helpful by nearly all staff approached to provide a case studies and who juggle work and family commitments.
 - Majority of school social events inside family-friendly hours.

- (vi) **Culture** –demonstrate how the department is female-friendly and inclusive and ensures visibility of women in science such as external speakers. ‘Culture’ refers to the language, behaviours and other informal interactions that characterise the atmosphere of the department, and includes all staff and students.
- In 2012, we outlined four specific actions to combat unconscious bias, within the culture of the school, recognizing that this can be displayed by both men and women to the detriment of both. The overarching aim was the normalization of female scientists in the workplace and their approaches to balancing academic success with other commitments (**2012 Action 2.9**). This was done in four main ways.

Updates on these specific actions since 2012:

1. Women now make up 33-44% of our invited speakers, and span all career stages from PhD candidates to FRS.
2. SBS produced a monthly newsletter (2011-2015), mixing personal and professional information to improve collegiality. The SBS Newsletter was replaced by the IGFS Newsletter, the SBS blog and Marine Lab/ IGFS/ SBS Facebook pages. All of these media frequently feature female-led activities and the latter two are edited by a predominantly female team. We monitor the gender of our ‘likes’ and hits and note that some of our most popular blogs were written by women.



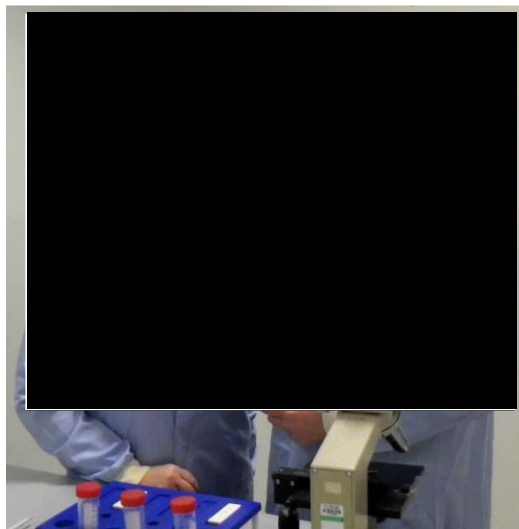
Collage of recent SBS Facebook posts, SBS blog and IGFS Newsletter

3. SBS is moving to a new site in 2018 and the plans for our new building were designed to encourage communication among School clusters, and collegiality among all staff – this includes a designated social space.
 4. School space is often used for gender-specific charity initiatives, e.g. Breast Cancer Awareness month, Movember, and Ada Lovelace Day. We also support non-gender specific charities (e.g. SBS marine biologists (lecturer, ERCs and technician) will shortly run the Belfast Marathon in relay to raise funds for the RNLI).
- Regular social events occur at all three sites, e.g., EBS cluster has Thursday morning coffee-and-homemade cake at the MBC, while the NITC/DKB site have their own coffee/buns sessions. We recently held a successful bake-off competition and the IGFS have an annual BBQ each summer.



SBS Bake-off event

- IGFS recently held a 'Dragon's Den' event where all researchers were invited to pitch their ideas to a team of 'dragons' from bioscience industry. There were eleven projects submitted, some individual and some as groups, and four of the projects were shortlisted. The Dragons decided that two projects were equally deserving of the £10k award, which was shared between two female winners, Drs [REDACTED] (SBS Senior Lecturer) and [REDACTED] (SBS ECR at [REDACTED]).



Drs [REDACTED] winners of IGFS Dragon's Den Competition

- SBS is supportive of women taking sabbatical to advance their research profile. For example, [REDACTED] (SBS Senior Lecturer [REDACTED]) is currently on sabbatical based in [REDACTED].

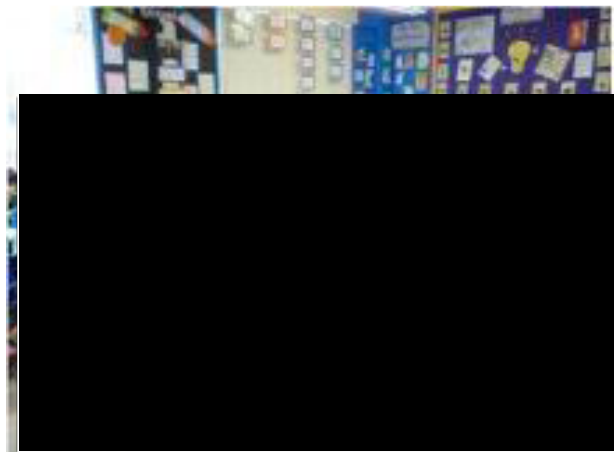
the University of California, Berkeley, USA, funded by a Marie Skłodowska-Curie Global Fellowship award from the European Commission. Also, last year we hosted Prof [REDACTED] (University of New Brunswick, Canada) who visited QUB on sabbatical funded by a Fredrik and Catherine Eaton Visitorship and a Lankester Investigatorship.

- **Outreach activities** – level of participation by female and male staff in outreach activities with schools and colleges and other centres.
- School outreach activities (i.e. those not relating to a specific research project) are monitored, included in our WAM and reported in probationary and promotion applications (**2012 Action 2.7**).
- Between 2012-2015, 116 staff days were spent on ‘official outreach’ activities with 32-43% female participation.
- Activities include the ever-popular annual SBS Science Olympiad, organised by [REDACTED] SBS Lecturer, and all 87 secondary schools in NI are invited to participate. Last year, 26 schools participated and typically 60-70% participants are female. The goal of the Bioscience Olympiad is to develop bioscience-oriented “academic thinking” and a creative approach to problem solving in school children. All teams must comprise at least one GCSE student, one lower 6th/AS-level student and one upper 6th/A2 student and no more than 5 people. Teams are invited to the MBC to participate in a practical section requiring hands on experimentation and problem solving and theoretical questions requiring creative thinking based on previously held knowledge of the subject. Outstanding individuals receive prizes along with the winning team who will also take home the Champions’ cup for their school to display until next year’s competition. Many participants have gone on to study science at QUB and other universities in Ireland/ UK. The Science Olympiad is sponsored by the Biochemical Society and the Irish Section of the Biochemical Society



Prof [REDACTED] and Dr [REDACTED] with winners of Science Olympiad

- Dr [REDACTED] SBS lecturer, organises the Primary Life Sciences (PLS) programme visiting local primary schools. In May 2015, we held a Primary Life Sciences at QUB event, which was captured on video and is freely available on YouTube. The Primary Food Science Programme, a spin-out of PLS, will be held at QUB in May 2016 with support from the Wellcome Trust.



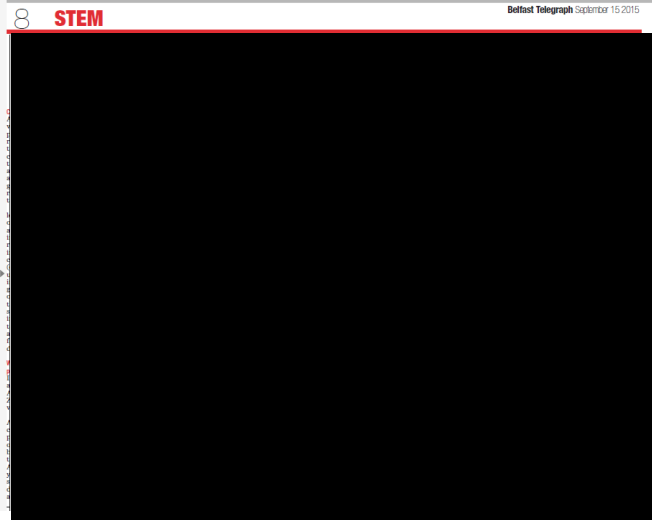
Dr [REDACTED] visiting a local primary school

- Many research projects include extensive outreach and media activities. For example, the Interreg-funded Enalgae project, which was led by a female PI with a female postdoc and female technician, incorporated an extensive programme of outreach activities including school visits, sponsorship of the Strangford Lough Maritime Festivals, radio interviews, features on popular television programmes, and several interactive exhibitions at shows.



SBS Marine Biologists with ITV film crew at QUB Marine Laboratory, Portaferry, Strangford Lough

- In 2014, the SBS blog, Qubio, was launched. Between April 2015 and April 2016 it amassed nearly 14,000 site visits (48% were from users registered as female) and the first and third most popular blogs were written by women.
- New SBS Facebook page and the QUB Portaferry Facebook pages are edited by a predominately female team and regularly feature females participating in research. They both have approximately similar proportions of male and female 'likes' (e.g. QUB Portaferry page has 52% female likes in April 2016).
- ██████████ (SBS-SAT member) regularly writes a blog for Energy BESS (the ECR wing of the NERC-funded Biodiversity Ecosystem Services Sustainability programme) and highlights her work as part of the CBESS (Coastal Biodiversity and Ecosystem Services Sustainability) project at QUB.
- Two SBS ECRs, ██████████ were highlighted in a special supplement published by the Belfast Telegraph to promote careers in STEM.



and

- SBS has an excellent work placement scheme, including a career development reflection programme, which is accredited by Degree Plus; to date nearly 60% of participants are female.
- A new initiative, '**Biosciences Workplace Study Tour**', was piloted in 2015. In conjunction with Queen's Career's Employability and Skills Service, SBS took 14 undergraduate participants (71% female) to the 'Golden Triangle' area of England and visited potential employers. The Bioscience Workplace study tour will become an annual event with plans in place for the tour in 2016.



Bioscience Workplace Study Tour

7. Flexibility and managing career breaks

(i) Maternity return rate

- Between 2012-2015, 24 periods of maternity leave were taken by academic staff (13 contract researchers and 11 permanent staff), including some females who took maternity leave twice.
- All but one returned to work, thus, maternity return rate is high (97%).

(ii) Paternity, adoption and parental leave uptake

- Between 2012-2015, 10 male staff took paternity leave (7 contract researchers and 3 permanent academics).
- 5 staff took dependent leave including 4 contract researchers (1 female and 3 male) and one female lecturer.
- All requests for family leave were granted.

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

- (i) **Flexible working** – 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.
- Flexible working is available for all our staff because work hours are not fixed and most have an informal arrangement, e.g. many academics work from home when they choose to or leave early to collect children etc. For example, [REDACTED] works from home 2-3 days a week to balance family ([REDACTED]) and work commitments.

- All requests for formal flexibly working arrangements were granted. There are currently ■ members of academic staff with formal flexible working arrangement, e.g. ■
 - Details of formalised flexible working arrangements are available through HR and we are updating the SBS staff handbook to signpost staff to these policies. The new SBS AS website (launching April 2016) will also direct people towards these policies.
- (ii) **Cover for maternity and adoption leave and support on return** –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.
- In addition to the QUB central maternity fund, SBS covers the costs of maternity leave for research staff whose research grants do not provide maternity cover. The School Manager applies for this fund on behalf of the female and all staff (contract researchers and permanent academic staff) have equal entitlements regardless of the length of their employment at QUB prior to their expected delivery date. In several cases, SBS has also covered the cost of employing further technical staff temporarily so that a female’s research project can continue during her period of maternity leave, for example see Case Studies.
 - Academic staff returning from maternity leave are offered a period of 6 months with no teaching after their return (**2012 Action 2.8**). The Head of School meets with staff member to ascertain their requirement for maternity leave, to offer this 6 months of non-teaching time and to discuss any additional support (e.g. flexible working, research assistance) they might require preparing for their maternity cover, and transitioning back to work. This arrangement is specific to each individual’s requirements and career progression. For example, one woman took this opportunity to focus on her research after her first maternity leave, which allowed her to focus on a new grant but chose to return to teaching after her second maternity leave.

- HoS and DEs are responsible for re-organising the administrative and teaching load of the member of staff. The member of staff is responsible for delegation of their research responsibilities as far as possible. SBS has provided support (e.g. hired research assistants) depending on the nature of the challenges faced.

- Keeping touch days, informal visits to the School and general email contact is at the discretion of the member of staff on leave. For example, most women prefer to keep abreast of their research project-related communications even while on leave but obviously not teaching or administration duties and most visit the School for coffee with their new babies.

- Women indicate whether they wish to return full or part-time prior to returning to work, this arrangement can be altered on their return permanently or in the short-term (e.g. switch to part-time temporarily).

- Staff are also advised of the QUB family friendly initiative, which includes eligibility for the childcare vouchers scheme. We are working on a new fact sheet regarding all maternity/ paternity leave policies that will be disseminated to all staff (again) and this information will also be included in the new School handbook (**new Action**).

- School Manager contacts staff before they are due to return to check if they have any specific requirements (e.g. most permanent academic staff have their own office but those staff who do not are advised that they can use the designated 'quiet room' for breastfeeding etc. if they prefer).

(4,967 words)

8. Any other comments – maximum 500 words

Please comment here on any other elements relevant to the application, e.g. other SET-specific initiatives of special interest implemented since the original application that have not been covered in the previous sections.

From entry-level students to the professoriate, we are committed to promoting gender and diversity at SBS and beyond through many beacon activities. The proportion of females on our undergraduate courses is over 50%, and we make every effort to encourage applications from both female and male school students. We also have a very active work-shadowing scheme for secondary school students visiting SBS, and monitor their gender balance. Over the last five years, 56% of the placements (of 111 students) were female.

SBS aims to be a paragon of good practice and has supported many other schools and institutes towards achieving AS awards. For example, [REDACTED] [REDACTED] has acted as an external advisor on several other schools' AS applications. Our staff were interviewed for the Loughborough University research project, commissioned by ECU, examining issues impacting career advancement in STEMM (2014). We have used opportunities to address national (e.g. SynbiCITE - National Centre for the Commercialisation of Synthetic Biology meeting at Imperial College, 2013) and international audiences (e.g. Phycological Society of America Joint Aquatic Sciences Meeting in Oregon, USA, 2014) to promote the AS Charter, often taking advantage of invited research seminars to also mention AS (e.g. [REDACTED] [REDACTED] also reviewed a publication on the leaky pipeline of women in academia (2014). We have hosted visitors from other universities to share our experiences for example, as part of an ERAMUS staff mobility scheme visitors came from the University of Konstanz (2014). We work closely with the University AS Committee and QGI to maintain our institutional silver award (renewed 2015) and work towards gold. Our past SBS-SAT chair contributed to the Wellcome Trust video – '*Athena SWAN Awardees share tips for success*' (2015).

As would be expected, there have been some cultural obstacles to overcome in particular with regard to our outreach/ beacon activities. For example, a SBS-SAT PGR attended a Peer-to-peer event at the [REDACTED] [REDACTED] and encountered some difficult differences of opinions in best

practices to encourage gender parity. Following this, and on a more positive note, SBS-SAT produced guidelines for organising events to encourage greater female involvement and visibility and to promote awareness of the AS goals. These have been adopted by the School and all SBS-SAT-supported events now adhere to these guidelines (e.g. suggestions for increasing female participation) and organisers also monitor participation and display AS posters. We collect data that describe female involvement in activities accurately (e.g. gender ratio of delegates, keynotes, chairs, questions asked during open fora etc.), which provide baseline information and enables us to monitor progress. We are also confident that awareness of practical ways to encourage wider participation at meetings etc. has spread from SBS-SAT to other professional bodies (e.g. one SAT member also chairs a British Ecological Society Special Interest Group and has ensured gender balance of keynote speakers at all annual meetings in 2014, 2015 and 2016).

(488 words)

9. Action plan

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

This should be a table or a spreadsheet comprising plans 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.

10. Case study: impacting on individuals – maximum 1500 words

Describe how the department has changed and how its staff have benefited since the original Gold award.

Provide a small number of case studies (e.g. one per 10 members of staff) of individuals working in the department and show how the inclusive culture and working practices of the department have enabled them to pursue a career in SET.

At least one of these case studies should be a member of the self assessment team, and at least one should be someone else in the department. There should also be at least one case study from a male member of staff. More information on case studies is available in the guidance.

██████████ (SAT member) is ██████████ who joined the University in ██████████

██████████ *'I joined Queen's University Belfast in early 2015 having spent most of my career in both the private sector and public sectors. Immediately on appointment to the post ██████████ and before actually starting the job I was made aware that I would receive a mentor under the AS initiative. She ██████████ was also a relatively new member of staff from the private sector. I met her approximately every month for the first few months. There was never an agenda but what there was, which was invaluable, was support and information. ██████████ provided me with this 'know how' in many cases. I am extraordinarily grateful to ██████████ and to Queen's for the mentoring arrangement, which has been of benefit to me and to my colleagues within the School. I am often the first point of contact for a wide range of queries and it is very important to me that I deal with these queries as efficiently and effectively as possible. Mentoring assisted me with this and with the process of settling more readily into an academic environment. Also my experience of flexible working arrangements as a member of non-academic staff are good. Coming from the public sector where this it is part of all contracts it was an expectation that it would be in place at Queen's. The difference is that there is greater flexibility within the University where my contract states 'hours necessary to do the job'. For*

example, I start very early some mornings and finish early to accommodate arrangements with my children.'

██████████ is a Postdoctoral researcher working on several projects in the area of farm animal health and welfare.

██████████ *'My research focuses specifically on chickens and the effect of environment and housing on their behaviour, health and welfare. It therefore demands a substantial amount of fieldwork on farms in Northern Ireland. This brings me into very close regular contact with large flocks of chickens, housed in both good and bad conditions, and has the potential to expose me to various types of avian diseases. As soon as I confirmed I was pregnant I contacted my supervisor to discuss health and safety concerns. We decided my farm visits would cease. The University provided me with additional resources to recruit a temporary member of staff to cover farm visits. This became even more crucial because I was very ill throughout my pregnancy and hospitalised several times. Additional support provided by the School gave me flexibility to work from home. This approach gave me reassurance during a time when I needed it most and enabled me to contribute at my own pace. Importantly, it also ensured that my research wasn't adversely affected, which was reassuring for my return to work after maternity leave. My contract end date, and my desire to finish the project, hastened my return to work. ██████████*

██████████ *There were some hiccups with the timing of the follow-on contract. The School stepped in, providing temporary funding until the new contract was in place. Again, this was so important, removing uncertainty and giving me the security and confidence to focus on my work. ██████████ The School have continued to support me in so many ways, most notably facilitating my request for part-time working ██████████ Their understanding and support is so important to me and my family and has provided me with a good work/life balance.'*

██████████ (SAT member) was appointed as a Lecturer at Queen's University ██████████ ██████████

██████████ *'As a committed young female scientist I appreciate the support that I have received from the School of Biological Sciences at a key transition period in my career. When appointed, in addition to being a young professional,*

I [REDACTED] At this point I found it a daily challenge, separating my time and energy resources amongst family and career. My spouse and I had already considered the idea of having another child. However, given the career break required and the fact that I would never want to jeopardize my job position, I decided to discuss my unease with my mentor at SBS. I discovered that QUB is very supportive to female scientists. To ensure that my maternity leave would not affect my period of probation, the University extends this period to cover my leave. The HoS confirmed that they would support me during my absence by offering to hire temporary staff to support on-going research. After [REDACTED] maternity leave, I benefit from not having any teaching and administration duties [REDACTED] after my return, which was really important as it provided me with more flexibility in scheduling my working hours and time to develop my career and boost my research profile. I also have flexibility to take care of [REDACTED] [REDACTED] Early-career female scientists can be reassured to know that QUB will support, encourage and understand them which is very important and allows them to reach their goals both professionally and in their family life.'

Dr [REDACTED] was appointed as Lecturer in Molecular Biosciences in [REDACTED]

[REDACTED] "As a new member of staff I received excellent mentoring from colleagues, from across all levels of staff, they have been very supportive, eager to listen and advise. As I am not native to Ireland, Queen's has adopted a flexible approach to extending holidays, on the basis of cumulative annual leave, enabling me to visit family and friends back home [REDACTED] [REDACTED] my wife, started working at the School [REDACTED] She started as a Research Assistant and worked her way up to become Research Associate [REDACTED] [REDACTED] it would have been very difficult to start a family together, being in Belfast and away from the support of relatives and friends, had it not been for the School's family friendly approach, with regards to job deliverables, working hours (meetings scheduled between 10am-4 pm) etc. In addition, the maternity leave [REDACTED] received together with [REDACTED] paternity leave that I received helped significantly, allowing us time to bond as a family. [REDACTED] [REDACTED] I intend to apply for promotion in the next few years while [REDACTED] develops her own research career aiming to secure a permanent post at Queen's."

██████████ arrived at Queen's on a fixed term contract ██████████ and was appointed as a full time permanent lecturer ██████████

██████████ ' ██████████
██████████ I was impressed by QUB's policy on paternity leave, ██████████
██████████ In addition to this the Head of School was happy for me to add holiday time to this. The Head of School's supportive attitude towards flexible working was a great help when our child was very young, ██████████
██████████ QUB's policy on enforcing "core" hours of 10-4 for meetings has also been immensely helpful to me, as it allows me to share the daily task of dropping and collecting our son from nursery".

██████████ joined the School of Biological Sciences as a full time staff member at Lecturer grade ██████████ and was promoted to Senior Lecturer ██████████ and to Reader ██████████ She has worked on a part-time basis ██████████
██████████.

██████████ 'The flexible, target-driven environment within our School really appeals to me and is one of the reasons that I joined the University. I value the freedom to pursue my own research interests as long as key School objectives are met. I have always felt supported in efforts to advance my career, and on both occasions that I was promoted, received invaluable encouragement and advice from colleagues. ██████████

██████████. I appreciate the fact that my temporary part-time working arrangement is being willingly facilitated by the School. Although a little pressured at times, this working arrangement has helped me to achieve a better overall work-life balance. This is aided by the fact that I can work from home when possible to avoid a long commute.'

(1,497 words)

Status of Athena SWAN Gold Award Action Plan (2012) for QUB School of Biological Sciences

Key achievements summary since Gold award in 2012

Green = activities related to key transitions points, career development etc.

Blue = culture

Pink = flexible working

Orange = beacon activities

2013

- AS Gold award to SBS (following silver award in 2009)
 - AS Gold success communicated to all staff and new Action Plan promoted:
 - AS updates continue as a standing item at school board meetings
 - Work-shadowing programme launched to encourage people to apply for promotion
 - Academic promotions fact sheet disseminated
 - ECR symposium on publishing in Biological Sciences
- New Work Allocation Model introduced after discussion at school and management board
 - International Scientific Advisory Board visit and report
 - All staff including, contract researchers, have formal appraisal with PIs/ line managers
 - SBS HoS organised symposium at 10th International Psychological Congress in Orlando, USA and ensured gender balance
 - SAT member and ECR representative organised the highly successful 57th Ecological Genetics Group Meeting at QUB
 - All female team from the Teaching Laboratory win gold Green Impact Award
- SBS supported NERC Fellow/ proleptic lecturer during maternity leave by providing technical support to facilitate lab research
 - QUB maternity and paternity entitlements factsheet produced and promoted at school board

- Daphne Jackson Trust Fellowship awarded to female postdoc
- Continue to offer an exemption from teaching duties for a semester to women returning from maternity leave

- SBS HoS promoted AS at SynbiCITE (National Centre for the Commercialisation of Synthetic Biology), Imperial College (95% male audience from Universities of Oxford, Cambridge and Edinburgh and several governments representatives)

2014

- Academic Careers for Women workshop for ECRs
- PhD peer mentorship programme launched
- Supported BEER (Biological Excellence Experimentation and Research) a QUB Postdoctoral, Postgraduate and Technician Inter-Centre Monthly Collaborative Science and Social Forum

- HE STEM Gender Equality Culture Survey on academic staff and PGRs to understand current gender equality culture at SBS
- Commissioned external review of good practice in place and its impact based on 2012 application
- In conjunction with QGI, STEM event for secondary school students
- Supported BES Agri Group Meeting and promoted AS
- New staff provided with mentors who are independent of their probation committee

- HoS promoted AS when receiving the Phycological Society of America Award of Excellence at the Joint Aquatic Sciences Meeting, in Portland, Oregon (approx. 3000 attendees)
- HoS promoted AS at Queen Mary University of London as part of an invited research seminar
- HoS attended event celebrating life and work of pioneering Irish botanist Matilda Knowles (1864-1933) at the National Botanic Gardens of Ireland

- SBS Staff and students participated in Loughborough University research project, commissioned by ECU, examining issues impacting career advancement in STEMM
- HoS reviewed the publication '*The contribution of the Italian University habilitation competition to the leaky pipeline of women in academia*'
- SBS hosted visitors from University of Konstanz (ERASMUS staff mobility scheme) to share experiences of gender equality initiatives
- SBS AS Champion and HoS contributed to QUB's successful institutional silver AS award
- SAT PGR representative reported our AS activities at Cambridge University.
- HoS gave presentation on AS to the Vice Chancellor, Deputy Vice Chancellor and Head of HR at Swansea University
- HoS was external adviser for College of Science at Swansea University's bronze department AS award

2015

- Piloted guidelines for ensuring gender balance, promoting AS and collecting gender-related data at AS-supported events at student-led Marine Biological Association Conference
- Adopted guidelines for AS-supported events
- SBS AS Champion joined School Management Board
- AS updates added as regular item to School Management Board Agenda
- Second SBS Champion and SAT Co-chair role created
- SAT PGR representative attended Peer2Peer International event – A Mentoring and Development Network for Female Researchers, at University of Konstanz, Germany
- SAT organised ECR Grant and Fellowship Writing for Success workshop in response to survey
- IGFS Academic Advisory Board established comprised of 4 senior female and 4 senior male academics

- Extended maternity leave taken by a lecturer in addition to a teaching-free semester and teaching post created to cover her teaching for this period

- Gender Equality Culture Survey results presented at school education retreat
- Gender Equality Culture Survey repeated to test for changes in attitudes since implementation of the Action Plan
- ECR survey to identify actions to meet their career development goals
- PGRs surveyed to identify desired training requirements
- School blog and Facebook page launched – both primarily edited by a team of females who regularly feature research led by women to maximise their visibility within and beyond QUB
- IGFS newsletter launched (replaced school newsletter)
- Pilot 'Bioscience workplace study tour' 14 undergraduates (70% female)
- Primary Life Science event with local primary pupils, teachers and parents,
- Dragon's Den, at IGFS with industry representatives on the judging panel, won by two joint-first place winners, both were female.

- SAT PGR representative participated in Soapbox Science
- HoS gave talk for International Women's Day at QUB School of Nursing - "*Unconscious bias - does it matter and what is it anyway?*"
- HoS gave talk for International Women's Day at Stirling University - "*Achieving Gold Standard in the School of Biological Sciences*" and participated in showcasing activities with [REDACTED]
- Hosted visit from AS Champion and HR Officer from University of York's Department of Biology (AS Gold Award)
- Contributed to the Wellcome Trust video – '*Athena SWAN Awardees share tips for success*'
- HoS was external adviser for Department of Life Sciences, Imperial College London's submission for Silver department AS award

2016 so far (and plans)

- Promotion of AS Action Plan to all staff and students and invited comments for review
 - New IGFS and SBS brochure produced to attract more female candidates to 12 new posts
 - Revised welcome statement on advertisements for new posts
 - AS updates added as standing item on both undergraduate and postgraduate SSCCs
 - Unconscious bias testing completed by SAT and SMB and encouraged to all staff and students
 - HoS promoted new academic standards required for promotion
 - Representatives of technical and professional staff joined SAT in preparation of new charter
 - Female academic co-opted onto Research Committee
 - Developing unconscious bias awareness protocol with HR
 - Developing communication strategy for AS Action Plan
 - Promoted QGI mentoring scheme and 'drop in' service for women preparing applications for promotion
 - SBS School Manager, ██████████ commenced Excellence in Leadership training course
- Promoted awareness of core hours and flexible working
 - Update guidelines for maternity, paternity and adoption leave for staff and students
 - Promoted AS AS suggestion box
- ECR surveyed again to identify actions that could be taken to meet their career development goals and to assess awareness and satisfaction with efforts to promote equality
 - New faculty-wide WAM introduced with best practice policy formulated in conjunction with other universities
 - Interviews held with new Directors of Education and Directors of Research on success and review of our current Action Plan
 - Survey commenced on past ECR's career destinations
 - Reinvigorated postdoc forum, now faculty-wide Postdoctoral Society
 - PGR communication workshop – '*Elevator pitches*'

- SAT to become EDG (Equality and Diversity Group)
- Formalise terms of reference and embrace new AS Charter
- Updating staff handbook
- Improving induction programme for research staff
- New SBS website to be launched with strong visibility of female researchers and updated AS pages (pending)
- Primary Food Science event with local primary pupils, teachers and parents will be hosted by IGFS supported by the Wellcome Trust

- HoS influenced FEB to ensure core actions regarding recruitment policy across the Faculty (includes SBS and School of Medicine Dentistry and Biomedical Science – silver award in 2012, Pharmacy – silver award in 2014 and School of Nursing and Midwifery – silver award in 2015).
- HoS advised Faculty Pro-Vice-Chancellor to co-opt a senior female academic onto FEB, which has been approved.
- We are working with HR to ensure that unconscious bias training will be added to compulsory online training QUB staff
- SBS-SAT advising other AHSSBL departments who are preparing applications for their first awards
- Gallery showcasing women in biology at MBC
- SBS AS Champion webinar panellist training
- SBS AS Champion is organising British Ecological Society Aquatic Group meetings and ensuring gender parity and will promote AS
- SBS-SAT member (██████████) ensuring gender balance and will promote AS AS at BBSRC event in January 2017

Status of Athena SWAN Gold Award Action Plan (2012) for QUB School of Biological Sciences

Green Actions = completed and successful, Amber Actions = actions in place targets and not yet completed

Ref.	Action	Actions taken by 2012	Planned actions and targets set in Nov 2012	Responsibility	Level of progress in 2016
1	<p>Theme addressed: Lack of applications by women for academic positions in the School of Biological Sciences</p> <p>Target: increase number and percentage of applications by females</p>				
1.1	<p>The “desirables” for posts to include “demonstrated ability to work as a group/in a team/co-operatively” or equivalent phrase. This does not disadvantage male applicants but encourages the appointment of women and more collegial-spirited men. Demonstrated during interview in response to a suitable question and included in scoring criteria.</p>	<p>In 2008/9: Put into place during recruitment for 6 posts</p> <p>To 2012: continued; interview questions included “what does collegiality mean to you?” and “what are the benefits of team-working?”</p>	<p>Continue action for all academic appointments.</p>	<p>HoS, DRs, appointments panels.</p>	<p>This group of measures has been very successful. Although recruitment was limited during this reporting period, the proportion of women applying for permanent academic posts has increased (from 31% in 2012 to 40% in 2015) and the percentage of females recruited is still increasing (since 2012: 53% research staff; 36% academic staff). Furthermore, success rates of female applicants is slightly higher than that of male applicants for both research and permanent academic posts (2.7% for women and 1.7% for men for research posts, and 5.5% for women and 4.9% for men since 2011).</p> <p>Since our previous award, QUB HR was re-structured and there is now a faculty-level recruitment team. In 2016, we ensured that the new faculty recruitment team were familiar with our practises and aligned with our Action Plan.</p> <p>The questions on collegiality/ team-working were asked at all interviews and will remain in place for future interviews.</p>
1.2	<p>Ensure that any breaks for maternity during the applicant's career are explicitly and</p>	<p>From 2008/9: Put into place during recruitment for 6 posts and continued</p>	<p>Continue action for all academic appointments.</p>	<p>HoS, DRs, Director of IGFS, appointments panels.</p>	<p>Similar to the above action, this has been highly successful and will be continued as routine practice. [REDACTED]</p>

	systematically taken into account at shortlisting and interview stages.	In 2008/9 and 2010/11 this resulted in bringing female applicants up to a higher position in the rankings. From 2012: Possible impacts of approved periods of maternity leave were taken into account by appointments panels.	From 2012: Appointments panels include consideration of periods of additional care-related leave and career breaks		Explicit consideration of these factors for all applicants by appointments panels continues to raise the profile of these issues with senior staff members.
1.3	Make the School more attractive to female applicants by greater visibility of women among existing academic staff	In 2009 generic university images of academics on School homepage were replaced with real females from different categories of staff. In 2010 removal of some images due to new QUB web template was rectified. In 2010 School newsletter SBS News was founded and prominently features School	From 2013: Organise additional official photos for staff, research groups, committees and other units within the School. Continue to produce and promote SBS News Target: by 2015 aim to have women comprising 50% of <i>shortlisted</i>	School website co-ordinator (Dr [REDACTED] [REDACTED] editor SBS News (Dr [REDACTED] [REDACTED])	Female students, researchers, and staff are highly visible in photographs on the website. In 2015, the SBS Newsletter ceased and was replaced by a SBS Facebook Page, SBS Blog and the IGFS Newsletter. To date females are prominent on every page that feature people (e.g. 5/9 graduate testimonials are female and 2/2 professional studies/ placement videos are female, 3/4 staff profiles in new IGFS staff recruitment brochure are female). This action undoubtedly contributes to the increase in females applying for posts (40%). The target of 50% of all shortlisted applicants by 2015 was overly ambitious. It remains our aspiration to achieve this gender parity, however, the aspirational timeline is revised in our new action plan.

		<p>females and families.</p> <p>In 2012 Global Food Security recruitment brochure included 50% senior female staff. Photos of female students were added to image bank.</p> <p>From May 2011: Females and families have featured prominently in 5 of 11 issues of the School's SBS News to date. http://www.qub.ac.uk/schools/SchoolofBiologicalSciences/SBSNews/</p> <p>2012: Global Food Security recruitment campaign attracted females: 43% of c. 60 applicants; 67% of 9 shortlisted; 75% of 4 appointments.</p>	<p>applicants for all posts</p>		
1.4	Make the School more attractive to female applicants	In 2009 added award and	From 2012: Increase AS information and	School website co-ordinator (Dr	Our AS AS Gold Award has been prominently displayed in SBS and on all promotional literature and our website.

	by publicizing AS Silver award on website and job advertisements	documents to School website Discussions with one female appointee (2010) and one interviewee (2012) suggested that the visibility of our AS, indicating our commitment to gender equality, had been influential in their decisions to apply and (in one case) accept the offer.	links to new AS website on School website – continue to link to postdoc forum, SBS News etc	██████████ ██████████	Most recent female appointments relocated from overseas and were not aware of the AS logo and scheme but this was explained during their interview and had a positive impact on acceptance decisions.
1.5	When possible, the School contacts for advertised positions should be female, and can use the opportunity to emphasize the good quality of life in Ireland, in particular the excellent education systems and good healthcare.	In 2008/9 , put into place during recruitment for 6 posts. From 2009/10 , there was a marked increase in the proportion of women being recruited. In 2011 , recruitment of two new posts involved two women (one in each Research Cluster) as contact person.	Continue action	HoS, DRs, Director of IAFLU/IGFS	We have continued this successfully wherever possible and avoided over-burdening female staff. Information detailing the standard of healthcare, education and local schools etc. will be included in the new brochure being produced for the 2016 recruitment process. ██████████ (SBS AS Champion) has been co-opted onto the IGFS recruitment search committee. The new brochure specifically highlights the diverse research and academic community at SBS and three of four researchers highlighted are female. SBS AS Champion on IGFS recruitment search team

1.6	Consider including welcome statement encouraging applications from females as they were under-represented in this category of employment (permitted under Sex Discrimination (NI) Order 1976 (as amended)).	Personnel/HR agreed it would be possible to change the welcome statements that accompany job adverts where appropriate . Has not been used to date as advertisements have included a range of posts so not justified. In 2009/10 , as chair of the AS champions group in QUB, the Biological Sciences champion encouraged other Schools with lower percentages of females to use this measure when appropriate. This measure is being piloted in 2013 in association with HR.	From 2012: This will be put into place in future when we advertise professorial positions specifically	HoS, Personnel, Equal Opportunities Unit, QUB AS Steering Group.	<p>From 2013 a welcome statement was added for all academic posts which included <i>'and particularly welcomes applications from women as females are underrepresented within the professoriate/area'</i>.</p> <p>Discussions are on-going between QGI, the Equal Opportunity Unit and HR, led by the university AS Committee Chair [REDACTED] to ensure that this text is included automatically in all appropriate advertisements.</p>
1.7	Advertise academic posts in multiples of at least two positions	2012: Success in attracting women applicants to Global Food	2012 onwards To be continued whenever	HoS, DRs, Director of IGFS	This has been successful and we have appointed a couple seeking two academic posts. Owing to funding constraints it was not always possible to advertise the unusually limited number of positions available during this period in pairs. We will

	<p>where possible, to mitigate what we identified in 2009 as the main deterring factor in Northern Ireland. The majority of applicants for academic posts come from Britain or abroad and females are differentially affected by mobility issues (e.g. partner's employment or family responsibilities including care of elderly and children).</p>	<p>Security positions (4 posts advertised) suggests that grouping posts is beneficial for women - spousal hire is not policy in QUB but multiple posts give scope for a couple to be hired together. Two other positions were advertised together (in October). 2010-12: Multiple posts enable both members of an academic couple to apply successfully. We have already appointed both members of two couples to separate positions. October 2012: Two positions advertised together attracted applicants (two couples each specifically seeking two</p>	<p>possible; expectation is that we will have at least three opportunities over next three years. This will require changes in university post approval processes. Target: By 2015 all posts will be advertised in multiples of at least two as a matter of routine.</p>		<p>shortly advertise 8 new permanent academic posts (of all grades) based within the main research arm of the School, IGFS. Three additional School-posts will be advertised very soon.</p>
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		positions together).			
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Ref.	Action	Actions taken by 2012	Planned actions and targets set in Nov 2012	Responsibility	Level of progress in 2016
2	Theme addressed: Under-representation by women at senior academic levels in the School of Biological Sciences Target: Double number and percentage of women at AC4/Professor levels				
2.1	Ensure that staff are familiar with the criteria for promotion.	From 2007/8 staff were made aware of promotion criteria by email and during annual staff appraisals 2007/8 to 2012: 6 of the 7 females at Lecturer grade eligible for promotion (i.e. probation completed plus at least 2 years; applicants are very rarely successful prior to this) had applied for promotion. 2 were successful; 1 unsuccessful; 3 applied in 2012, with results pending. 2012: Promotion process explained in detail in updated Staff Handbook.	Continue to encourage attendance at QGI promotions seminars. Continue to update staff handbook in line with new procedures and profiles for promotion.	HoS	HoS promoted awareness of new school academic standards and the university's academic profiles required for each grade at school boards. Mentors are advised to ensure that mentees are aware of school standards and the academic profile and criteria for promotion. QGI Mentoring scheme, promotion clinics and 'drop in' service for women preparing applications for promotion was highlighted to all staff at school boards and other communications. Since 2012, 7 women have been promoted from 10 applications (70% success rate) compared to 4 men promoted from 13 applicants (29% success rate; Table 3). This included the promotion of a female senior lecturer to professor in 2016.

2.2	Ensure that all staff make as rapid progress as possible by regular review of potential for early confirmation in post; large proportion (currently 45%) of probationary lecturers are women so this will benefit women in particular	<p>From 2010: Progress of probationary staff closely monitored by HoS and in Probation Committees' annual reviews, seeking opportunities for early confirmation in post</p> <p>Since 2010: Early confirmation in post achieved by one male and one female probationary lecturer;</p> <p>2012: female recommended for early confirmation in post.</p>	Continue annual monitoring of probation to ensure that all qualified staff are confirmed in post early	HoS, directing Mentors, Probation Committees	<p>This practice has been successful and is now embedded as core policy.</p> <p>Since 2012, 1 female and 2 males were confirmed in post early to accelerate career advancement.</p>
2.3	Encourage female staff who have the required profile for promotion to apply.	<p>2007/8 to date: A higher proportion of females than of males have applied for promotion. 6 (86%) of 7 eligible females at Lecturer grade had applied compared to 6 (67%) of 9 eligible males at Lecturer grade.</p>	<p>Specifically include preparation and encouragement for promotion as part of the appraisal process</p> <p>Target: By 2015 there will be at least one additional female professor and</p>	HoS, DRs.	<p>All appraisers are well-trained and the processes are reviewed and updated routinely. In addition, all new staff are assigned mentors who are independent of their probation committees and can offer additional support to probationers and mentorship after staff are confirmed in post.</p> <p>The timeline for this target was ambitious and no high level appointments were available since 2012 (owing to prolonged period of voluntary severance and recruitment moratorium).</p> <p>Since 2012, 10 eligible women have applied for promotion and 7 were successful (including a female promoted to Professor in 2016). This is a greater success rate than for males but we feel that more work needs to be done to encourage more women to apply.</p>

		2010: Appraisal process reviewed and strengthened to ensure all staff are appraised by well-trained and well-informed appraiser	at least 3 females at AC4		We plan to recruit up to 12 academic posts, including senior positions, in 2016 and are implementing our revised action plan to facilitate gender parity.
2.4	Encourage mentoring for those considering submitting an application for promotion, including use of the QGI's drop-in scheme for particular queries related to career hurdles.	Annual: QGI email all female staff annually; School SAT checked that mailing lists included School staff By 2012, 3 of 7 females eligible for promotion (43%) had taken up mentoring opportunities in the QGI Women's Mentoring Scheme. 2 of the 3 had subsequently applied for promotion.	From 2012: ensure all females eligible for promotion have considered QGI mentoring; include discussion of mentoring in appraisal interviews.	HoS, DRs	(as above) By 2016, more women have availed of the QGI 'drop in' service, where mentors offer advice on specific targets, such as providing feedback on promotion applications. New staff on probation are now assigned a mentor who is no longer a member of their probationary committee as was the case previously. This facilitates mentors to advise probationers in a more independent and less formal capacity and they can remain mentors after confirmation in post and provide advice at other career hurdles (e.g. promotion).
2.5	Offer work shadowing of university senior staff by women in academic positions to help	New action	Offer work shadowing experience within QUB as widely as possible	HoS	Two females participated formally. One lecturer shadowed the SBS Deputy HoS and another lecturer shadowed the HoS. Both reported that the experience was insightful in terms of witnessing management policies being implemented but also stressed the benefits of spending time with senior academics discussing their administrative roles and the networking opportunity this experience

	women understand senior management roles in QUB and encourage applications for academic management positions.		Target: at least one female will take up the offer in each of the next three years.		provided. One of these lecturers was subsequently promoted to senior lecturer.
2.6	Ensure that each female applicant has sufficient administrative experience for promotion, by reviewing the organization and distribution of administrative responsibilities.	<p>In 2007/8 promotions, explicit recognition of administration, particularly in pastoral roles, contributed to promotion of one woman to Senior Lecturer.</p> <p>From 2010 School Management Board co-opted female to gain management experience.</p> <p>From 2010: New formal management roles include: Schools Liaison Officer; website co-ordinator; internationalization champion.</p> <p>2011/12: Female co-opted to SMB</p>	Continue to include one co-opted female as member of SMB. Include School AS Champion as member of SMB	HoS, SMB	<p>These actions were all implemented successfully. In addition, several more roles were created. We are a relatively large school and these roles provide greater opportunity to gain administrative and management experience. For example, a second Director of Education post was created and a third research cluster was formed within SBS in 2015 with a new Director of Research (██████████), Differentiation Chair, Seminar Co-ordinator and PGR Co-ordinator. Moreover, in 2016 a Deputy Head of School was appointed.</p> <p>In 2013-14, the new WAM was introduced which is now being further updated at faculty level which ensures parity of workloads among staff.</p> <p>2015, one female was promoted to Senior Lecturer and was given explicit recognition of a large administrative role managing an offsite facility and another female on a 0.8 contract was promoted to Reader.</p> <p>2015, the SBS AS Champion joined the school board. We now have two AS Champions in recognition of this work load at school and university level. Both SBS AS Champions are female lecturers. One has since been promoted.</p> <p>Current female co-opted onto the School Management Board has applied for promotion.</p> <p>In addition, a female Reader was co-opted onto the Research Committee.</p>

		<p>was promoted to Senior Lecturer. From 2011: WAM included admin tasks e.g. pastoral care 2012/13: Current co-opted female applied for promotion.</p>			
2.7	<p>Emphasize the likelihood that candidates with all-round contributions to the School can achieve promotion (not just research stars).</p>	<p>The example of several promoted women in SBS who better fit the profile of all-round high quality than research stars has been used in Promotions panels to evaluate other applicants.</p> <p>Promotion of one female in 2011/12 was based on all-round contribution, including administration and teaching as well as research grants and publications.</p>	<p>Continue to discuss this with appropriate candidates but acknowledge that need strong research awards and papers are needed for promotion; In future (2013-16) keep female candidates informed of changes in university policy and practices.</p>	HoS, DRs	<p>Promotion of two females in 2015 was also based on all-round contribution, including administration and teaching as well as research grants and publications – one had a major 25% administrative work load.</p> <p>All eligible academic staff were invited to apply to join IGFS in 2016. Assessment for membership took a transparent and holistic approach, which considered teaching and research activities, clearly recognising overall contribution in the School's research flagship (IGFS). The success rate for full membership for females from SBS was 100% (compared to 60% for males).</p>

2.8	Female academic staff returning from maternity leave to be allowed to concentrate on their research for six months	<p>2011/12: This policy was put into practice for the first baby born to a female academic in our School in five years; support was also provided to another woman returning from maternity leave</p> <p>In 2011/12 one woman returned from maternity leave and took up this opportunity to concentrate on her new Research Council grant. The School provided financial assistance to bridge a gap in technical staff support following QUB-funded maternity cover for a second female.</p>	This policy will be continued	HoS, liaising with SMB, QGI	<p>This practice is now embedded in our core policy in SBS and beyond.</p> <p>Implementation is at the discretion of the female academic who may prefer to return to undertake some teaching. For example, lecturers on probation who have successful research grants may prefer to increase their teaching portfolio towards the criteria for early confirmation in post.</p> <p>During this period, 24 periods of maternity leave have been taken (13 researchers and 11 academics) with 23 returning.</p> <p>2014, one female took extended maternity leave for 12 months and then returned to be exempt from teaching duties for 6 months. Another two females returned from maternity leave in 2015 and 2016 and the school provided temporary lecturers in education to cover teaching duties.</p>
2.9	Increase visibility of role models for successful women in academia from	<p>From 2007, 33% and 44% of presentations in our School in the</p>	<p>Actions to be continued: Monitor visiting speaker gender;</p>	HoS, DRs, Director of IGFS,	<p>This has been very successful and we continue to strive for equal gender representation in all SBS seminar series. For example, the EBS cluster seminars are weekly during term-time and since 2012 56% of all speakers were female (44% invited speakers and 77%</p>

	<p>outside QUB by inviting female speakers, where possible to present to wider audiences (e.g. national and international conferences).</p> <p>Provide opportunities for staff and students to meet speakers (e.g. at coffee/tea/lunch before or after the presentation).</p>	<p>two research clusters were given by successful female academics.</p> <p>From 2010: Monitor visiting speaker gender. From 2007 to date, visiting speakers to both seminar series have included a high proportion of women: in Molecular Biosciences, 33% of 30 visiting speakers were female, and included three female professors. In the Ecology & Evolution cluster 40% of visiting speakers were female.</p> <p>In 2011: Distinguished researcher [REDACTED] gave a keynote research presentation to 50 plant scientists from</p>	<p>invite senior women when possible.</p> <p>Target: By 2014, one of the males on the ISAB will be replaced by a female, as turnover opportunities arise.</p>	<p>organizers of seminar series</p>	<p>QUB-researchers). The newly launched FSN cluster had 33% female guest speakers. These seminars are at lunchtime and staff and students are invited to meet the speakers during core work hours so that those with family commitments are not disadvantaged of networking opportunities traditionally after office hours.</p> <p>We have not had another ISAB since 2014 and aim for equal gender representation when the next panel convenes.</p> <p>We have had an extensive programme of beacon activities and in addition our SAT members have organised several international symposia and ensured gender balance (e.g. International Psychological Congress in Orlando, USA, and British Ecological Society Aquatic and Macroecology meetings in London).</p> <p>The recently established IGFS Academic Advisory Board has gender parity (4 female and 4 male senior researchers).</p> <p>IGFS also has an Industrial Advisory Board (IAB), where companies support their own membership and nominate their representatives, thus, we are limited in how we can assert gender parity. We can report, however, that currently 2 of the 7 members are females and we will raise awareness of the AS Charter and our Action Plan with all IGFS partners.</p>
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		<p>Ireland, explicitly linked to the gender promotion activities of QGI and SBS, to an audience including female gardeners from the local Botanic Gardens.</p> <p>In 2011: International conference of the Systematics Association included Presidential address by [REDACTED] [REDACTED] [REDACTED] [REDACTED]</p> <p>From 2012, [REDACTED] (former Director of NSF) became member of School's newly formed International Scientific Advisory Board (ISAB).</p>			
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Ref.	Action	Actions taken by 2012	Planned actions and targets set in Nov 2012	Responsibility	Level of progress in 2016
3	<p>Theme addressed: Lower female representation among permanent than among fixed-term contract research staff in School Target: Fixed-term contract staff enabled to make transition to academic positions (QUB no longer appoints permanent research staff)</p> <p>NOTE: Some 2009 actions have been moved from Problem/Theme 1 to avoid duplication</p>				
3.1	Encourage postdoctoral researchers to continue careers in academia	<p>In 2008 and 2009 the HoS addressed all research staff on career development. In 2010 School Postdoctoral Forum was established 2011/2012: Four of the School's female postdocs obtained permanent academic positions</p>	<p>For 2013 the Forum has arranged two new workshops: Research Excellence Framework; Career Development 2013 onwards: the Forum has ambitious plan for workshops supported by School funding. Target: our postdocs continue to obtain permanent academic posts, at least one post per year.</p>	Co-Chairs of Postdoctoral Forum	<p>These actions have been very successful. Several of our post docs have obtained academic posts each year since 2012 (e.g. [redacted]).</p> <p>[redacted] and many others have moved on to prestigious Fellowships (e.g. several Marie Curie Fellowships).</p> <p>We supported the B.E.E.R. initiative (QUB Postdoctoral, Postgraduate and Technician Inter-Centre Monthly Collaborative Science and Social Forum) who held several social events and seminars.</p> <p>IGFS held Dragon's Den event, whereby mainly ECRs presented exciting new ideas to IAB who awarded £10,000 to support the best ideas. There were two winners and both were female.</p>

		<p>2012: Chair of Postdoc Forum</p> <p>█ gave an invited presentation on AS at the Sanger Institute in Cambridge as part of their Sex in Science series</p> <p>In 2011 Forum held a grant writing and fellowships symposium.</p> <p>In 2012 it organized a coach-led Focus Group meeting on women's careers to tease out ideas for practical coaching support and skills based workshops that will make a difference in career confidence and resilience.</p>			
3.2	School to encourage postdocs to take up	2008/9 to 2011/12	Continue measure	Co-Chairs of Postdoc Forum, in	We will continue to promote QGI and success can be seen by the women who have attained academic posts.

	Queen's Gender Initiative mentoring for postdoctoral staff.	QGI postdoc mentoring offered. Several women postdocs in Biological Sciences have participated in QGI mentoring, and one has obtained a permanent academic position.		liaison with QGI	
3.3	Encourage postgraduates to consider careers in academia	From 2008/9 to date two SBS-SAT members from Biological Sciences including Chair of School Postdoctoral Forum led annual PGR Skills Training promoting women in science. 2008/09 to date: Strong interest was shown by postgraduates across the university in a symposium on juggling an	PGRs will be included in the workshops mentioned above	HoS and Co-Chairs of Postdoctoral Forum	The now annual peer-mentoring scheme continues to be implemented. In 2013, we held an ECR publishing symposium In 2014, a female SAT member and PGR student reported her QUB AS activities to Cambridge University In 2015, a female SAT member and PGR student participated in Soapbox Science. SBS AS champion organised ECR research funding workshop which was very well received. PGR students hosted 2015 Marine Biology Associated conference with support from AS and promoted AS and surveyed participants. Based on this pilot we then produced guidelines for promoting AS at all school events. PGR students led a research communication workshop ('elevator pitch') and collected data based on AS guidelines

		<p>academic career with a family. High demand led to extra sessions being scheduled.</p> <p>In 2012 HoS presented "What is so great about an academic career" to PhD students (male and female) in Postgraduate Week.</p> <p>In 2012 the HoS's presentation at QUB's Postgraduate Week "What is so great about an academic career" resulted in strong engagement in discussion by males as well as females.</p>			
3.4	Provide a supportive environment for postdoctoral staff, through successive contracts,	Supportive monitoring of research staff is encouraged during appraisal of academics.	2012-2016 New, more specific actions to emphasize the needs of staff for mentoring are	HoS with support from DRs, all employers of contract staff, SBS-SAT	<p>As described above, our postdoctoral community is vibrant and has been successful in obtaining permanent positions and prestigious Fellowships (e.g. Daphne Jackson Fellowship, multiple Leverhulme and Marie Curie Fellowships).</p> <p>Activities described in 3.5 are also relevant here</p>

	including preparing them for transition to academic positions if desired, by regular monitoring of <i>curricula vitae</i> , meetings, etc.	In 2011/12 following mentoring and guidance, four female postdocs within the School gained lectureships (in [redacted])	now being explored by the Postdoc Forum during coaching sessions and will be applied over the next three years Target: our postdocs continue to obtain permanent academic posts, at least one post per year.		
3.5	Ensure PIs employing contract staff meet their responsibilities for detailed, comprehensive appraisal including mentoring, by general communications and targeted communications from Head of School	2010: Initiated.	Continue strong encouragement for a comprehensive, detailed annual appraisal process across the School	HoS, DRs.	All staff including fixed term contract researchers are included in our annual appraisal scheme (more frequent for short contracts). Postdoctoral Forum is currently negotiating a specialised appraisal proforma – to date postdocs are appraised based on the standard academics forms (some of which focuses on administrative duties and activities not relevant to postdocs). An amended form has been requested through a new- Cross-Faculty Postdoctoral Forum and this is being facilitated.

3.6	Encourage contract staff to apply for grants as "researcher Co-I", and for fellowships as "PI".	<p>In 2008 and 2009 the HoS addressed all research staff on making grant applications.</p> <p>In 2011 Postdoc Forum organized School-specific training for PGRs (run by Staff Training and Development Unit)</p> <p>In 2012 Postdoc Forum Grants and Fellowships workshop also involved postdocs/PGRs from Schools of Pharmacy and Geography, Archaeology & Palaeoecology. Several postdocs including females made applications for competitive independent fellowships. [REDACTED] obtained a</p>	<p>2013: The Post Doctoral Forum organised another grant writing training day.</p> <p>Target: By 2015, at least three females will have applied for independent fellowships annually.</p>	Co-Chairs Postdoc Forum, with assistance from HoS, DRs	<p>We have a healthy postdoctoral community including several with independent fellowships (e.g. SAT member, [REDACTED] is a Leverhulme Fellow; another Leverhulme Fellow secured a full lectureship post within the School) and many have applied for independent fellowships (e.g. NERC, Royal Society) and been successful as Co-Is on prestigious grants (e.g. [REDACTED] BBSRC)</p> <p>Also, 3 postdoctoral researchers have won grant income as PIs from the Gates Grand Challenges scheme. Doing this facilitated one of them securing a lectureship in the School in 2014.</p> <p>In addition, the school has 1 QUB Fellow, who is employed on a 4-year contract with the expectation of becoming a permanent academic staff member on completion.</p> <p>Also, the highly successful Grant Writing and Fellowship Workshop described above.</p>
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		Marie Curie Fellowship.			
3.7	Try to identify why postdoctoral staff have not made the transition from research to academia.	In 2012 , Postdoc Forum ran questionnaire survey to determine concerns of postdocs and blocks to their career transition Results of 2012 survey were used to inform and shape Focus Group meeting with career coach.	2013-2016 New postdocs will be surveyed annually by the Postdoc Forum and results included in annual coaching sessions	Co-Chairs of Postdoc Forum	This has been successful and we will continue to engage with our postdocs to ensure a vibrant community. Research staff were surveyed in 2015 to identify actions that could be taken to meet their career development goals and again in 2016 to assess awareness and satisfaction with efforts to promote equality within the workplace. We identified a desire for training in grant and fellowship writing and responded by organising a grant writing workshop with experts from Marie Curie and RCUK review panels. The survey respondents were overwhelmingly positive in their assessment of the School's efforts to create and maintain an equitable workplace. A destination survey of previous contract researchers was carried out in 2016 by contacting current PIs in SBS. This identified many researchers still active in academia and industry. It was noted that a thorough investigation of destinations of previous contract researchers and PhD students should be considered and discussed with HR and SBS Careers Advisor [REDACTED]
3.8	Give good feedback to unsuccessful applicants for positions to help them with future applications	Feedback has been provided informally and formally to unsuccessful applicants, under guidance from HR. In 2011/12 a female PDR within the School gained a lectureship in our School, following	In 2013: explore with HR whether more detailed feedback can be provided if requested	HoS, HR	We give feedback to all unsuccessful applicants and are establishing a formal protocol with the new faculty-based HR team for SBS candidates.

		feedback from previous applications			
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Ref.	Action	Actions taken by 2012	Planned actions and targets set in Nov 2012	Responsibility	Level of progress in 2016
4	Theme addressed: Potential drop in proportion of female students on our undergraduate courses Target: Identify future changes and analyse causes where identified				
4.1	Monitor and analyse data	Target: any changes in female proportions will be rapidly identified and causes identified if possible, so that further actions can be formulated if necessary.	Continue to monitor data and analyse it annually, with focus on Foundation degree and UG pathways	HoS, Director of Education	<p>We identified a negative trend in our foundation course and were able to ascertain that it was temporary and an artefact of very low numbers for statistical analyses.</p> <p>We now have two DEs and are expanding the nature and content of many of our degrees which offers more opportunity to engage directly with potential students. The dramatically increased engagement with the Work-Placement module and the Professional Studies Year options has provided additional training and support for students keen to be engaged with potential employers during their degree programmes (in 2015 we had >150 students go out on work placements across a diversity of employers). We showcase our work-placement programmes to prospective students through video testimonials given by two female students.</p> <p>We are also launching a new foundation course in 2016 for entry into QUB in collaboration with Belfast Metropolitan College and have almost gender parity of all students who have applied to date (27 females and 29 males).</p>

Athena SWAN Action Plan (gold renewal application 2016) for QUB School of Biological Sciences

All actions from 2012 are now embedded in school practices. We will monitor these actions (theme A) and list the supplementary and additional actions to reach ambitious new targets and success indicators. A new theme (B) has been added to highlight our practices and promote beacon activities.

2012 Ref.	Rationale	Actions	Responsibility	Timeline	Success indicators
Theme A: Monitor all previous actions (see 2012 Action Plan themes 1-4) to ensure these practices remain embedded					
1.1-1.2, 1.5	To increase the number of females applying for posts		HoS, DRs, Director of IGFS, appointments panels, HR	2019	Target: 50% of all applicants for permanent academic posts will be female and 50% of short-listed candidates will be female
1.3-1.4	As many of our female applicants are not from the UK/ Ireland, more information about AS and our policies will be added and updated routinely on SBS website, FB, blog and IGFS Newsletter	Monitor hit rates, 'likes' and followers on AS web pages and Facebook etc (we currently have similar females and males regularly viewing our FB page)	Digital Transformation Team and School website co-ordinators [REDACTED] [REDACTED] [REDACTED] School FB and blog editors, IGFS Newsletter editors and all academic staff	New website to launch April 2016 2017 (when most new staff are in post)	Target: increase hits/ likes on pages with AS updates

			who use social media		
1.6	To increase the number of females applying for posts	Ensure the 'welcome statement' encouraging applications from females where they are under-represented in this category of employment (permitted under Sex Discrimination (NI) Order 1976 (as amended)).	HoS, Deputy HoS, Personnel, Equal Opportunities Unit, QUB AS Steering Group.	2016-2019	Target: Welcome statement will be included in all appropriate new posts at SBS (currently all lecturer and Professorial posts)
1.7	To encourage more women and where appropriate couples to both apply for separate academic posts	Advertise academic posts in multiples of at least two positions where possible. Spousal hire is not policy in QUB but multiple posts give scope for a couple to be hired together.	HoS, DRs, Director of IGFS	2016-2019	Indicator: All posts will be advertised in multiples of at least two as a matter of routine. For example, in 2016 we expect to recruit 8-12 academics of all grades and couples will be encouraged to apply.
New Action	Eliminate unconscious bias in all	All staff at QUB are trained before joining an	SBS SWAN Champions, QUB SWAN	2016	New Target: 100% SBS staff to complete unconscious bias testing and have UB testing included in university policy as a compulsory online training course

	recruitment processes	interview panel. Continue discussions with HR to ensure unconscious bias training is added to the compulsory interview skills training workshop with compulsory online training required for all staff at QUB	Champion Chair, QGI, HR		
2.1, 2.2, 2.3, 2.4, 2.5, 2.8	Addressing under-representation of women at senior academic levels		HoS, DRs, Director of IGFS, HR	2019	<p>New indicator: staff surveys to indicate 100% awareness of promotion criteria</p> <p>New Target: Increase the proportion of eligible women applying for promotion from 18% to 35% by 2019</p> <p>New Target: 25% of staff confirmed in post early</p> <p>New Target: At least four female professors in post</p>
2.6	Ensure that each female applicant has sufficient administrative experience for promotion	Analyse data from new faculty-level WAM and university TAS to test for gender-based differences in work allocations	HoS, School Manager	2019	New Target: Females will constitute 50% of management post-holders

2.7	Emphasize the likelihood that candidates with all-round contributions to the School can achieve promotion (not just research stars).	Apply holistic model (research/ teaching/ admin.) for membership to IGFS	HoS, Director of IGFS		New Target: All females will have full membership of IGFS
2.9	Increase visibility of role models for successful women in academia from outside QUB by inviting female speakers		HoS, Director IGFS, AS Champions		<p>New Indicator: Ensure SBS AS guidelines for hosting meetings are applied (e.g. 50% female keynote speakers)</p> <p>To date several planned national and international meetings hosted by SBS will adopt the guidelines for promoting visibility of females produced by SBS SAT (e.g. BBSRC UK Veterinary Vaccine Network Conference at QUB in January 2017, BES Aquatic Group Annual Meetings at Charles Darwin House, London, in July 2016-18) in addition to internal seminars and student-led activities.</p> <p>New Target: All advisory boards (e.g. ISAB, IGFS Scientific Advisory Board, IGFS Industrial Advisory Board) will have 30-50% female representation</p>
New Action	Encourage females to gain management training and leadership experience	Management training will be promoted to suitable females during appraisals. For example, QUB offer courses on <i>Excellence in</i>	HoS, Director IGFS, AS Champions	2019	New Target: All women SL and above will have completed management training

		<i>Leadership for managers and in Management and Leadership in a Research Role.</i>			
3.6	Encouraging contract researchers to apply for fellowships				<p>New Target: 100% postdocs apply for independent fellowships/ permanent posts</p> <p>New indicator: Excellent female ECRs will be identified and supported to apply for Fellowships</p>
New Action	Increase visibility of females to students	Monitor gender balance on all teaching modules (currently very few have all-female or all-male teaching teams), external examiner appointments and encourage the use of texts produced by females on all curricula (where appropriate)	HoS, Directors of Education, Pathway convenors		<p>New Target: 30% external examiners will be female</p>

Ref.	Objective	Actions	Responsibility	Timeline	Success indicators
New Theme (B): Promote the Action Plan and its benefits to all SBS staff and students and beyond SBS by providing advice on good practice to other departments and institutes (Beacon)					
B.1	Promote Action Plan to SBS students and staff	AS Champion a permanent member of both Undergraduate and Postgraduate Staff-Student Consultative Committee (SSCC) AS AS updates and regular item on SSCCs agenda	HoS, AS Champions and SAT Committee	2016-2019	New Target: Staff and student surveys will indicate 100% awareness levels of Action Plan and positive staff opinions
B.2	Ensure staff and student engagement with Action Plan development	This Action Plan is a working document that responds to changing environments, management structures and challenges Draft, disseminate and promote revised Action Plan		2017-2019	New Target: AS permanent item on both SSCCs agenda and AS champion permanent member of both committees

B.3	Engage with wider community beyond SBS	Poster Project highlighting successful women in biology in conjunction with local school – resulting in posters on permanent display in SBS foyer in addition to AS Charter posters	HoS, Deputy HoS, AS Champions and SAT Committee	Launch 2017 Unveiling of posters to coincide with World Women’s Day 2017	New Indicator: Permanent gallery of AS charter aims and female biologists showcased in foyer and SBS Office
B.4	Offer advice and share expertise of achieving Gold Award (we will also benefit from shared experience with other institutes)	AS Champions to join ECU assessment panel Most SAT members to join AS assessment panels AS Champions and HoS to provide advice to other institutions and departments regarding good practice and implementation	SWAN Champions SAT Panel HoS, Deputy HoS, SWAN Champions, SAT Committee	2016 2017-2019 2016-2019	New Target: Consultation provided to five other schools and institutes preparing submissions.

		SAT members to include AS objectives at invited research seminars	SAT Committee	2016-2019	
B.5	Review staff and student awareness and opinions of gender and equality issues and policies to avoid complacency	Survey all academic staff to assess awareness and satisfaction with efforts to promote equality within the workplace	SAT Committee	2017, 2019	New Target: 100% staff fully aware of all gender equality initiatives and policies at SBS and QUB.
B.6	Influence university-wide policies and advise on promotion and implementation of AS Charter	SBS AS Champions are members of the university AS Committee	SBS AS Co-chairs HoS	2019	New Target: QUB to apply for Institutional Gold AS Award New Target: Ensure AS aims are implemented at faculty and university level through FEB
B.7	Prepare for new AS Charter, evolve to the Equality and Diversity Group and redefine remit	Establish and promote terms of reference for SAT Committee	HoS, SAT Committee	2016-17	Target: Prepare next award application for post-May 2015 AS Charter