Athena SWAN Silver department award application

Name of university: University of Stirling

Department: Biological & Environmental Sciences

Date of application: April 2015

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

Contact for application: Kirsty Park

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

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

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

Sections to be included

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

Athena SWAN Manager
Equality Challenge Unit
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SCHOOL OF NATURAL SCIENCES

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31st March 2015

Dear Athena Swan Manager

Letter of Endorsement: Athena Swan Silver Application

On behalf of Biological and Environmental Sciences (BES), it gives me great pleasure to confirm my full support for this application for the Athena Swan Silver award. This application has been developed by our *Equality and Diversity Committee* (EDC) which I set up in January 2014 and remain an enthusiastic member. The EDC is a team of eight scientists who provide representation across the full spectrum of activities and career stages within BES. We have already implemented a number of policies and measures to tackle issues of gender imbalance with demonstrable effect.

BES has a real "can-do" atmosphere, a function of the energy and ability of the staff. Building on this positivity, it has been my priority to ensure that all staff have the opportunity to progress and realise their ambitions. My role has, in part, been to set the strategic direction for BES, ensure good governance across all aspects of BES' activities, promote good practice, and recognise, nurture and bring talent to the fore. All these require the implementation of robust policies and practice in equality and diversity to ensure positive action for gender balance within recruitment and management. We firmly believe that these measures will ensure the future success of individuals and the continuing prosperity of BES. I have placed EDC as a standing item on the academic staff agenda so I can ensure the plan is executed.

Recognising the need to address the issues of gender imbalance, BES was directly involved with the University of Stirling's successful institutional bid for Athena Swan Bronze, awarded in September 2013. In BES, the work of the EDC has resulted in a step change in the way we think about equality and diversity throughout all our activities, from recruitment, retention and promotion to ensuring a gender balance with visiting speakers (from below 20% in 2012 to 50% in 2014). For example, changes in the way we recruit staff resulted in the number of female applicants increasing from around 25% to 45% in the last round, and of the last four posts we appointed three females. We also highlight examples of how we are implementing policies which encourage the retention of female research students and staff, to help develop their careers following, for example, maternity leave.

Our equality and diversity code of practice was embedded within our REF 2014 submission and I believe this has contributed to BES' REF success; based on research power, BES is ranked second in Scotland (2014; C17). With this level of evidence delivered over a relatively short space of time, we believe the timing is now right for BES to apply for the Athena Swan Silver award.

In all these activities I would like to commend my colleague and Deputy Head of Division, Dr Kirsty Park, who led this work. Her drive, tenacity and innovation have been central to this application. I am also very grateful for the commitment of the EDC, and to the whole department (93% of whom returned survey data) for their contributions.

Professor Andrew Tyler (Head of Biological & Environmental Sciences)

[499 words]

Glossary

Explanation for terms and acronyms used in the application (full names are also provided for acronyms where first used in the text).

Acronym (where relevant)	Full name	What is it?
AAPC	Academic Advancement & Promotions committee	A University of Stirling level committee
-	Academic Council	The body responsible for the academic work of the University and for the regulation and superintendence of the education, discipline and welfare of the students of the University
-	Achieving Success	A personal development review process, conducted annually
ASSAP	Athena SWAN Self-Assessment Panel	A University of Stirling level committee
	Aurora Leadership programme	A women-only leadership development programme launched by the Leadership Foundation for Higher Education
BES	Biological & Environmental Sciences	The department within University of Stirling making this application
ECU	Equality Challenge Unit	A body advancing equality and diversity in Universities and colleges, and responsible for assessing Athena Swan applications
EDC	Equality and Diversity Committee	A BES level committee
-	Equate Scotland	A body promoting and supporting women in academia, business and industry
-	Equality Steering Group	A University of Stirling level committee
FTE	Full Time Equivalent	-
HoD	Head of Division	-
NERC	Natural Environment Research Council	A UK government funding body
PDRA	Post Doctoral Research Associate	
RCUK	Research Councils UK	A partnership of the seven UK Research Councils
RPG	Research Postgraduate	A PhD or Masters by Research student
	ScienceGrrl	An initiative celebrating and supporting women in science and organising events to inspire potential future scientists
STEMM	Science, Technology, Engineering, Mathematics and Medicine	-
-	Stepping Stones programme	A personal development programme for women offered as part of the Stirling Gender Equality Initiative
TPG	Taught Postgraduate	-
UG	Undergraduate	-
-	University Court	The governing body of the University. It has overall responsibility for the management of the University's resources, the ongoing strategic direction of the University and the approval of major developments.
UoS	University of Stirling	-

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

An accompanying letter of endorsement from the head of department should explain how the SWAN action plan and activities in the department contribute to the overall department strategy and academic mission. The letter is an opportunity for the head of department to confirm their support for the application and to endorse and commend any women and STEMM activities that have made a significant contribution to the achievement of the departmental mission.

See pages 2-3.

2. **The self-assessment process: maximum 1000 words [695]**

Describe the self-assessment process. This should include:

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

The self-assessment team (henceforth known as the Equality and Diversity committee, EDC) was established in January 2014 by Dr Kirsty Park (Chair) and includes both male and female academics spanning the career stages of post graduate student to Professor, and encompassing the range of academic disciplines within Biological & Environmental Sciences (BES; Table 1). We will be advertising for a UG student to join the committee (**action 2.2b**). The committee is supported by an administrative assistant. Membership of the EDC is either by invitation from the Chair or self-selecting through staff or students volunteering to join. Members cover a range of working patterns and contracts (part-time, full-time, open-ended, fixed-term) with a proportion having caring responsibilities for family members.

Table 1 Composition of the Equality & Diversity committee

Name	Position (arrival at Stirling)	Relevant history, academic & personal roles
Dr Kirsty Park (Chair)	Reader (1998)	- Joined BES as a postdoc in 1998, a lecturer in 2005, promoted to Senior Lecturer in 2010 and Reader in 2014; - Current roles: deputy Head of Division, Chair of the Equality & Diversity committee; - Previously served on the University's Academic Advancement & Promotions committee.
Dr Stuart Auld	NERC Independent Research Fellow (Jul 2013)	- NERC fellow since 2014; - Provides training to PhD students on making the most of being an early-career researcher, with specific focus on building confidence and project management; - Contributed to the process of examining the data, discussing priority action points and conducted data analysis and visualization for this application.
Professor Mike Billett	Professor (Aug 2014)	- Previously at Centre of Ecology and Hydrology (CEH). Experience as trained Welfare Officer providing counselling and support to staff across NERC research centres; - A Research Group leader at UoS: responsible for mentoring and supporting early-career academic staff; - Contribution: wrote parts of the text in section 4 as well as contributing to the Athena Swan process and consultation. - Outside University actively involved in the support of two elderly parents.

Dr Luc Bussière	Lecturer (2007)	- Lecturer in Evolutionary Biology and member of the Learning & Teaching Committee; - Instigated BES' well established undergraduate bursary scheme to provide more opportunities for students to work on research projects with academics; - Contributed to the process of examining the data, discussing priority action points, commenting on the text and conducted data analysis and visualization for this application; - He has a step-daughter and partner in Sweden.
Joan Colston	Administrative Assistant (2013)	- Roles include dealing with enquiries from both staff and students, organising the departmental timetable and recording student grades and information; - Currently working towards a degree in Accountancy and Finance part time whilst working.
Dr Daisy Dent	Lecturer (2011)	- Previously a postdoctoral researcher at the Smithsonian Tropical Research Institute, Panama. - Ongoing research projects in Brazil, Panama and Malaysia on human disturbance on tropical forest ecosystems; - Contributed to the Athena Swan process and consultation and wrote one of the case studies presented in section 7. - She has a six-year old daughter.
Elizabeth Herridge	PhD student (2010)	- Currently in final year of a 5 year PhD Research Apprenticeship and has a BSc (Hons) in Zoology from the University of Aberdeen; - Helped establish a University-wide policy of maternity leave for University funded postgraduate students; - Contributed to the Athena Swan process and consultation, and was involved in the PhD focus group outlined in section 4.
Dr Eileen Tisdall	Lecturer (2012)	- Appointed as a part-time lecturer in Environmental Geography in 2012 (originally as part of a fixed-term job share with another lecturer - now a permanent position); - Chair of BES' Learning and Teaching committee; - Contributed to the Athena Swan process and consultation, instigated the PhD focus group and wrote parts of the text in section 4; - She has a young family.
Professor Andrew Tyler	Professor (1994)	- Joined the University of Stirling in 1994 as a lecturer in Environmental Science, Senior Lecturer in 2003, Reader in 2008 and Professor in 2013; - Became Head of the BES in 2011 - assumed the strategic lead in research and academic development; - Contributed to the Athena Swan process and consultation, and wrote several parts of the text in sections 3 and 4; - He has a young family.

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

The Equality & Diversity committee met formally approximately monthly from March – December 2014 (Table 2). The Chair also attended quarterly meetings of the Chairs of the self-assessment team at a University level to share ideas and experiences with Health Sciences, Psychology, Aquaculture, Maths & Computing Sciences (Table 3), and Equate Scotland's Gaining and Sustaining

Silver, Athena Swan Workshop 11th November 2014. HEIDI data was supplied by Policy & Planning to provide UK benchmark data for students, a staff equality survey was circulated to all academic and research staff in BES, and a focus group meeting was held with female postgraduate students. Guidance on the process was provided by Svenja Timmins, Graeme Duff, Rachel Winzer (Policy & Planning) and Prof Carron Shankland (Deputy Head of the School of Natural Sciences; Chair of the Athena Swan Self-Assessment Panel, ASSAP), who were all involved with the University submission in 2013. A draft application was then assessed by ASSAP. The final application was then approved and signed off by the Equality Steering Group. The Equality & Diversity committee was made a standing item on the agenda of academic staff meetings (held approximately four times a year).

Table 2. Dates and content of meetings of BES' Equality & Diversity Committee.

No.	Date	Description
1	10/03/14	Discussion of Athena Swan process, identification of work-plan; distribution of roles within the team.
2	11/04/14	Discussion of successful silver applications; plans for RPG focus-group and staff equality survey; identification of actions; agreed to invite Stuart Auld onto the committee.
3	16/05/14	Examination of data set and further requirements; agreement on equality survey questions; Luc Bussière and Stuart Auld volunteered to lead on statistical analysis and graphics.
4	20/06/14	Examination of revised data set and further requirements; discussion on presentation to BES on dataset and equality survey findings.
5	04/07/14	Discussion of data set and presentation of results.
6	15/08/14	Presentation of staff equality survey; discussion over confidentiality issues.
7	12/09/14	Discussion of promotions data set and priority action points for students; update on tasks assigned in August.
8	15/10/14	Discussion of draft application and outstanding actions; agreement on presentation of results
9	14/11/14	Discussion of second draft of application and identification of further actions
10	12/12/14	Discussion of third draft of application and identification of further actions

Table 3. Dates and outline of meetings and consultations with relevant University committees and groups

No.	Date	Committee/group
1	27/03/14	Athena SWAN Chairs. Includes the chairs for all the STEMM University departments
2	23/06/14	Athena SWAN Chairs. Includes the chairs for all the STEMM University departments
4	11/10/14	Seminar of data findings to BES
5	11/11/14	Equate Scotland's Gaining and Sustaining Silver, Athena Swan Workshop
6	08/12/14	Athena SWAN Chairs. Includes the chairs for all the STEMM University departments
7	03/03/15	University Self-Assessment Panel meeting

Buy-in from the whole of BES is considered critical to the activities of the Equality & Diversity Committee, and during the development of this application there was wide consultation and information-sharing including:

1. *Information about the self-assessment process*, including an invitation for comment and ideas, was circulated to the entire division in June 2014.
2. *Staff equality survey*: there were 43 responses to the staff equality survey (93% completion rate) circulated in July 2014. The majority of men and women indicated a high degree of satisfaction with the working environment within the division. However, it also raised some issues and areas of concern so proved invaluable in developing the action plan and, more widely, improving communication within BES (see section 5 for details; Fig 13). We have already made a start in these areas (see action plan).
3. *Presentation of data*: the Chair of the Equality & Diversity committee gave a seminar on the content of this application, including the staff equality survey (11th October 2014), as a way of disseminating information and sparking discussion. Attendance at this presentation was

high (approximately 50 staff and research postgraduates). Feedback from all these activities and information sources has been used to shape this submission and has fed directly into the action plan. We also shared this presentation with other divisions within the School of Natural Sciences.

Whilst the Athena Swan process in BES was formally initiated early in 2014, there had been recognition and discussion of the issues of gender inequality in STEMM subjects generally, and BES specifically, for a number of years and there has been some progress in trying to address these, hence our application for a silver award. Table 4 below provides a summary of key actions and impacts.

Table 4: Key issues identified where actions have already been started and their impacts

Issue identified	Action taken	Impact observed
Low proportion of women applying for fixed/open positions	Introduction of positive actions directed at recruitment e.g. - Advertising all open-ended contracts as available part-time; - Increasing prominence of commitment to equality & diversity including Athena Swan logo (**continuing actions 3.2a, d, e**).	- The proportion of women applying for fixed/open positions in 2014 rose from 25% (2012-14) to 45% (2014); - Appointment of three new female lecturers (grade 7) in 2014/5.
Low number of senior female academics	Focus on improving the promotional prospects for eligible female staff through e.g. - Identification of potential leadership roles (**continuing action 3.5a**); - Active mentoring and feedback on application from HoD.	Two women promoted to Reader level in 2014 (see example on page 19).
Low number of women chairing decision-making committees	HoD approached potential female candidates directly, using the workload model to take other responsibilities into account.	Number of decision making committees with a female chair has risen from one to four.
Low proportion of female external seminar speakers	Increasing awareness and specific positive actions e.g. - Informal and formal (e.g. academic staff meetings) during Institutional Athena Swan application; - A specific call for a greater number of female speakers was made in BES (**continuing action 2.3d**).	The proportion of female academics visiting Stirling to give seminars has increased from 10-36% (2009-2013) to approximately 50% (Fig 11).
Poor visibility of senior female academics at PhD events	Increasing awareness and specific positive actions e.g. - Ensure senior females (from BES or external) speak at PhD events; - Invite female alumni PhD students to speak at annual winter PhD symposium (**continuing action 2.4b;** since 2013).	High degree of engagement and appreciation for such events from PhD students e.g. feedback via twitter hashtag #BESWinter. (available at: http://sti-cs.org/2013/12/05/making-internal-symposia-a-success/)/

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

The Equality & Diversity committee will continue to meet quarterly in order to discuss implementation and progress of the action plan timetable and discuss new initiatives, and the Chair of the committee will report on activities and progress to BES academic staff meetings and to the Chairs of self-assessment teams (**actions 1.1a, b**). We will engage with relevant external activities to share good practice; e.g. ECU, Equate Scotland (**action 1.1c**). The staff equality survey will be repeated at three yearly intervals to provide evidence of changes in knowledge and perceptions from staff (**action 1.1;** evaluation).

3. **A picture of the department: maximum 2000 words [1992]**
   Provide a pen-picture of the department to set the context for the application, outlining in particular any significant and relevant features.

BES became a Division within the School of Natural Sciences in 2011, alongside Aquaculture, Computing Science and Mathematics, and Psychology. There are 29.5 staff, 13.6 Post-doctoral research associates (PDRAs) and research fellows, almost 600 undergraduate (UG) students, about 20 taught postgraduate (TPG) and 60 research postgraduate (RPG) students (all figures expressed in Full Time Equivalents, FTEs). BES has an inclusive and supportive ethos for staff and students alike, with a regular programme of consultative meetings, social events and charity fund raising.

BES provides eight core undergraduate honours degree programmes, a number of combined degrees, and three Masters programmes. A recent innovation was the development of the Applied Biology degree, designed to increase University accessibility; this has direct input from the Scottish Life Sciences employers' community and is taught jointly with nearby Falkirk College, where students transfer wholly to Stirling during their two honours years. In 2011, BES introduced a 5 year Research Apprentice scheme, a part-time PhD programme, to provide a broader academic training including experience of a diversity of research topics and leadership in teaching.

Research within BES is organised into two distinctive research groups, each with increasing evidence of world leading research and largely focussed at the interface between the environment and society: (i) Ecology, Evolution and Conservation; and (ii) Environmental Systems, Environmental Change and Environmental Protection. BES is led by the Head of Division (HoD) and supported by a deputy. The HoD is responsible for the divisional strategy and, as a member of the School of Natural Sciences Executive, reports to the Head of School and contributes to the School's strategic plans. Teaching matters are driven by the Learning and Teaching committee (LTC), which includes Programme Directors, Chief Examiners and the HOD. The chair of the LTC reports to the School's Learning and Teaching committee, which includes student representation. Each of the two research groups is led by a senior member of staff and, along with key members from the groups and the RPG tutor, are members of the Research committee. The Director of the Research committee also reports to the School's Research committee.

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

In the majority of cases we present data for the three year period covering 2012-2014 inclusive. We have presented data from a longer time period where data are available and where numbers are small. Because we are including data from 2014, we have been unable to source comparator data for some of the national (UK) data sets e.g. proportion of female undergraduates studying biological and geography degrees. However, at the national level we note that these do not typically change substantially year-to-year.

A note on interpretation of the figures: the vertical lines associated with individual data points (e.g. observed proportion) are the 95% binomial confidence intervals. These denote the level of confidence we have for the proportions presented. For example, if the proportion observed was one from a sample size of only two, you would have less confidence in this figure than if the proportion was 50 from a sample of 100 (even though both are 50%); this is reflected in the larger confidence intervals for smaller sample sizes. Where a confidence interval overlaps 0.5 (in the proportion of women), this indicates the proportion observed is not statistically different from an equal sex ratio. Where two proportions are being compared, they are taken to be significantly different from each other if their confidence intervals are non-overlapping.

Student data

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

The University of Stirling runs a Science access course through the School of Education which provides a route into Stirling's degree courses. The majority of these students take up a nursing degree and currently no member of BES staff teaches on this course. Table 5 indicates a decline in the numbers of female students over three years although this is based on a small sample size. We will continue to monitor these figures (**action 2.1a**).

Table 5. Numbers of male and female students on the Science access course 2011/12 – 2013/14.

Academic year	Female (n)	% female	Male (n)	% Male	Total (n)
2011/12	6	75	2	25	8
2012/13	3	38	5	63	8
2013/14	2	18	9	82	11
Total (n)	11		16		27

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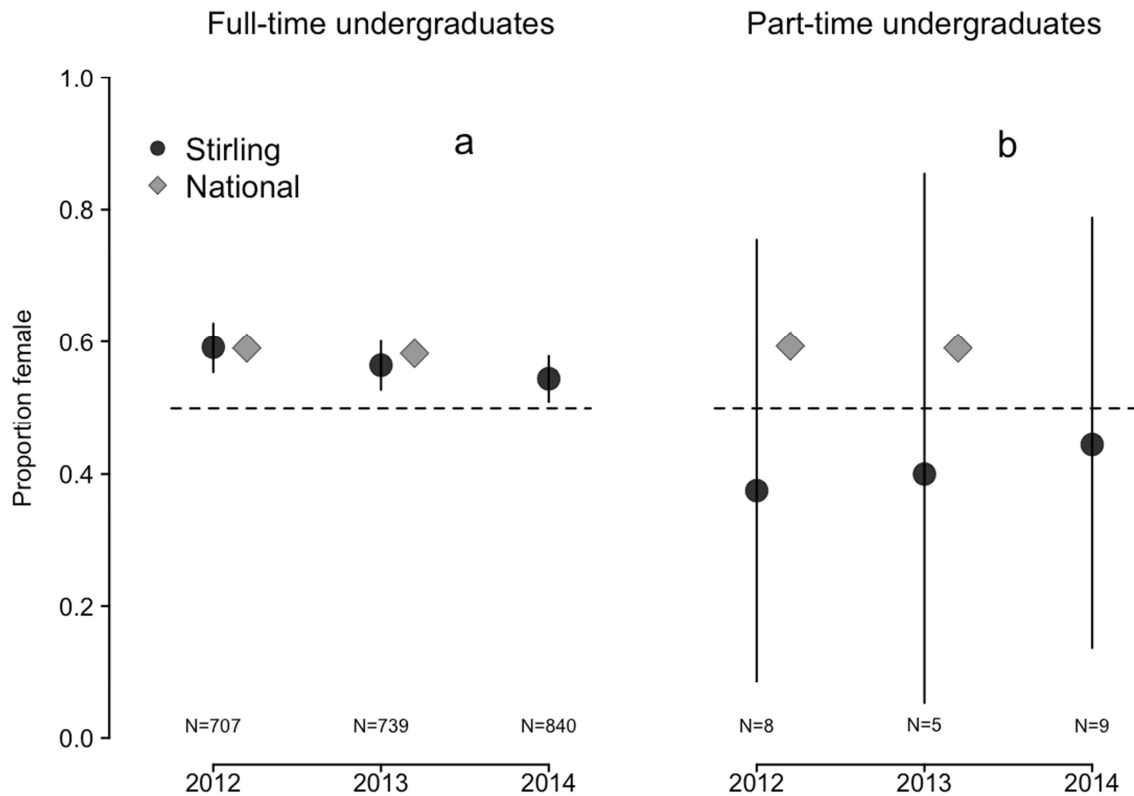

Fig 1 The proportion of female undergraduates undertaking degrees within BES (a) full time or (b) part-time, compared to national (UK) figures for similar degrees. National figures for 2014 are not yet available. Dashed lines indicate 50% female. Note that 95% confidence intervals are not presented for national figures; due to the very large sample size these would be extremely small.

Over the period 2012-14, our annual intake (including those on combined degrees with other Schools and divisions) averages 762 full-time UGs. Of these, in 2012 59% were female, in line with the national average for biological and geophysical sciences. However, there has been a slight decrease over our reporting period and females now account for 54% of students (Fig 1a). The underlying reasons are is unknown but we will continue to monitor these figures, review our recruitment material and ensure a gender mix of recruiting staff (**action 2.1a, 2.3b, e**). A very small number of undergraduates are part-time (n = 22 (1% of the total) over three years), of whom an average of 40% are female.

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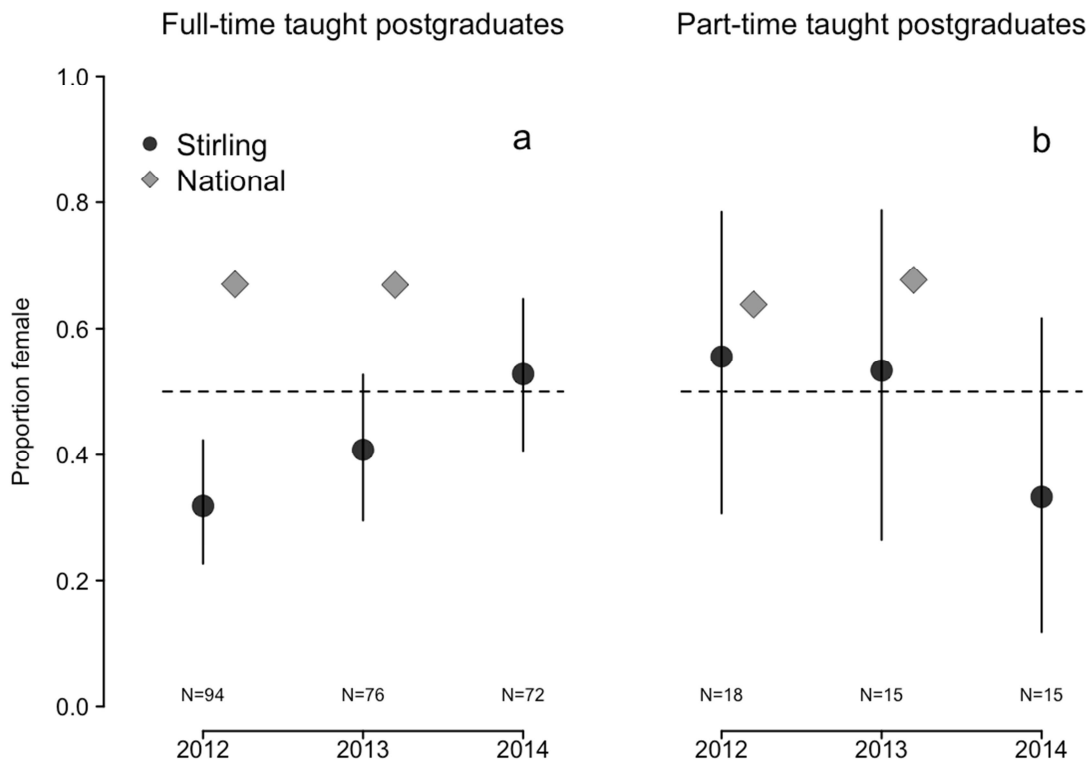

Fig 2 The proportion of female taught postgraduates undertaking degrees within BES (a) full time or (b) part-time, compared to national (UK) figures for similar degrees. Dashed lines indicate 50% female. Note that 95% confidence intervals are not presented for national figures; due to the very large sample size these would be extremely small.

There was a strong male bias in full-time TPG numbers in 2012 but this diminished over the three year period and females now account for 53% of students (Fig 2a). Whilst the three BES Masters programmes have approximately equal numbers of men and women, "Energy Management", a programme that BES runs with the division of Economics attracted large numbers of, predominately male, students from Kazakhstan and China. Changes to funding streams in these countries has since 2013 has reduced the number of applicants coming to Stirling. Whilst the proportion of full time female TPG is still below the national average of 67% we consider our more evenly balanced sex ratio satisfactory; we will, however, continue to monitor these figures and review our recruitment material (**action 2.1a, 2.3b**). Whilst the figures are much smaller for part-time TPG, the proportion of females within BES are in line with national comparator figures for these subject areas (Fig 2b).

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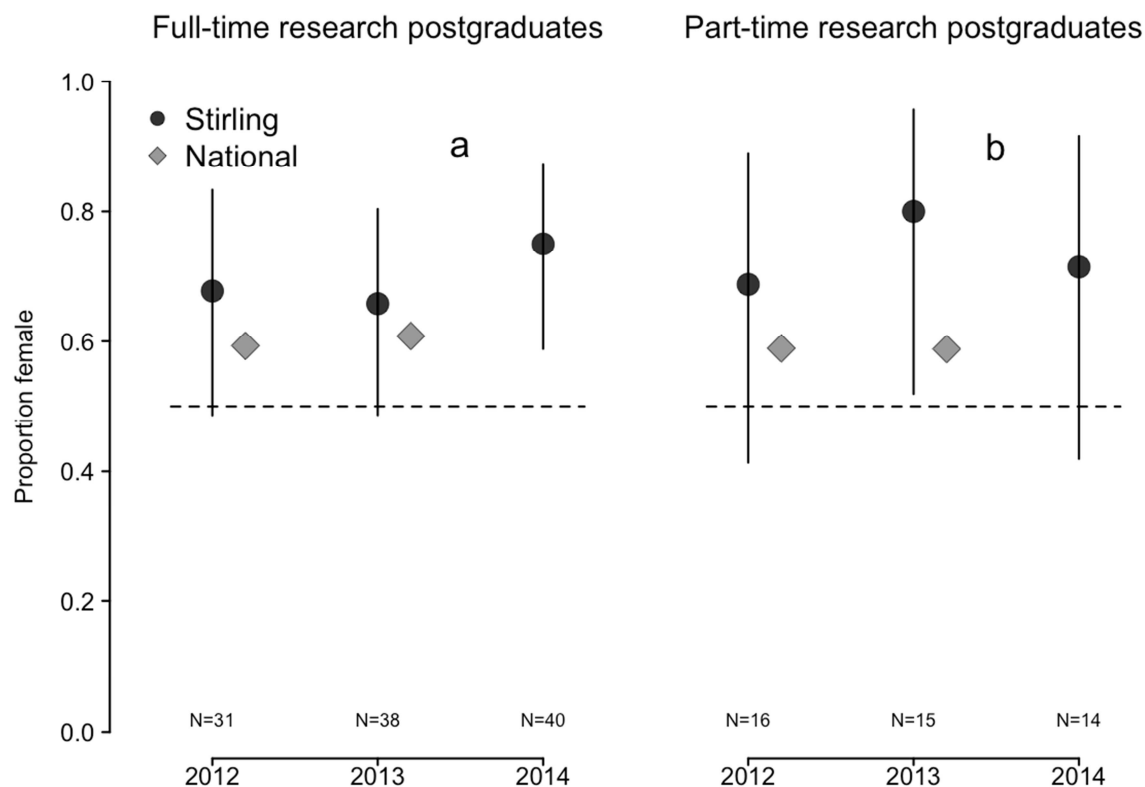

Fig 3 The proportion of female taught postgraduates undertaking degrees within BES (a) full time or (b) part-time, compared to national (UK) figures for similar degrees. Dashed lines indicate 50% female. Note that 95% confidence intervals are not presented for national figures; due to the very large sample size these would be extremely small.

The proportion of full time female RPGs is above the national average of 60% for these subject areas; although the confidence intervals overlap indicating that this difference is not statistically significant it is consistent over the three years (Fig 3a). The pattern for part-time RPGs is very similar to that of full-time students. These data suggest our recruiting materials (e.g. mix of genders on website), and interviewing procedures (e.g. use of RPGs for departmental tours and informal chats, invitations to seminars and other social events) have been successful in attracting high quality female RPG and we will continue to monitor these figures (**action 2.1a**).

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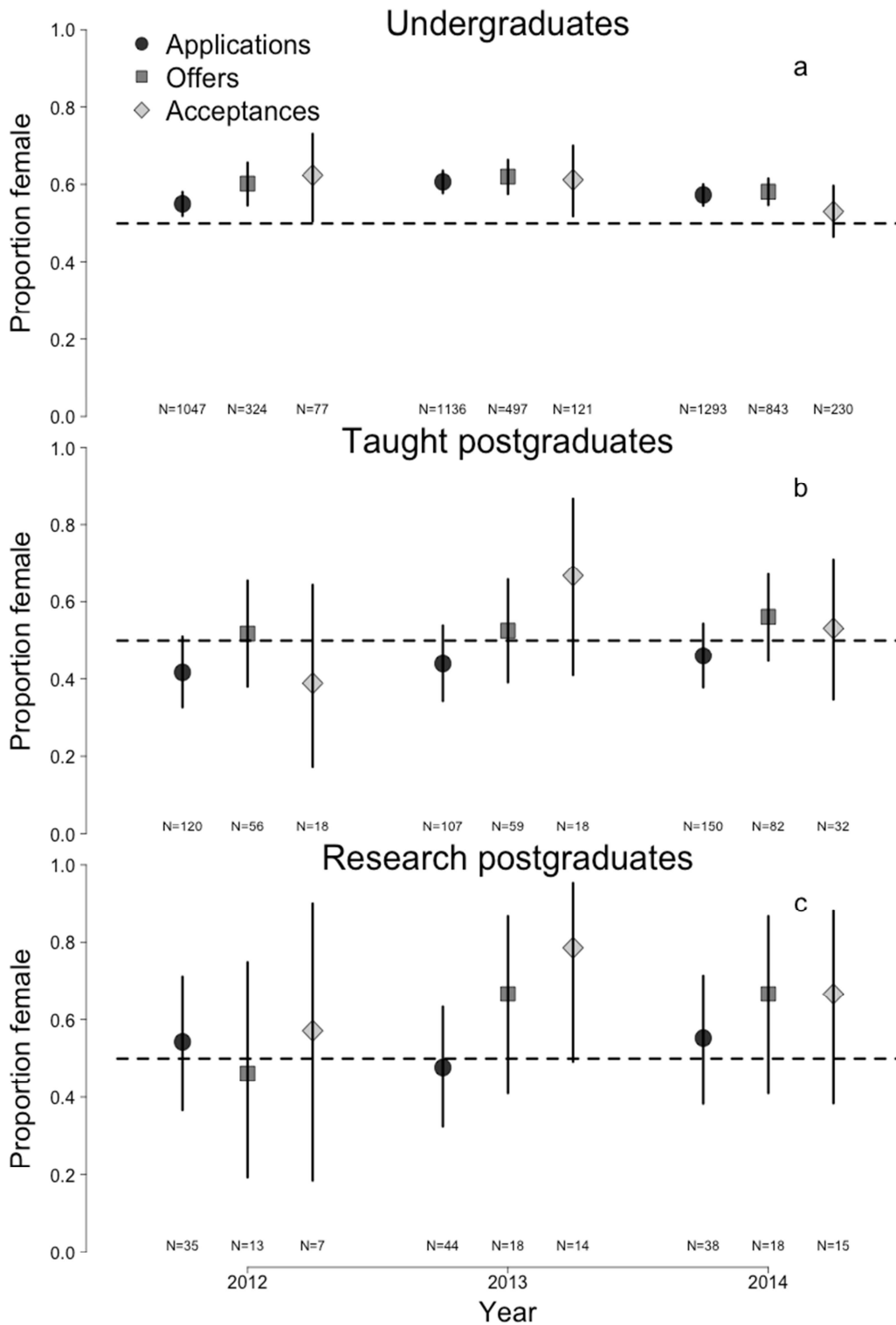

Fig 4 The proportion of female (a) undergraduate, (b) taught postgraduates and (c) research postgraduates applying, given an offer and accepting a place for a degree within BES 2012-2014. Dashed lines indicate 50% female.

The proportions of offers made to female UG, TPG and RPG are in-line with, or marginally higher, than the number of applications made and accepted (Fig 4), and there does not appear to be any bias in our selection process. We believe these figures demonstrate our efforts to ensure gender balance in our recruitment material, at recruitment days (**action 2.3b,e**) and on interview days (RPG only) are successful and we will continue to monitor these figures (**action 2.1a**).

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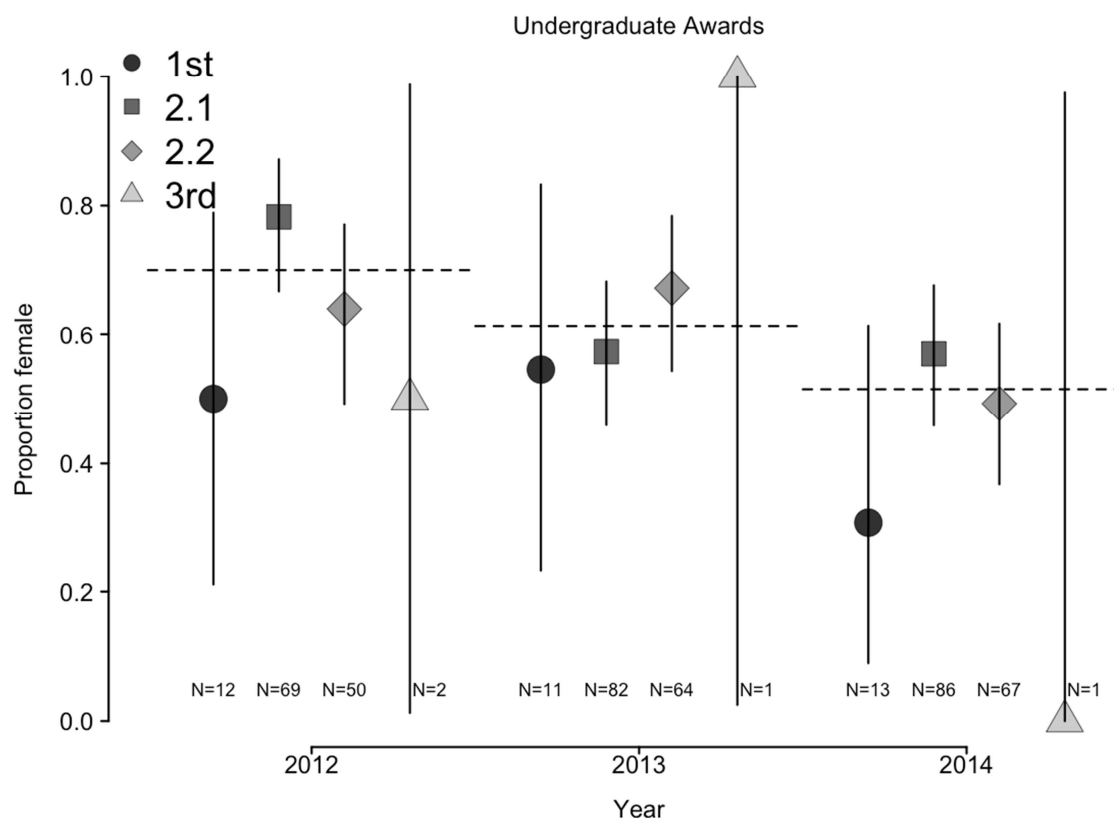

Fig 5 The proportion of female undergraduates with degree classifications 1st to 3rd class in years 2012-2014. Dashed lines indicate the proportion of females in each year. Numbers at the bottom indicate the total number of students in that degree class in a particular year i.e. in 2014, there was only one 3rd class degree awarded (to a male).

Fig 5 indicates that whilst women, on average, perform at a similar level to men, they appear less likely to gain a 1st class degree. Although the confidence intervals overlap with the expected proportion, this pattern is consistent over the three years. Whilst this phenomenon is a national one, it is not found at all universities and we were previously unaware that this was an issue at Stirling. A previous examination of the possible reasons for women being less likely to gain 1st class degrees suggested a range of plausible mechanisms (e.g. marking bias, academic aptitude), none of which was well supported by their analyses (McNabb et al. 2002[1]). The EDC is committed to exploring each of these possible causes and will conduct a series of analyses to identify data

[1] McNabb R, Pal S & Sloane P. 2002. Gender differences in educational attainment: the case of University students in England and Wales. *Economica* 69: 481-503.

requirements, examine potential mechanisms (**action 2.2a**), and put in place appropriate actions. It should be noted that since we have anonymous marking for all but final year dissertations, the pattern is very unlikely to be due to marking bias.

Other actions already taken or planned on this issue are targeted at boosting awareness of gender equality issues in science and the performance of female UG and we will achieve this through the following:

1. Our new personal tutor scheme (implemented Oct 2014): personal tutors will act as a point of contact for all students, provide support for academic studies and develop transferable and career development skills. Female students have the opportunity to request a female personal tutor.

2. Increase the visibility of female role models: given the currently limited number of female lecturing staff, more RPGs and postdoctoral researchers will be invited to contribute to lectures and practicals in UG and TPG teaching, over and above current demonstrating in practical classes (**action 2.3c**).

3. Undergraduate surveys: we will conduct a survey of 1st and final year UGs in order to understand the perceptions of science careers and future aspirations of males and females (**action 2.1b**). Following analysis of these data we will identify appropriate actions (e.g. female-orientated careers workshops).

4. Engage with female UGs on gender equality issues: we will recruit an UG to the Equality & Diversity committee, continue to ensure that staff-student consultative committees are of mixed gender (**action 2.2b, 2.3f**), and publicise our activities with external gender equality initiatives (**action 2.3a**).

Equality impact assessments will be conducted to ensure that actions outlined above (e.g. 1, 2) do not impact disproportionately on female staff (**action 4.2a**).
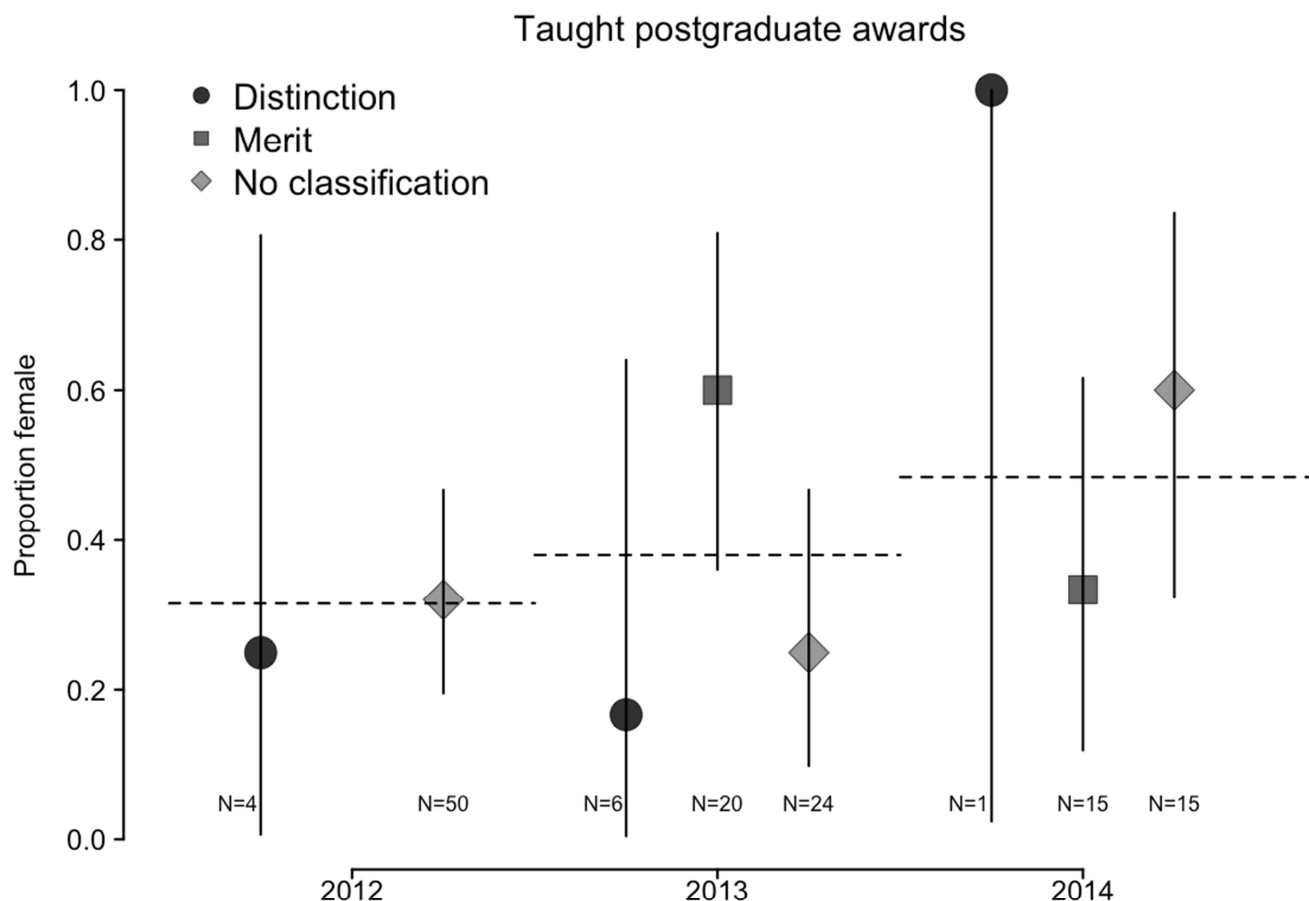
Fig 6 The proportion of female taught postgraduates with degree classifications no classification (pass) to distinction in years 2012-2014. Dashed lines indicate the proportion of females in each year. The grade of "merit" was introduced in 2013. Numbers at the bottom indicate the total number of students in that degree class in a particular year i.e. in 2014, there was only one distinction awarded (to a female).

Female TPG were marginally less likely to gain a distinction than males in 2012 and 2013 (Fig 6). In 2014 only one distinction was awarded (to a female). However, the numbers here are substantially lower than for undergraduates which means the confidence intervals around these proportions are greater i.e. we are less confident about the accuracy of the observed proportion. Nevertheless we will continue to monitor this pattern (**action 2.1a**), and will put in place a series of actions aimed at supporting TPGs and encouraging women in scientific careers (pages 26-27).

Research postgraduates

There is a slight bias towards male RPG being more likely to submit within the required 4 year period; of nine instances where a student exceeded the 4 year deadline or withdrew from their PhD, all but one were female (Table 6), and all but one were self-funded students. In order to ensure that self-funding students are as well prepared as possible we are implementing a more rigorous selection procedure, greater scrutiny of engagement and enhanced guidance (**action 2.4a,e**). We will also conduct exit interviews for any students leaving without completing their degree (**action 2.4d**).

Table 6 The outcome of registered RPG students who were due to complete between 2007 and 2014 within BES (part-time RPGs shown in brackets). Students are required to submit their thesis within 4 years although they may apply for extensions to this. Women comprise 76% registered students but 89% of students with extensions or who withdrew. Both instances of students transferring to other Universities occurred when they left to follow their primary supervisor who had left Stirling. Seven years of data have been included here as the numbers were relatively small.

	Registered students (2007-2014)	Submitted < 4 years	Submitted > 4 years	Withdrew	Transferred
N students	37 (5)	26 (0)	3 (0)	6 (5)	2 (0)
N female	28 (4)	18 (0)	3 (0)	5 (4)	2 (0)
% female	76	69	100	83	100

Staff data

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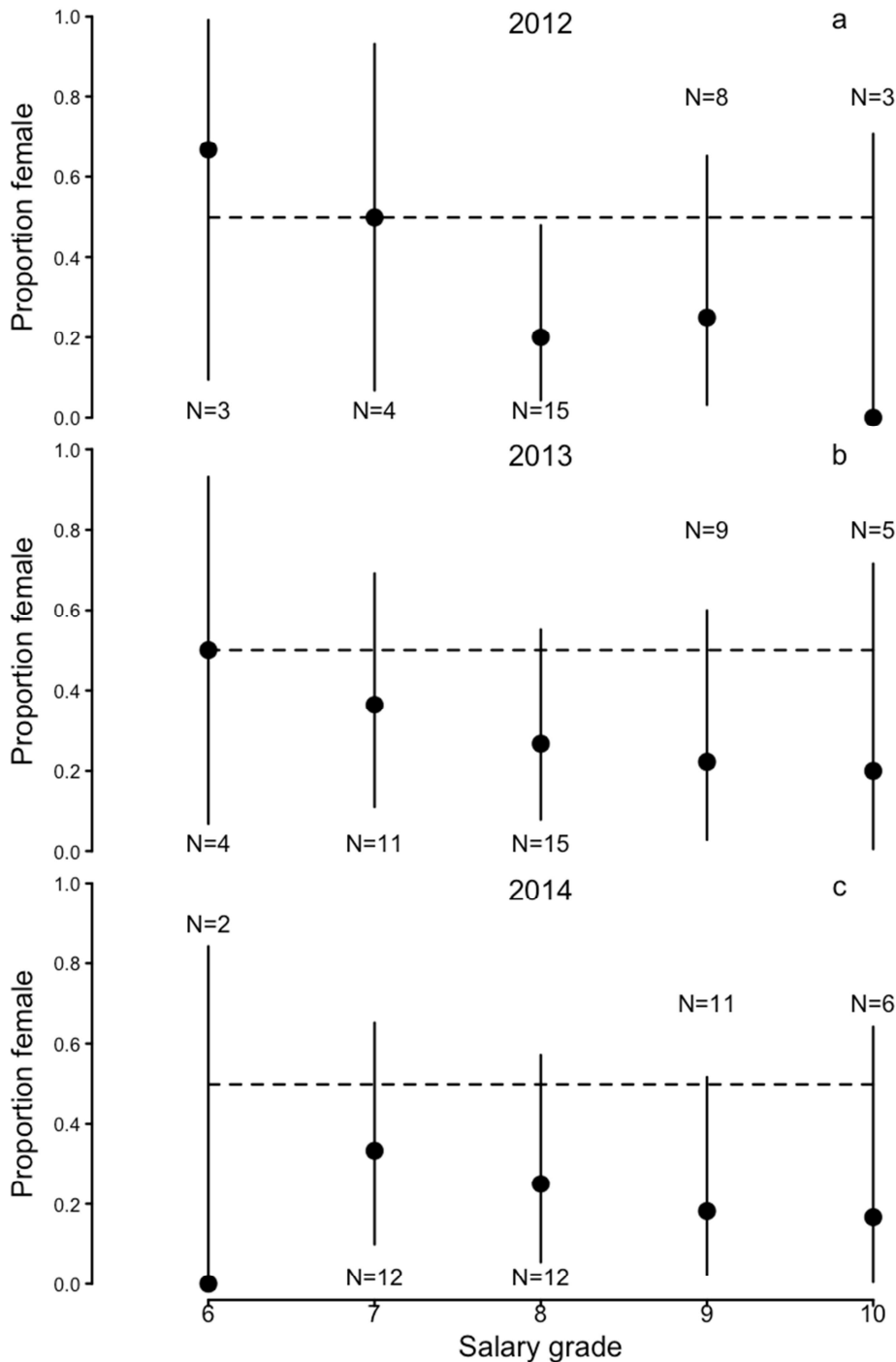

Fig 7 The proportion of female staff at salary grades 6-10 in years 2012-2014 (a-c). N indicates the total number of staff at each level. Dashed lines indicate 50% female. Grade 6 = Research assistant & equivalent; Grade 7 = Lecturer, Research Fellow & equivalent; Grade 8 = Lecturer & equivalent; Grade 9 = Reader, Senior Lecturer & equivalent; Grade 10 = Professor & equivalent. On average, over the three years presented, approximately 40% of grade 6 and 7 staff were female, falling to 22% at grade 9 and 12% at grade 10.

Reflecting the national picture, the proportion of female staff within BES decreases with increasing grade seniority although, because BES is relatively small the confidence intervals overlap with the 0.5 line (Fig 7). In recognition of this issue, over the past few years we have undertaken several actions which we believe are now starting to have a positive impact. In particular actions directed at recruitment (**actions 3.2a,b,d,e, 3.3a**) and promotions (**action 3.5a**), have resulted in the appointments of three new female lecturers who will all be starting in 2015, and the promotion of two females to Reader (pages 21-22).
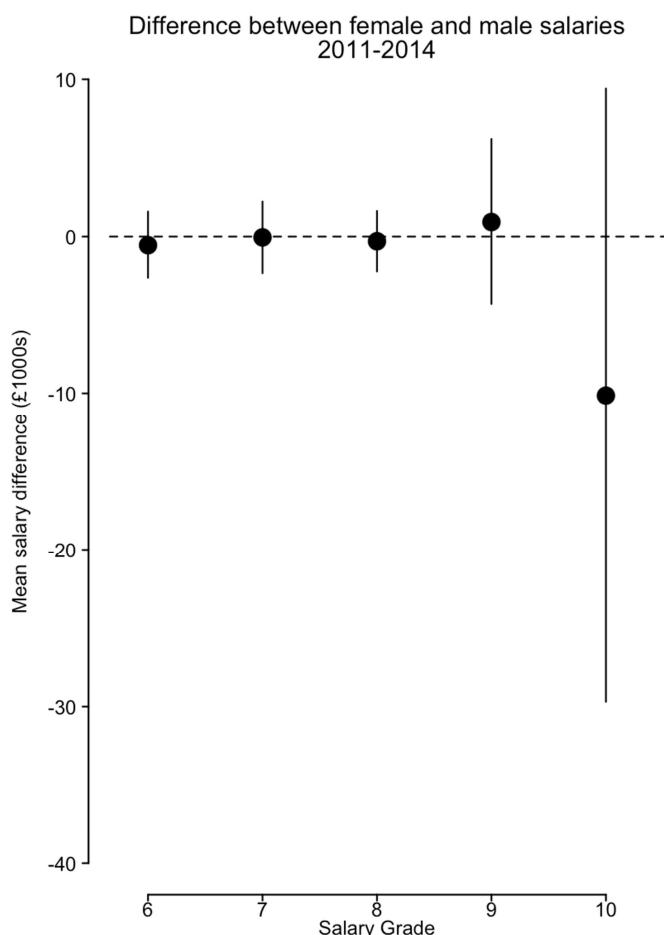

Fig 8 Salary differences between male and female academics at different salary grades between 2011-2014. Dashed line indicates the line of equality in pay. Grade 6 = Research assistant & equivalent; Grade 7 = Lecturer, Research Fellow & equivalent; Grade 8 = Lecturer & equivalent; Grade 9 = Reader, Senior Lecturer & equivalent; Grade 10 = Professor & equivalent.

We assessed the potential for salary differences between males and females at the same grade but found no evidence for this (Fig 8). The comparatively lower salary at grade 10 is due to one female professor who entered academia in 2012.

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

Between 2011-14, 16 staff (38% female) left at the end of, and six (0% female) resigned from, fixed-term contracts (grades 6-8) broadly reflecting the profile of staff within the division. Of six resignations from open-ended contracts (grades 7-10), two (33%) were from women. Of these, one followed her partner who took up a position overseas, and the other took up a position in another University. Whilst the University invites staff on fixed- or open-ended contracts leaving the University to complete an exit survey, the response rate is currently very low and these data are not routinely analysed. One of UoS' institutional planned actions is to review the exit process and how it could be enhanced. BES will engage with the revised University procedures, and encourage all staff leaving to complete the exit survey so that we can monitor a more comprehensive dataset (**action 3.1c**).

4. Supporting and advancing women's careers: maximum 5000 words [4998]

Key career transition points

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

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

Proportion of female job applications
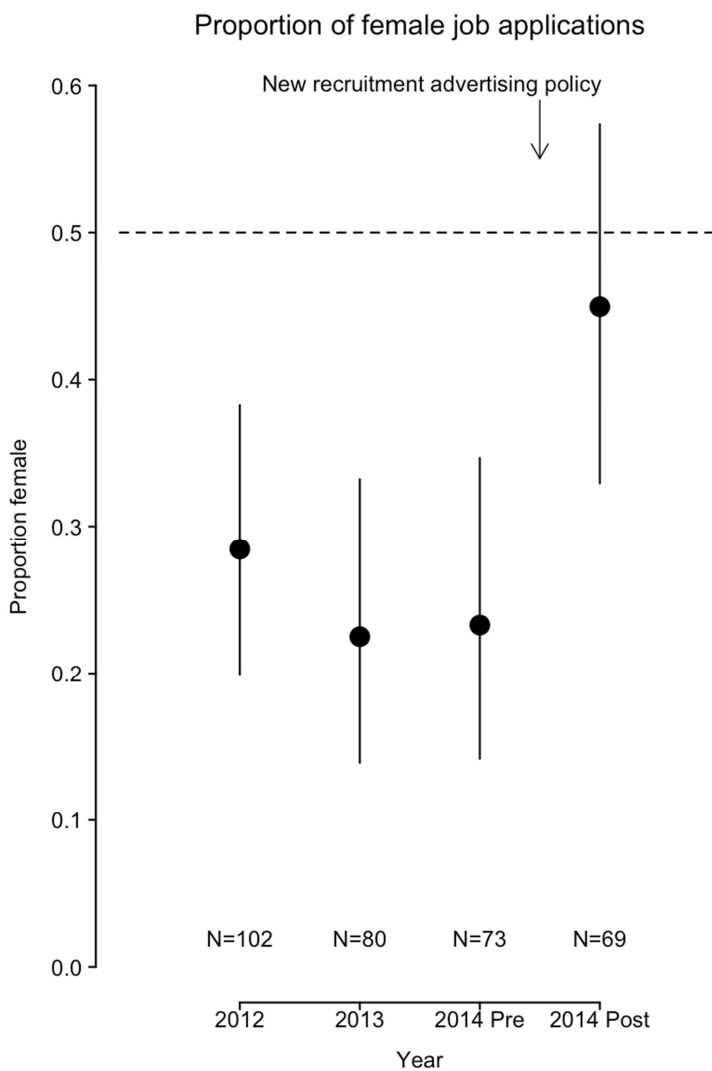
Fig 9 Proportion of female applications for positions (grades 6-10) 2012-2014. A new recruitment policy was introduced in August 2014. Dashed lines indicate 50% female.

Prior to changes in our recruitment approach, the proportion of women applying for fixed term and open-contract positions (grades 6-10) consistently averaged approximately 25% (Fig 9). After the introduction of positive actions directed at recruitment (**actions 3.2a,b,d,e**) this has risen to 45%, resulting in the appointments of three new female lecturers within the past year. We will also ensure training in unconscious bias for line managers and those on interview panels (**action 3.1b**).

(ii) **Applications for promotion and success rates by gender and grade** – comment on whether these differ for men and women and if they do explain what action may be taken. Where the number of women is small applicants may comment on specific examples of where women have been through the promotion process. Explain how potential candidates are identified.

The call for applications for promotion, including detailed criteria for promotion, is widely distributed to academic staff annually. Schools assess the applications in the first stage and forward successful applications, with an evaluative report to the University committee (Academic Advancements and Promotions committee; AAPC) to take the final decision. AAPC is required to be of mixed gender and comprises nine members including the Principal.

Table 7 Numbers of male and female academic staff applying for and being awarded promotions 2010-2014. Due to the small sample size data have not been broken down per year.

	Applied		Successful	
Position	Female	Male	Female	Male
Professor	0	4	0	3
Reader	2	1	2	1
Senior Lecturer	2	8	1	6
Senior Teaching Fellow	0	3	0	1
Totals	4	16	3	11

The proportion of successful promotions is similar for men and women (Table 7). Of four applications from women applying for promotion between 2010-14, three (75%) were successful, in comparison to 69% of male applicants. Since 2012 our personal development review system (*Achieving Success*; page 25) has become more rigorous and we now use this process to actively support staff and work with them to help them build a strong case for promotion. This is having a marked improvement on promotion success. There were six applications 2010-2012 (inclusive) of which only two (33%) were successful. In contrast, between 2013-2014, 14 people applied for promotion and 12 (86%) of these were successful. As an example of how our personal development reviews now work, one of the female applicants in Table 7 had been encouraged to apply for a readership a year in advance and the HoD worked with her to enhance her leadership role in the division. This included the preparation of two submissions to the Research Excellence Framework assessment in 2013. Due to the heavy workload that this entailed, the HoD organised for other colleagues to take over a lecture course and an administrative job. Her application for promotion was subsequently successful.

We therefore find no bias against women in promotions, although the numbers presented in Table 7 are small. However, these data do not reveal whether women's careers tend to progress more slowly and whether periods of leave or part-time working affect progress. Collecting and analysing this information is part of our action plan (**action 3.4e**) although we recognise that, due to the size of the division, our sample size for this will remain small.

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

(i) **Recruitment of staff** – comment on how the department's recruitment processes ensure that female candidates are attracted to apply, and how the department

ensures its short listing, selection processes and criteria comply with the university's equal opportunities policies.

Of 324 applications for 15 posts over the three year period, 29% were from females, closely matching the proportion of positions offered to females (33%). We recognise that a key issue with the low number of female staff within BES is due to relatively low numbers applying. The initiative to make all lectureships available as part-time posts or job shares, and highlighting our commitment to gender equality and the Athena Swan process in job adverts (**action 3.2a,d,e**) appears to have had some success (Fig 9) although it is too early to be confident about the causal effect of these actions. We feel that increased awareness of actions currently being implemented (**actions 3.3a, b**) and planned for the future (e.g. **action 3.4d**) will help with this issue. We have also encouraged all staff advertising for PDRA and technical posts to consider whether these can be advertised as part-time (**action 3.2b**). However, we are currently constrained by funder restrictions (e.g. RCUK policy on limits to funding periods), and we intend to lobby for changes to policy at the institutional level (**action 3.2c**).

All staff are required to undergo training in "Equality and diversity in the workplace". This ensures that staff: 1) understand key features and provisions of equalities legislation; 2) understand broader equality and diversity issues; 3) know their responsibilities and rights as a member of staff of the University. In the staff equality survey, 89% of staff on open-ended, but only 50% of fixed-term staff had completed equality and diversity training. We have now included a section on our personal development review forms that specifically asks staff about completion of equality training (**action 3.1b**), with a request that anyone who has not yet taken this does so before the next review (this is mandatory for staff on recruitment panels).

The University's policies in relation to leave, flexible working and others relevant procedures is open access and clearly set out in the "Terms and Conditions of Employment". A copy of these policies is available to job applicants and new and existing staff on the University HR website[2]. Specific policy documents have been prepared for Maternity Leave, Paternity Leave, Adoption Leave and Parental Leave. In addition, the University has developed a flexible working policy for staff with caring responsibilities. This applies to both childcare and adults. Many of these approaches to leave and flexible working are agreed at the outset with Head of Division. A problem highlighted in the staff equality survey was a lack of awareness amongst staff about existing policy and mechanisms for applying for different types of leave and flexible working (with 44% and 21% of females and males respectively disagreeing with the statement that "*My division has made it clear to me what its policies are in relation to gender equality e.g. on discrimination, parental leave, carer's leave, flexible working*"). We intend to resolve this issue through the establishment of a new page on the BES website, accessible to both internal and external visitors, to enhance visibility and provide links to policy documents for both prospective applicants and existing staff (**action 3.3a**), and through dissemination during annual reviews (**action 3.3b**).

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

Based on our figures of staff and students, and through focus group meetings with RPGs, the key points of attrition appear to be between RPG and postdoctoral researchers, and again between postdoctoral researchers to those securing open-ended contracts. BES has introduced a number of initiatives, alongside wider UoS programmes, to support individuals at each transition and their career development:

1. Introduction of maternity leave for all funded female RPGs (**action 2.5a**). Whilst RPGs funded by the UK research councils already have maternity cover during their PhD in place, other RPGs do not and we consider this unfair. We have recently implemented a new scheme whereby RPGs without externally- or University-funded maternity provision have this paid for by BES. Conditions for maternity leave will be matched to those of the Natural Environment Research Council (currently 26 weeks paid and 26 unpaid leave). In order to ensure the financial sustainability of the scheme we will investigate funding options with external funders and appropriate accounts with the University to facilitate this (**action 2.5b**). Men wishing to take paternity leave are granted 10 days unpaid leave under NERC but we will extend this to three weeks (unpaid), and support requests to the University for a Leave of Absence from men wanting to take a longer paternity period (**action 2.5c**).

2. Graduate career development programme. Our own internal RPG training programme covers a wide range of technical and transferable skills development. Backing up this programme we encourage our graduate students to engage with the UoS Graduate School, which offers an annual programme of over 40 training sessions; in 2013/14, 24 of our PhD students (83% women) registered for one or more of these sessions.

3. Researcher development programme provides training opportunities and support materials aimed at promoting the transferable skills and leadership development of researcher staff. This is open to all researchers but is particularly aimed at early-career researchers. The University was highly commended for its Gender Equality Initiative in the Times Higher Education Awards "Outstanding Contribution to Leadership Development" category (2014). To date, three permanent staff and two research fellows have completed programmes supported by this initiative which are aimed at women and this is strongly encouraged within BES (**action 3.4a**).

4. Annual personal development review: in 2014 our review system was extended to all research staff. These are conducted by a member of the reviewing team who feeds back to the HoD (see page 25; **action 3.4b**).

5. The University's Impact Fellowship Programme provides two-year research positions to outstanding early-career researchers to launch their independent research careers. BES has been very successful in attracting high quality candidates for these positions and currently has seven impact fellows (3 female, 4 male), who are supported by a senior mentor within the division. Within BES we have introduced a new internal peer review system which provides support for early-career researchers in preparing applications for further fellowships (including those that require institutional financial support e.g. Leverhulme, Daphne Jackson) and permanent positions. One further action will be to encourage all fixed-term research staff to take up available mentoring opportunities (**action 3.4c**).

Career development

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

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

In 2010, UoS implemented a new staff personal development review called *Achieving Success*. This scheme is directed at academic staff of all grades and since 2012 has been undertaken rigorously on an annual basis, although only consistently for fixed-term staff since 2014. Within BES, this was initially implemented by the HoD for all academic staff, and by academic staff for PDRAs. The process combines: i) a reflective analysis of previous years achievements set against previously agreed goals identified for career progression; and ii) short term (1-2 years) and medium term (5 years) goal setting. The review includes research, teaching, administration/management and related impact roles. Training and development needs and opportunities for mentoring, networking and personal development programmes (e.g. Aurora and Stepping Stones) are also reviewed in the process (**actions 3.4a-c**).

With increasing academic staff numbers, the *Achieving Success* process has been led by senior colleagues (grades 9 and 10) with the HoD taking the lead for staff seeking promotion. It is BES policy that we adopt a proactive stance to encourage staff to seek promotion, rather than relying on individuals to put themselves forward (**action 3.5a**). Equally, all staff are able to put themselves forward for promotion. All promotion cases and specific and generic issues identified by the *Achieving Success* are reviewed by the senior colleagues (including female representation) with the HoD at the end of the process. This review leads to the identification of promotion cases who will then be mentored by HoD to ensure the best and fairest case is put forward for promotion. Candidates for promotion are then scrutinised at School level and, if successful, forwarded to the promotions panel. We found that male and female staff on open-ended contracts responded similarly to the equality survey question regarding the usefulness of the annual review system, with 64% (3 of 5 women and 15 of 23 men) finding this useful (10% disagreeing; 1 of 5 women and 2 of 23 men). In contrast, however, only 22% of fixed-term staff agreed they had a useful annual review (0 of 3 women and 2 of 6 men). Since the annual review for all fixed-term staff was only universally introduced in 2014, before this survey was conducted, we are hopeful that these staff will benefit from this process in the years to come (**action 3.4b**).

The Academic Advancements and Promotions committee (AAPC) look for excellence across criteria in the categories: research and knowledge exchange, academic leadership, teaching and pedagogy, professional practice and development. Those applying for the teaching only path are not expected to demonstrate research excellence, and those on the research only path are not expected to demonstrate teaching excellence. Periods of leave (e.g. maternity leave) or part-time working are taken into account in the process, generally by adjusting the quantity of excellent work required to meet the criteria. However, only 40% of female and 68% of male staff believe that their full range of skills and experience (e.g. research, pastoral work, outreach work, teaching, administration and technical support) are valued when considering whether to allow applications for promotion to go forward to the University panel, and this is exemplified by this comment in the equality survey that "*research and research output is clearly favoured over the other areas of*

work". Whilst the criteria employed by the AAPC are outwith our control, this information will be fed back to the appropriate University committee (e.g. Equality Steering group) as this is an issue which could potentially disproportionately affect females (**action 3.5b**).

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

Current recruitment information includes information on career development opportunities and emphasises family-friendly staff benefits, such as the University nursery, childcare vouchers and flexible working arrangements. Information about our commitment and approach to equality and diversity is included in recruitment literature. All new academic staff (grade 7) at the University are on probation for between one and three years, depending on experience. As a probationer, academic staff have reduced teaching loads and it is BES policy to start a new member of staff on less than 50% of the normal teaching load, which is then increased to the average teaching load over the period of their probation or nominal two year period, whichever is the longer. They are assigned a senior colleague as mentor (both men and women are mentors within BES). As part of probation, staff must complete a development plan, and are measured against this plan before they can successfully complete probation.

The University runs a number of training and development activities for staff including inductions, management training, a mentoring scheme, and on-line learning (equality & diversity; health & safety; data protection; recruitment & selection). Staff are encouraged to take part and completion of relevant training modules is logged through BES' *Achieving Success* programme.

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

Undergraduate and Taught postgraduate

We have identified that female UG may be less likely to gain 1st class degree (Section 3: student data, vi) and will examine potential mechanisms for this trend (**action 2.2a**), and put in place appropriate actions. We have also identified a knowledge gap with regard to the relative success of jobs following graduation; whilst the University conducts "first destination" surveys, these have not been analysed with respect to gender. We will work with the University to provide these figures on an annual basis (**action 2.1d**). In collaboration with the University's Career Development Centre we will instigate career development "away days" for final year UG students in order to focus on job and further education searching techniques, CV and cover letters, interviews; these will pay particular regard to gender issues (**action 2.3g**).

The University of Stirling is engaged with Making the most of Masters, a partnership between the Universities of Aberdeen, Edinburgh and Stirling. This project fosters placements between potential employers and students, and was the winner of the 2013 Times Higher Education Awards (Outstanding Employer Engagement Initiative category). First destination surveys show

that in 2013/14, 86% of female graduates (n=14) from a taught postgraduate degree were in full-time employment or further study after six months, compared to 57% for male graduates (n=14). Actions aimed at supporting TPGs and encouraging women in scientific careers include a survey of TPGs in order to understand their perceptions of science careers and future aspirations (**action 2.1b**), a review of the use of female role models within BES (**action 2.3b**). We will also include TPGs in other actions aimed at encouraging women in scientific careers including engagement with external initiatives (e.g. WISE; **action 2.3a**) and ensuring a high proportion of external female seminar speakers (**action 2.3d**).

Research postgraduate

Following discussions with RPGs about mentors, a postgraduate mentor scheme, initiated by the students and overseen by the postgraduate tutor, has been established to allow for informal peer support within the PhD student cohort. Mentors for first year PhD students have been allocated from students in their third year, and female students can request to have a female mentor.

Findings from an RPG female focus group in summer 2014 indicates a lack of awareness of potential routes into academia and alternative careers. We will conduct a survey of RPGs in order to understand their perceptions of science careers and career aspirations (**action 2.1c**) and initiate annual focus group meetings to explore ways in which they can be better supported (**action 2.4c**). As a way of showcasing the variety of different routes into a successful academic career all external seminar speakers now provide a biography highlighting their career path, and invited keynote speakers at our PhD winter symposium are asked to integrate this with their research talk (**action 2.3b,d**). We have also secured funds from the University for an RPG careers workshop to be held in April 2015.

Organisation and culture

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

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

Women sit on four of the six committees within BES and form just over a third of the committee members. Following the recognition that few of our decision-making committees were chaired by women, an effort was made to approach potential candidates and this figure has increased from one in 2012-13 to four in 2014 (Table 8). Typically, the Head of Division will identify appropriate staff through their relevance, expertise, and other commitments, but vacancies are also circulated via email and people can put themselves forward for specific posts.

Table 8 Male and female members of staff on five BES committees; the gender of the chair of each committee is indicated in bold. * The Ethics committee comprises staff from within BES as well as the wider University and a lay member; only BES staff are included here.

Divisional committee	2012		2013		2014	
	Female	**Male**	**Female**	**Male**	**Female**	**Male**
Controlled Environment Facility	0	**3**	0	**3**	0	**3**
Ethics *	**1**	2	**1**	2	**1**	2
Health & Safety	0	2	0	2	0	3
Learning & Teaching	2	**4**	2	**4**	**3**	6
Research	2	**4**	2	**4**	**1**	6
Equality & Diversity	-	**-**	-	**-**	**4**	4
Total	5	15	5	15	9	24

(ii) **Female:male ratio of academic and research staff on fixed-term contracts and open-ended (permanent) contracts** – comment on any differences between male and female staff representation on fixed-term contracts and say what is being done to address them.
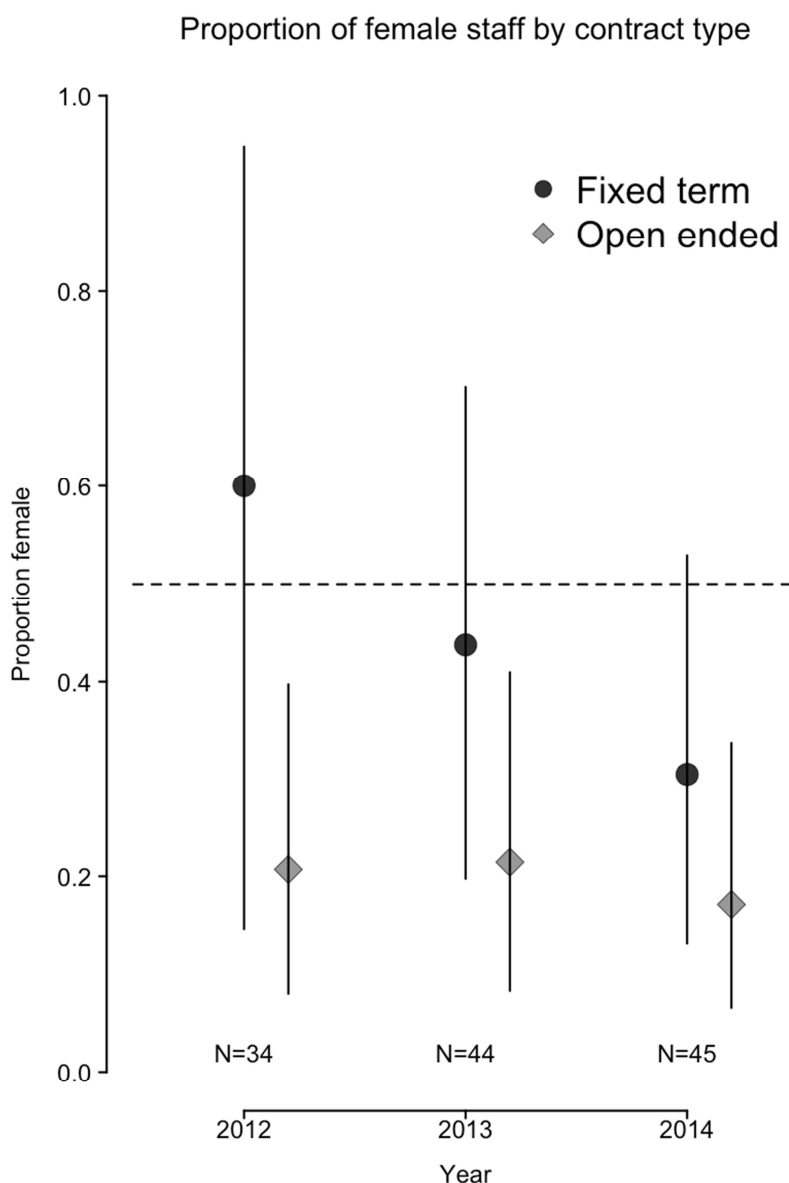
Fig 10 The proportion of female staff on fixed-term or open-ended contracts (2012-2014)
Dashed lines indicate 50% female.

Over the monitoring period, whilst the number of women on fixed-term contracts (postdoctoral researchers, research fellows) has been approximately equal to those of men, the proportion of women on open-ended contracts is considerably lower (Fig 10; 21% in 2014), reflecting the trend shown in Fig 7. Whilst the 95% confidence intervals overlap (i.e. suggesting no difference) we note that this pattern is consistent across the three years. The difference between fixed-term and open-ended contracts reflects, to a certain extent, recent initiatives in providing independent fellowships and supporting the development of early-career researchers is targeted through **actions 3.4a-c**. We have, however, recently appointed three female and one male lecturer (open-ended contracts) and they will be starting in 2015 (resulting from **actions 3.2a,d,e**).

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

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

In BES, women play an active role in shaping the future of the division and on decision-making committees (Table 8). Because of the relatively low number of female staff, we are conscious of the fact that achieving an appropriate balance of female representation of all committees could result in their being overburdened with committee work, so allocation of such work is conducted with reference to the workload model (see Workload model below). Women in BES are also active in a wide range of external work; they are represented on the editorial board of peer-reviewed journals, members of influential committees (e.g. NERC Review College) and are active in a range of learned societies (e.g. British Society of Soil Science, British Ecological Society). A number of our female staff are on Scientific Advisory Committees and Boards of Trustees for environmental organisations, and have been appointed as advisors to international governments, in particular through research expertise in Gabon and Panama.

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

BES initiated a workload model in 2008 which was then modified and adopted by the rest of the School of Natural Sciences in 2011. The model accounts for: (i) teaching provision allocating time for direct contact with students, project supervision for UG and TPG, preparation and assessment time and leadership roles such as degree and programme co-ordination; (ii) RPG supervision; (iii) internal administrative and leadership roles within BES, the School of Natural Sciences and University, which includes contributions to committees and strategic roles such as Head of Division, Research and Teaching, Chief Examiner, Health and Safety and Equality; and (iv) external activities including examination duties, contributions to and leadership of expert groups, leadership of commercial enterprises and other scholarly activities. The model accounts for contract type, with the remaining time allocated to research. This is an open and transparent process with all input parameters such as the time allocated for different duties, down to individual assessments agreed at the divisional level.

The workload model is used by the Head of Division to try and achieve as equal a workload model as possible for each staff grade. This is achieved by a combination of the reallocation of duties and the appointment of new staff. However, to date we have not analysed teaching and administrative commitments with respect to gender and analysis of these data is now an key action in this area (**action 4.2a**).

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

Results of the BES staff equality survey indicated that timing of meetings is an issue for some staff: one female (10%) and one male (3%) member of staff disagreed with the statement "*meetings in my Division are completed in core hours to enable those with caring responsibilities to attend*". The HoD has now issued a minuted edict in a subsequent academic staff meeting that all committee meetings had to take place between 10 am – 4 pm and we will monitor this (**action 4.1a**). We also changed the timing of our external seminar series from 4 pm to 12 noon. We have investigated whether we could restrict the times of lectures to core hours but as this is centrally timetabled it is difficult to achieve universally; all lectures are recorded using our "*listen again*" facility which does enable access for students unable to attend lectures. We will, however, conduct an audit of UG and TPG modules to identify those with a high proportion of lectures outside core hours with the aim of reducing this where possible (**action 4.1b**). Social events include the annual Christmas ceilidh, organised by the RPGs for charity (to which UG and TPGs are invited and staff and students routinely bring their families), and Christmas lunch.

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

The University has a clear equality and diversity policy[2] through which it aims "*to create an environment and culture where staff and students are equally valued and respected, where diversity is celebrated, and where our staff and students are able to achieve their full potential*". Actions that stem from this policy are fully supported and built upon in BES. In relation to gender, 78% of female and 96% of male respondents agreed that "*staff are treated on their merits irrespective of their gender*". In addition, 89% of females and 96% of male respondents felt that their "*line manager/supervisor would deal effectively with any complaints about harassment, bullying or offensive behaviour*". There are several regular events that help foster communication amongst staff and RPGs including scheduled coffee times, a weekly external seminar in semester time to which RPGs are invited to a pizza lunch with the seminar speaker afterwards, and a weekly internal seminar to which both staff and students contribute. In addition the coffee room is used for a variety of other social occasions including celebrations of birthdays, grant awards and charitable events. In module evaluation forms undergraduates regularly comment on how friendly and approachable the lecturers are and BES staff are repeatedly nominated and win Excellence in Teaching awards organised by the University's student union (e.g. 20 BES staff were nominated in 2015).

We recognise, however, that there are areas which need improving. For example, 20% of female and 25% of male staff disagreed that "*BES makes it clear that unsupportive language and behaviour are not acceptable*", and 11% of respondents (male and females equally) reported that they had "*experienced a situation(s) where I have felt uncomfortable because of my gender*". Our

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[2] Equality & Diversity Policy (University of Stirling):
http://www.diversityandequality.stir.ac.uk/documents/EQUALITYANDDIVERSITYPOLICYFINAL.pdf

aim is that many of the actions outlined in this application, including training in equality and diversity and unconscious bias (**actions 3.1a,b**) will collectively enhance the culture of inclusivity within BES but additionally staff will be encouraged to be more vigilant and challenging of socially unacceptable behaviour (**action 4.3a**).

Prior to the self-assessment process we realised that the proportion of women being hosted as external seminar speakers was very low (10-36% between 2009-2013). However, this proportion has now risen to approximately 50% (Fig 11); this was due to increased awareness of the issue when the Institutional Athena Swan application was submitted and also a specific call within BES for more female speakers to be invited. In the future we will ensure that the proportion of female speakers does not drop below 40% (**action 2.3d**). Our internal seminar series has historically been more evenly balanced between male and female speakers (Fig 12). It is arguable that this proportion should be higher given the high proportion of female RPG in BES but calculating the expected ratio is not straightforward since not all staff and students regularly attend. Nevertheless supervisors are expected to strongly encourage their students to talk at the seminar series, as well as our annual symposium and at national and international conferences (**action 2.4e**).
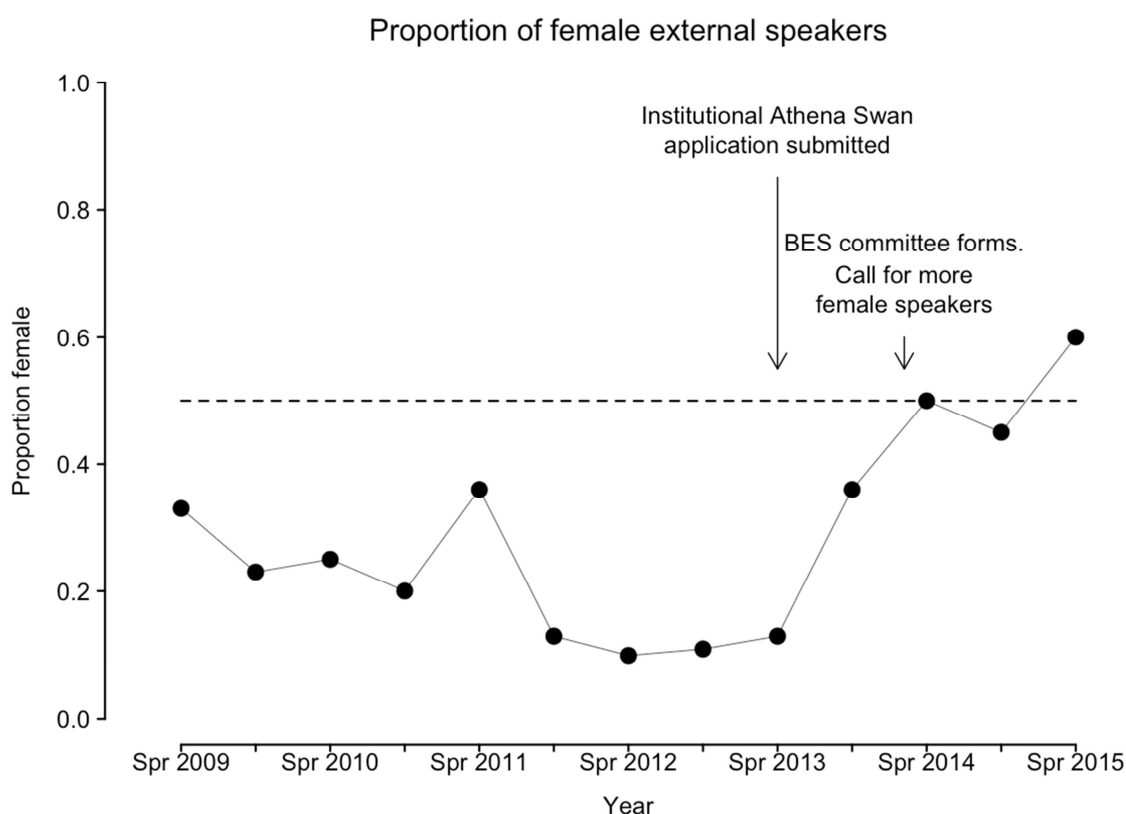

Fig 11 The proportion of female speakers hosted in external seminar series (2009-2014), with key dates relevant to the self-assessment process indicated. Dashed lines indicate 50% female speakers.
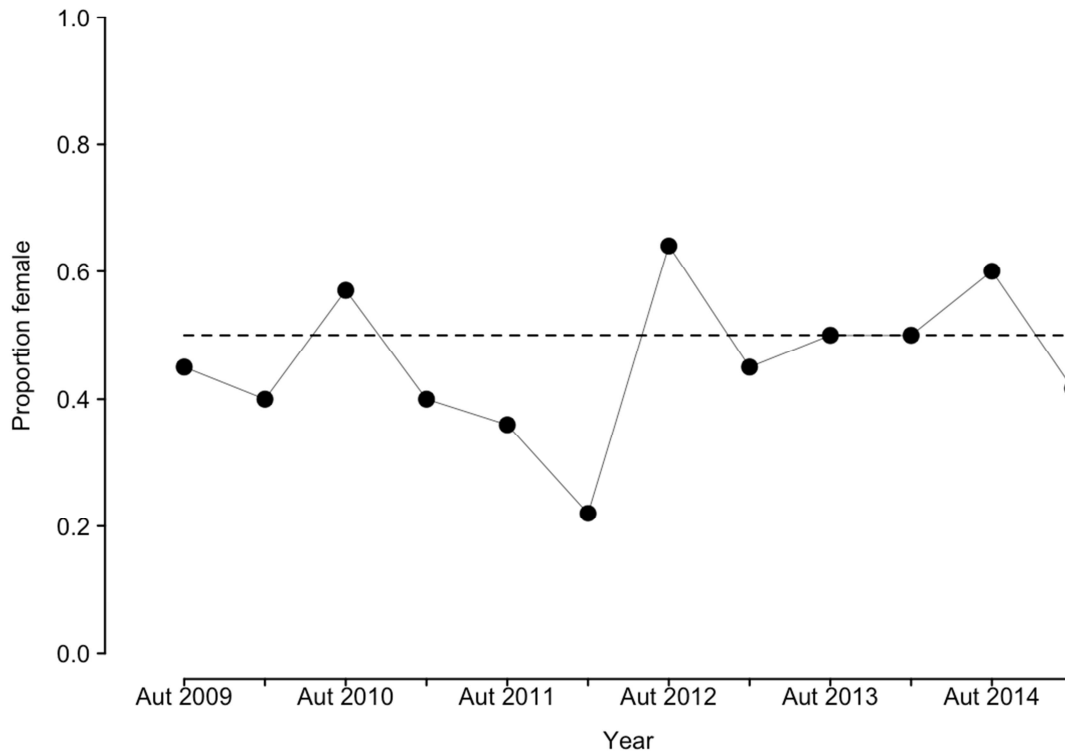
Fig 12 *The proportion of female internal seminar speakers (2009-2014). Dashed lines indicate 50% female speakers.*

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

Much of the research in BES deals with societal-environmental interactions and as such we are actively engaged with a variety of outreach, in relation to our own research but also far more widely in terms of public understanding of science. A large number of our male and female staff and RPGs engage in outreach activities, within the UK and overseas; these include public talks (including podcasts e.g. "An Introduction to Soils and Cultural Heritage", an educational video for the British Society of Soil Science), arranging museum exhibitions, laboratory and field classes with children in schools, girl guide groups etc. We also contribute to public understanding of science through social media, and 61% of blogs (n=31) written for our site *Stirling Conservation Science* have been authored by female staff or students. In collaboration with colleagues in Computing Science and Maths, a Stirling chapter of the organisation ScienceGrrl has now been set up which includes 3 members of staff and 11 RPGs from BES. Our female RPGs have also contributed to *Meet the Expert* programmes at Glasgow Science Centre, and the Science Connects programme of STEM ambassadors. Another female RPG founded a conservation charity *Bats without Borders* which has outreach as one of its core remits and to date has supported education programmes in several countries in Africa, including donations of equipment and fundraising support.

Whilst outreach is greatly encouraged and included as an activity through our annual review system, it is not yet recognised formally through our workload model but this will be implemented from 2017 (**action 4.2b**).

Flexibility and managing career breaks

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

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

Over the past three years no staff on open-ended contracts have taken maternity leave, but one RPG has, raising the issue of many RPGs not having maternity cover, a situation we are now addressing (**action 2.5a**; see section 7, case study 2). One impact fellow who had a child prior to her fellowship starting in 2012 is on a 60% contract, with the length of her contract adjusted upwards accordingly. She is has just had her second child and again the end date for her fellowship will be adjusted according to the length of her maternity leave.

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

No applications for paternity leave have been taken between 2012-2014. However, informal discussions with staff indicate that it may be taken without being reported. Since only 57% of male staff understood what our policies are in relation to these matters, we will raise awareness of leave (**action 3.3a,b**). We note the recent changes in the law with regard to shared parental leave and these will be reflected in BES policies and those of the University, and communicated to staff (**action 3.3a,b**).

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

The University has a Flexible Working Policy that is available to eligible employees within the University who have caring responsibilities. The University's policy is that a request for changed working hours (e.g. to part-time) is approved unless there is a business case for refusal (e.g. providing a service within core hours). There have been no applications for formal flexible working within the recording period.

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

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

Currently, one female research fellow, and two lecturers (one female, one male) are part-time. Both women have young families. The lecturer is 60% FTE, with her original position a result of a successful job share application for a full time lectureship post.

At the divisional level, flexible working is implemented informally, and staff adjust their working hours to cater for family commitments, travel arrangements or personal preferences (e.g. section 7, case study 1). Evidence from discussions with staff suggests that informal flexible working is appreciated and used regularly to enable them to care for their families during pressured times for example school holidays and when children or family members are ill.

The informal approach appears to work well but there needs to be an increased awareness that flexible working arrangements can also be set up formally and which the HoD fully endorses. Our equality survey indicated that individuals are not as well-informed about policies and procedures, or equality initiatives, as we would like (see section Key Career Transition Points, page 23; **action 3.3a,b**).

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

As part of the university, BES has relatively generous maternity leave arrangements; all eligible fixed term and open-ended contract staff with six months qualifying service are entitled to the first 16 weeks of maternity leave at full pay (subject to returning to work for at least three months afterwards). There have been no pregnancies among BES staff during the last three academic years. It is the responsibility of the HoD to arrange maternity cover, in discussion with the member of staff. It is likely that colleagues with relevant expertise would take over teaching and guidance of research staff and supervision of PhD students during this period.

Returning after maternity leave is a potential point of attrition for academic staff and we are in the process of devising a new initiative "*return to work fellowship*" to support female lecturing staff returning from maternity leave. This would involve the promotion of an option to undertake a period of sabbatical leave with the aim of restarting research activity prior to resuming normal teaching and administrative duties. Teaching cover during maternity leave and the subsequent fellowship will be bought-in by BES rather than requesting other colleagues to take on additional work; this would require a budget uplift from University central funds and we will be raising this as a priority issue with the relevant personnel (**action 3.4d**). The University is also committed to exploring possible mechanisms for such a scheme (Institutional application 2013) and we will work with them on this. Through consultation with the University, we will explore the possibility of affordable on-site childcare that would be available to staff and students; this issue was raised by RPGs during BES consultation on this application (**action 3.4f**). We will also ensure that appropriate refrigeration facilities for expressed breast milk are available (**action 3.4g**).

5. Any other comments: maximum 500 words

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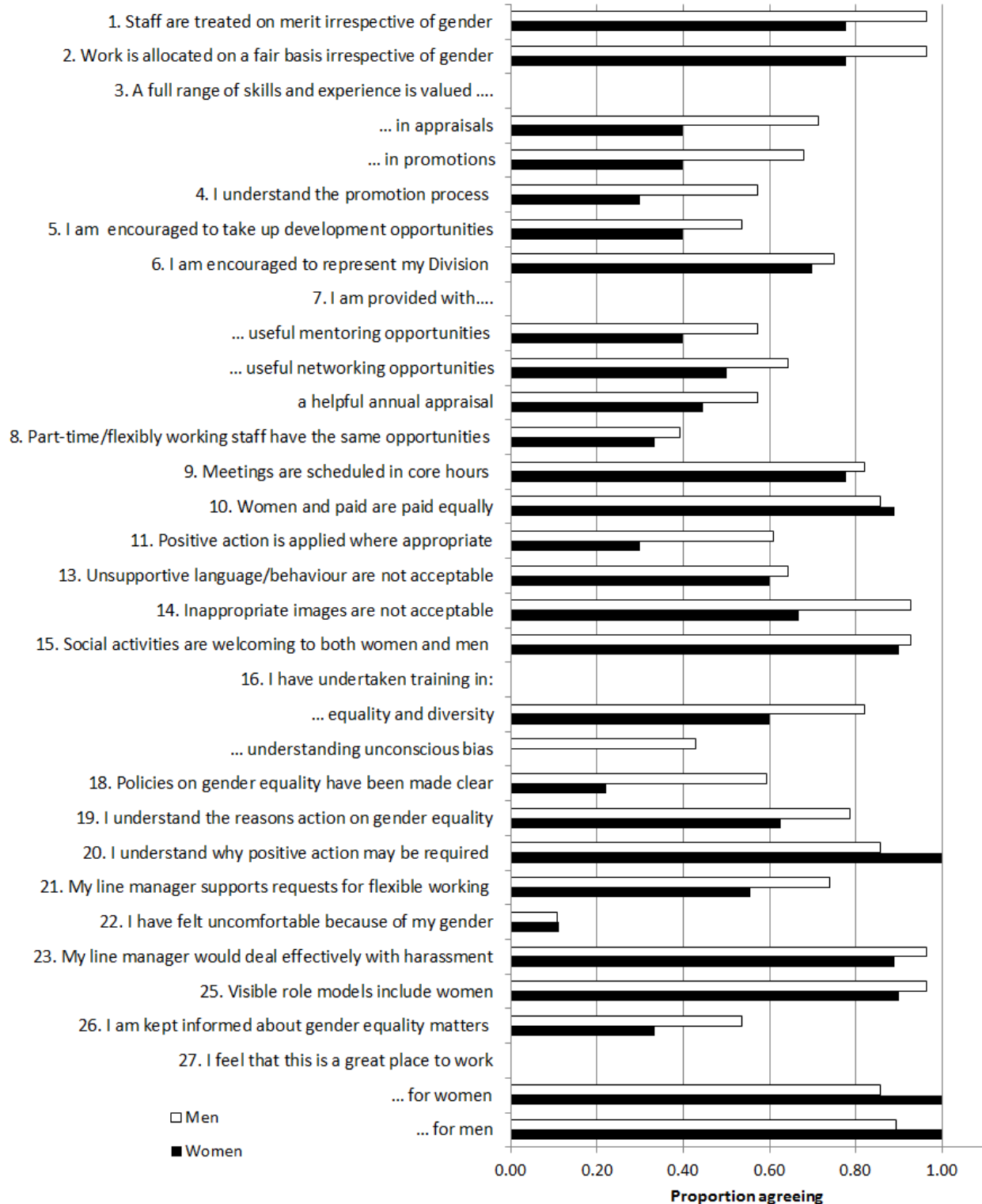

Fig 13 Proportion of respondents on open-ended and fixed term contracts (n=43; 10 women, 29 men, 4 unknown) agreeing with statements provided in the staff equality survey (black bars = women; white bars = men).

The results from our staff equality survey were completed by 43 staff (93%) of whom 10 were women, and 29 were men (four did not answer this question). In addition, 28 were on open-ended, and 10 on fixed-term contracts (five people did not answer this question).

The majority of men and women indicated a high degree of satisfaction with the working environment within the division. For example, 78% of female and 96% male staff agreed that "*work is allocated on a clear and fair basis irrespective of gender*" and 100% of female staff felt that BES "*is a great place to work*" for both men and women (male respondents also agreed with this statement for women (86%) and men (89%)). However, it also raised some issues and areas of concern so proved invaluable in developing the action plan and, more widely, improving communication within BES. In particular, it highlighted the need to improve upon communication to staff regarding promotion (only 30% of female and 57% of male respondents reported that they understood this process; **action 3.5a**), policies on gender equality, maternity cover etc. (**action 3.3**). There is also a need to enhance positive action, and the communication of this within BES (only 30% of female and 61% of male respondents agreed that "*staff are encouraged to apply for posts in areas where they are under-represented*", although only 6% of staff disagreed with this statement with the remainder neutral; **action 1.1a**). Whilst there was an apparent difference between responses to "*my line manager supports requests for flexible working*", with 56% women vs 74% men agreeing (Fig 13), only one person (a male) slightly disagreed with this statement and the remainder chose "not applicable" or "neither agree nor disagree". Evidence from discussions with staff suggests that this may be in part because of availability of informal flexible working (see flexible working, page 35).

We have included comments on other aspects of the staff equality survey in the relevant parts of the application and actions relating to this survey are embedded throughout the application.

 [341 words]

6. Action plan

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

See Appendix 1: action plan

7. Case study: impacting on individuals: maximum 1000 words [706]

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

(1) Daisy Dent

Dr. Daisy Dent was appointed as a full time Lecturer in Biological and Environmental Sciences in 2011, and is a member of BES' Equality and Diversity committee (Table 1). Prior to this she was a postdoctoral researcher at the Smithsonian Tropical Research Institute, Panama.

"I joined the University of Stirling to take up a lectureship in Biological and Environmental Sciences when my daughter was 3-years old. The department supported my transition by granting me a 9-month grace period to complete fieldwork associated with an existing grant from the Panamanian government. During this time, I visited Stirling for 3-weeks to give some initial lectures and meet colleagues, but I did not move to Stirling permanently until September 2011. This enabled me to move my family during the summer break. I was then facilitated with a very gradual increase in teaching for the first two years, which had allowed me to maintain research obligations in Panama and develop a research team.

As a single parent, flexible working hours have been essential for me to balance my career with looking after my daughter. For example, I leave work at 2.45pm to collect my daughter from school two days per week, and make up these hours in the evenings. Departmental meetings and seminars are scheduled during core working hours, which is very helpful for me. The department has supported me in maintaining my research programme in Panama, such that I have been able to schedule my teaching so that I spend up to 3-months per year in Panama from January to March.

From my experience, the working environment in Biological and Environmental Sciences is unusually supportive and collaborative. I still find balancing work and family a challenge. However, I think this is typical of many working mothers, and the flexible working environment provided by Biological and Environmental Sciences certainly makes finding a good work-life balance more achievable".

(2) Caitlin Riddick

 "I joined the Department of Biological and Environmental Sciences as a research apprentice in 2010, working part-time as a demonstrator and research assistant for the department and part-time on my PhD researching the remote sensing of algal blooms. The Department provided a stipend above the standard NERC stipend, and this position allowed me to gain valuable teaching experience, and research in a range of related disciplines as well as conduct my own field.

In May 2012, my husband moved to USA and the flexibility of the department allowed me to follow and commit my time fully to my PhD, working remotely from the USA. Although the department was not required to do so, they agreed that I would still be paid a 50% stipend because I would no longer be present at the University to fulfil my research apprentice duties. At this time, I was also pregnant, and it was agreed that I could take six months of maternity leave from August 2012. The department further agreed to provide maternity pay during these six months leave, despite the lack of a formal contract obliging them to do so. With these accommodations by the department, I was gratefully able to balance my family life with the ability to carry on with my PhD remotely.

Since January 2013, I have appreciated the ability to work flexible hours. This was essential, as I could not afford the fulltime childcare fees and therefore needed to work a combination of nap times, evenings and weekends. My supervisors were also very accommodating in order for me to work remotely in a different time zone, and found time in their schedules to arrange regular Skype meetings.

In January 2014, my family relocated back to the UK, and I have continued to write up my PhD remotely from Cambridge. Since returning to the UK, I have been able to travel up to the University of Stirling for occasional meetings, and my supervisors have reimbursed the travel expenses, which they were not obliged to do but was much appreciated.

The staff and department policies have been supportive overall during my time as a PhD student at Stirling. The decisions made by the department assisted me with balancing work with family life, and ultimately enabled me to carry on my PhD. I will submit my PhD in September 2015, within the four-year deadline".

Biological & Environmental Sciences, University of Stirling

Section 6, Appendix: Action plan (see end for explanation of any acronyms used).

Action	Description of action	Continuing / planned actions	Responsibility	Start date/ timescale	*Evaluation*/target	Relevant page no. in application
1. Self assessment and sharing good practice						
1.1	Promotion of gender equality activities, review progress and share good practice	a) Chair of EDC to report to academic staff on progress of action plan	EDC (chair)	From Mar 2014; approximately quarterly	*Assess impact through repeat staff equality survey every three years (next one due 2017)* Target: increased awareness of equality and diversity issues and increased perception of a culture of respect, including a female-friendly ethos, throughout BES. Our target is a gender balance in perceptions between M/F and for a minimum of 80% of "agrees" with the relevant perception questions, or an increase where 80% has already been reached[1]	9, 37
		b) Chair of EDC to report on activities and progress of EDC to the Chairs of self assessment team	EDC (chair)	From Mar 2014; Quarterly		9
		c) Engage with relevant external activities to share good practice; e.g. ECU, Equality Scotland	EDC (chair)	From Mar 2014; as opportunities arise		9
2. Student data, evidence & actions						
2.1	Collect and monitor relevant student data	a) Continue to monitor student categories presented in the application form	EDC (All), University (Policy & Planning)	From May 2014; Annually from 2015	*Assess trends in student data, perceptions and aspirations to identify any further actions and appropriate targets* Targets: • > 70% participation from selected student groups with surveys 2.1b,c	10-13, 15, 17
		b) Conduct survey of UG & TPG perceptions of science careers & career aspirations	EDC (All)	Annually, by Jan 2016		16, 27
		c) Survey RPGs for their views on BES & career aspirations	RPG tutor, EDC (RPG representative)	Annually, by Jul 2015		27

Action	Description of action	Continuing / planned actions	Responsibility	Start date/ timescale	*Evaluation*/target	Relevant page no. in application
		d) Analyse 1st destination statistics for UG with respect to gender	EDC, CDC	Annually, by Oct 2016	• A gender balance within 1st destinations following UG graduation	26
2.2	Undergraduate & TPG: maintaining & improving female student performance within BES	a) Examine potential reasons for lower UG female attainment of 1st class degrees	EDC (All)	By Sep 2015	*Assess student performance with respect to gender and potential mechanisms* Target: a gender balance for the proportion of female UGs obtaining 1st class degrees, and female TPG obtaining distinction grades; maintain gender equality across other degree classes	15-16, 26
		b) Recruit an UG to EDC	EDC (Chair)	From Jan 2015		5, 16
2.3	All students: Increase awareness among students of activities, internally & externally, to promote gender equality in STEM subjects; increase visibility of female academics	a) Continue to engage with Women Into Science & Engineering (WISE) activities and ScienceGrrl	EDC, staff & RPGs	From Feb 2015	*Surveys outlined in 2.1b,c will include questions regarding gender issues and perceptions of gender equality in BES* Targets: • Initial surveys will provide baseline data: our aim is reach and maintain > 70% of UG, TPG students (M/F) demonstrating awareness of gender equality issues in science, and a recognition of engagement within BES; • All recruitment sessions will have a mix of M/F speakers, guides, demonstrators; • All SSCC meetings will have gender balance amongst staff and students	16, 27
		b) Review recruitment material / use of female role models within BES	EDC (All), BES PR officer	From Apr 2014		11, 12, 15, 27
		c) Assess number of modules with male-only teaching staff and increase teaching opportunities for female RPG & PDRAs	HoD, all staff	By Mar 2016		16
		d) Continue to ensure a high proportion of external female seminar speakers (min 40%), and provide biographies	Seminar organiser, all staff	From Jun 2014		8, 27, 32
		e) Continue to ensure gender mix at BES recruitment days	BES PR officer	From Mar 2014		11, 15
		f) Continue to ensure gender mix at staff-student consultative meetings (SSCC)	SSCC co-ordinator	From Mar 2014		16
		g) Instigate career development "away days" for final year UG, with a focus on gender issues	EDC	Annually from 2015		26

Action	Description of action	Continuing / planned actions	Responsibility	Start date/ timescale	*Evaluation*/target	Relevant page no. in application
2.4	RPG: Maintaining female student participation and performance within BES; promotion of examples of female role models (internal & external)	a) Implementation of revised selection procedure and guidance for self-funded students	RPG tutor, all staff	By Oct 2015	*Monitor progress and improve the completion rate of submission < 4 years for RPGs* Target: a completion rate of > 85% RPGs submitting within 4 years	18
		b) Ensure annual female keynote speaker(s) at annual PhD winter symposium	RPG tutor	From Dec 2013		8
		c) Establish focus group meetings with female RPGs	EDC	From Jul 2014		27
		d) Introduce exit interviews for RPGs withdrawing from their degree	RPG tutor, all supervisors	By Oct 2015		18
		e) Ensure that all RPG give regular research presentations (internal and external)	RPG tutor, all supervisors	From Dec 2013	Target: 100% of RPG giving at least one internal presentation annually + a minimum of a talk at one national and one international conference	18, 32
2.5	Ensure equitability of maternity cover for PhD students	a) Monitor new initiative of paid maternity leave for all funded female RPGs	EDC, HoD, BES Administrator	From October 2014	*Monitor uptake and retention of RPGs on maternity leave* Target: successful completion of PhD from all female RPGs after maternity leave	24, 34
		b) Investigate funding models to ensure financial sustainability of (a) above		By October 2015		24
		c) Extend (unpaid) paternity leave to 3 weeks for RPGs and support requests for Leave of Absence for longer periods		By October 2015	Provides a general societal benefit by supporting parental leave	24
Key Career Transition Points, Appointments and Promotions						
3.1	Ensure good practice in recruitment and exit surveys	a) Continue to ensure training in equality & diversity amongst staff (mandatory for those on recruitment panels)	HoD, senior staff	From Mar 2013	*Monitor uptake equality & diversity training* Target: > 90% of all staff undergo training (open-ended and fixed term)	32

Action	Description of action	Continuing / planned actions	Responsibility	Start date/ timescale	*Evaluation*/target	Relevant page no. in application
		b) Promote training in unconscious bias among staff and particularly line managers (& make it mandatory for those on recruitment panels)	EDC, HoD, senior staff	From Jan 2017	*Promote and monitor uptake on unconscious bias* Target: > 80% of all staff having undertaken training (open-ended and fixed term)	21, 23, 32
		c) Engage with revisions of University exit surveys and monitor data	HoD, senior staff	From Jan 2017	Target: > 80% staff complete the exit survey	20
3.2	Increase the proportion of job applications from women across grades but particularly for more senior posts	a) Ensure that all lecturer (and above) positions to be available as part-time / job share and advertised as such	HoD, BES office	From Aug 2014	*Monitor applications with regard to gender* Target: > 40% applications from females (averaged over a 3 year period)	8, 20, 21, 23, 29
		b) Encouragement of staff to advertise PDRA / technical posts as available part-time	HoD, all staff	From Aug 2014		20, 21, 23
		c) Lobby funders to relax restrictions on project extensions to enable fixed-term posts to be offered as part-time (3.2b)	EDC, University Equality Steering Group	By Oct 2016		23
		d) Ensure search committees for lecturer (and above) positions include a high proportion of woman members; actively seek to identify potential female candidates	HoD, senior staff	From Jan 2014		8, 20, 21, 23, 29
		e) Ensure all adverts highlight our commitment to equality & diversity, and include the Athena SWAN logo	BES office	From Aug 2014		8, 20, 21, 23, 29
3.3	Increase awareness within BES of policies on gender equality, flexible and part-time working, maternity leave, child-care	a) Create dedicated webpage for BES' policies on gender equality and related issues (e.g. part-time working, maternity leave etc.); to be accessible externally	EDC, IT support	By Jun 2015	*Assess impact through repeat staff equality survey every three years* Target: increased awareness of policies relating to gender equality (> 80% "agrees") and a reduction in the imbalance between M/F[1]	20, 23, 34, 35
		b) Ensure that all those engaged in annual personal development reviews disseminate relevant policy information to staff	HoD, senior staff, line managers	By Sep 2015		23, 34, 35

Action	Description of action	Continuing / planned actions	Responsibility	Start date/ timescale	*Evaluation*/target	Relevant page no. in application
3.4	Improving career development support at key transition points, and increase awareness of support measures	a) Continue to encourage and support female staff to undertake leadership training (e.g. Aurora)	HoD, line managers	From Dec 2013	*Assess impact through repeat staff equality survey every three years* Target: increased awareness of existing and recently introduced opportunities for career development (> 80% "agrees") and to maintain the minimal imbalance between M/F[1]	24, 25, 29
		b) Ensure that all fixed-term staff complete personal development review	HoD, line managers	From Sept 2014		24, 25, 29
		c) Ensure that PDRA / research fellows are aware of mentoring opportunities within BES and more widely at Stirling University	HoD, line managers	By Sep 2015		24-25, 29
		d) Introduction of sabbatical scheme for female lecturing staff returning from maternity leave (requires agreement on financial details with the University)	EDC, HoD	From Oct 2016	Target: 100% women taking maternity leave report a high level of satisfaction with arrangements	23, 35
		e) Collect data on career progression in relation to gender, periods of leave & flexible working	EDC	By Sept 2017	Target: data collection and analysis to identify any effects of gender & leave on career progression	22
		f) Explore the possibility of affordable on-site childcare with the University	EDC (Chair)	By Oct 2017	Target: meeting(s) with relevant personnel held to discuss options	35
		g) Provide facilities for storing expressed breast milk at work (as required)	Technician in charge of facilities	By April 2017	Target: facilities available to staff and RPGs	35
3.5	Increase awareness of promotion process and actively work with staff to build strong cases for promotion	a) Continue to use the personal development scheme to identify candidates for promotion	Head of SNS, BES HoD	From Sep 2012	*Monitor success rate of promotion applications; evaluate relevant responses in staff equality survey* Targets • At least 80% of promotion candidates successful (male and female)	8, 20, 25, 37
		b) Feedback perceptions of inequality (i.e. consideration of full range skills and experience) in the promotions process to the AAPC			• > 70% "agrees" and no gender imbalance with relevant questions in staff survey	26

Action	Description of action	Continuing / planned actions	Responsibility	Start date/ timescale	*Evaluation*/target	Relevant page no. in application
4. Organisation & Culture						
4.1	Timings of meetings, seminars & lectures	a) Ensure that new rule on the timing of BES meetings & seminars (i.e. held within core hours 10-16.00) is being adhered to	EDC, seminar organisers	From Aug 2014	*Assess impact through repeat staff equality survey every three years* Target: 100% "agrees" from M/F to the relevant question in the survey[1]	31
		b) Analysis of UG and TPG modules to identify those with a high proportion of lectures outside core hours	EDC, module co-ordinators, University timetabling personnel	By Jul 2017	*Monitor module teaching hours to identify actions and appropriate targets* Target: quantify and reduce the number of modules with a high proportion of lectures outside core hours	31
4.2	Ensure transparency and fairness in the use of the workload model	a) Ensure equitable division of teaching, administration, research according to gender (via equality impact assessments)	EDC, HoD	By Jul 2016, annual analysis	*Analysis of the workload model with respect to gender* Targets: • Parity in teaching and internal administration between M/F;	16, 30
		b) Ensure workload model incorporates outreach activities	HoD, BES office	By Jul 2017, annual analysis	• Inclusion of outreach activities	33
4.3	Improve inclusivity in the culture of BES	a) Encourage staff to challenge any unsupportive language or behaviour through leadership and example from senior staff	HoD, all staff	From Feb 2015	*Assess impact through repeat staff equality survey every three years* Target: 90% "agrees" from M/F to the relevant question in the survey[1]	32

Glossary of acronyms used above:

AAPC	Academic Advancements and Promotions Panel Promotions committee
BES	Biological & Environmental Sciences
CDC	Career Development Centre
ECU	Equality Challenge Unit
EDC	Equality & Diversity Committee (BES)
HoD	Head of Division
LTC	Learning & Teaching Committee
M/F	Male/Female
BES PR officer	Publicity & Recruitment Officer (BES)
RPG	Research Postgraduate
SNS	School of Natural Sciences (includes BES)
TPG	Taught Postgraduate
UG	Undergraduate

[1] It is important that questions from the staff equality survey being used to assess the impact of above actions are chosen *in advance* of such analyses. Therefore we have identified specific relevant questions for each action, and these are outlined in the table below.

Action	Relevant questions from staff equality survey (see section 5)
1.1	1, 2, 8, 9, 10, 11, 12, 13, 14, 15, 22, 23, 25, 27
3.3	18, 21, 26
3.4	5, 7
3.5	3, 4, 7
4.3	13