



Athena SWAN Bronze department award application

Name of university: The University of Edinburgh

Department: School of GeoSciences

Date of application: 30/04/2013

Date of university Bronze and/or Silver SWAN award:

Bronze 2006; renewal 2009, 2013

Contact for application: Prof Kathy Whaler

Email: kathy.whaler@ed.ac.uk

Telephone: 0131-650-4904

Departmental website address: <http://www.ed.ac.uk/schools-departments/geosciences/>



SCHOOL of GEOSCIENCES
The University of Edinburgh
Grant Institute
The King's Buildings
West Mains Road
Edinburgh EH9 3JW

Telephone +44 (0)131 650 1000
or direct dial+44 (0)131 650 8508
Confidential Fax +44 (0)131 650 7340
<http://www.ed.ac.uk/schools-departments/geosciences/>
sandy.tudhope@ed.ac.uk

30th April 2013

Dear Athena Swan Assessment Team,

I write to confirm my support for our School of GeoSciences application for an Athena SWAN Bronze Award.

Over the past two years, we have been making some significant changes to improve fairness in the allocation of workloads, and recognition of the diverse ways in which colleagues contribute to the success of the School. These changes include the development of a 'workload model' that captures contributions across the spectrum of research, teaching, management and service, and which is used to guide workload and resource allocation. In parallel, we have worked to improve family-friendly working practices through supporting flexible and part-time working and ensuring School meetings are within core working hours. The underlying motivation for making these changes is to enhance not only the efficiency and quality of our delivery, but also the sense of fairness and community around our shared purpose.

Engaging with the Athena SWAN process has provided an ideal framework for further developing around this theme. We are using the opportunity to not only explore and improve the ways in which we support and promote the contributions of women in SET, but to use these same principles to enhance our awareness of opportunities for improvement across the spectrum of equality and diversity. As Head of School I have driven the process, but this initiative has received enthusiastic support from colleagues across the School. We have used School-wide meetings (all academic and support staff) to discuss the issues, the process and to update colleagues on progress, and we had an excellent response to our benchmarking surveys of staff and students. I asked Professor Kathy Whaler to lead on the development of the Athena SWAN case for GeoSciences, and she, with support from the College of Science and Engineering, assembled an enthusiastic School Working Group to help develop our strategy and action plan.

In the School we have some exceptional role models for women academics in science. These range from senior colleagues (e.g., Prof Kathy Whaler: 2013 winner of the Price Medal of the Royal Astronomical Society; Prof Gabi Hegerl: IPCC Lead Author, 2012 recipient of an ERC Advanced Fellowship and elected a Fellow of the Royal Society of Edinburgh in 2013), through to dynamic

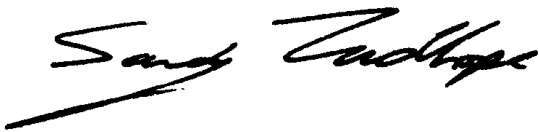
HEAD OF SCHOOL Professor A.W. Tudhope

The University of Edinburgh is a charitable body, registered in Scotland, with registration number SC005336

early-mid-career colleagues (e.g., Dr Caroline Nichol: Fellow of the Royal Society of Edinburgh Young Academy). However, we recognise clear opportunities for further developing our culture and processes to support women in the School, and that this application for Bronze is simply a first step. Our submission identifies some of the actions we have already taken, and those we will take imminently to set our trajectory. As Head of School I will Chair the Equality and Diversity Committee, and the Deputy for that Committee will be our Athena SWAN Champion. In this way we will ensure that Athena SWAN and associated Equality and Diversity topics are central to the ethos and decision-making of our School.

Please feel free to contact me at any time for further information about our actions and aspirations.

Yours faithfully,

A handwritten signature in black ink, reading "Sandy Tudhope". The signature is fluid and cursive, with a long horizontal stroke at the end.

Professor Sandy Tudhope
(Head of School of GeoSciences).

2. The self-assessment process

The Self-Assessment Team consisted of:

Kathy Whaler (KAW), Team Leader, Professor of Geophysics, has been Head of Department, Convenor of the College of Science and Engineering Equality and Diversity Committee, Athena Project Development Grant Steering Group member, and Athena SWAN awards panel member. She worked part-time for several years to take care of her partner who developed a serious, disabling illness, but is now back full-time.

Godfrey Fitton, Professor of Igneous Petrology, shares family responsibilities with his wife, who has an equally successful career. One of their three children has learning difficulties, which took up a lot of their time in the early years. His wife completed a part-time PhD while the children were young, which he helped her do by taking on extra domestic responsibilities.

Linda Kirstein is a Lecturer in Earth Sciences. From 2000 she held three personal fellowships at the University of Edinburgh prior to taking up her current position. She has two children born in 2001 and 2004. She worked 4 days/week for three years following the arrival of her second child. She and her husband share child care responsibilities.

Paul Palmer, Professor of Quantitative Earth Observation, is the School Director of Research. He and his wife, also a full-time senior academic at the University of Edinburgh, share the domestic duties associated with raising their two young children.

Debbie Polson is a postdoctoral Research Associate. She joined the department in 2008 having briefly left academia to work in industry after her PhD. She lives with her partner and does not have children.

Niamh Shortt is a Senior Lecturer in Human Geography in the School and a co-director of the Centre for Research on Environment, Society and Health. Niamh was appointed Lecturer in January 2004 and Senior Lecturer in March 2013. During this time she has taken two periods of maternity leave (in 2008 and 2010) totalling 20 months, and returned to work 4-days/week after her first maternity leave.

Darren Wilkinson is a PhD student. He and his wife are working young professionals who know all too well the challenges faced by couples when balancing professional careers and home life. The challenges faced specifically by his wife in attaining this balance have affected them both, and so he wanted to be a part of enacting changes from inside the School he knows well.

The Team was formed in summer 2012 with representatives from all Institutes and career stages, and has met every 5 weeks on average. Uniquely for a School committee, membership is associated with a School Total Workload Model (TWLM)

tariff. We used the QuickCAT survey with small modifications to assess the culture and attitude in the School, with 141 staff and 127 students responding after its launch at a School meeting in September; KAW presented a summary of the results and a progress report at the next School meeting. Dr Caroline Wallace, the College of Science & Engineering's Athena SWAN Support Officer, provided the centrally-gathered statistics and comparator data, and analysed the survey results (redacting comments that would have broken anonymity). The results of these questionnaires were the main agenda items for the two meetings after the survey closed, providing very useful input to our considerations and guiding the development of subsequent activity and our Action Plan. Alongside this, members of the Team held small focus group meetings with women who have had periods of maternity leave, on the difficulties of returning particularly to research activity, later year postgraduate students (women and men separately), on what factors influence whether they regard careers in academia as a good choice, and recently-arrived academic staff regarding induction. Subsequent Team meetings were used to hone the Action Plan, and consider how we would monitor its impact. In it, we aim to recognise that women in the School at different points in the careers from undergraduate to Professor require different support, and that we have identified immediate and longer-term actions that we hope will positively influence the experiences of women at all levels.

KAW attended two senior management committee meetings to discuss how School structures would best accommodate the actions we propose, and to agree the Action Plan in detail and resources required. Oversight will be the responsibility of the School Equality and Diversity (E&D) Committee, which henceforward will be Chaired by the Head of School, with a Deputy who will be Athena SWAN 'champion'. The E&D Committee meets three times per year. To provide continuity, we expect at least two Team members to be E&D Committee members when membership next rotates.

The Team was asked to look at the draft rules for providing researchers with small amounts of flexible research funding. This contained a clause that, for part-time workers, the amount of funding would be *pro rata* to the fraction of FTE that they worked, although the allocation criteria were not. Our recommendation that those meeting the criteria should instead receive the full amount was accepted by School management.

Members of the Team participated in other networking activities associated with Athena SWAN and Women in Science in general. This included attending the launch of the Scottish Resource Centre for Women in Science, Engineering and Technology (SRC) Career Coaching Programme, a seminar on gender equality initiatives and good practice (with 2 external speakers), and a Royal Society of Edinburgh Discussion Seminar on 'Revisiting 'Tapping all our Talents''. KAW participates in the University Athena SWAN Network and joined a small group advising the University on its application to renew its bronze status.

(911 words)

3a Pen-picture of the School

The School is large and has a very broad research base, covering earth sciences, meteorology, ecology, environmental sciences, and geography, thus extending through a broad spectrum from quantitative science to human geography. It was formed in 2002, when the University underwent a major reorganisation, by amalgamating two departments, and sections of other former departments. It is currently housed in three buildings on two sites approximately two miles apart. Undergraduate teaching takes place on three sites, as well as in the field, on both local and residential field courses. We have 100 academic staff, 72 research staff, 64 support staff, 850 undergraduate students, 215 taught postgraduate students and 170 research postgraduate students. We run 20 undergraduate degrees (including 9 leading to the degree of MA), and 14 MSc programmes (1 shared with Heriot-Watt University, and 4 with the Scottish Rural College). We operate a large number of experimental and equipment facilities and laboratories, some jointly with other Schools within the University, and several on behalf of research councils.

We have had four Heads of School and several management structures since 2002. Management of academic staff is now through three Institutes, each with a Head (an academic member of staff) responsible for line management of academic staff, and the strategic direction and management of research within the Institute – given the size of the School, they are akin to ‘mini-Departments’. Institute Heads control some budget lines, and can bid into others held at School level. Teaching is organised and managed separately, although teaching is allocated by the Institute Heads. The Head of School, Institute Heads together with the Director of Teaching and School Administrator form our executive committee, the School Policy and Resources Committee or SPARC, which meets monthly. SPARC decides which applications for promotion will be supported by the School; candidates are recommended to SPARC by Heads of Institute. Administrative task distribution is the responsibility of SPARC. Heads of School are appointed for 5 years; Heads of Institute and Director of Teaching for 3 years.

The School has an active Research Development Group (RDG) to provide career development support for the research community. It is led by Dr Kate Heal (Senior Lecturer, head of Research Training and Development (RTD), and academic responsible for research staff development), Dr Stuart Gilfillan (research staff organization representative), and Rosanna Maccagnano (administrative lead, manager of RDG and the School Research Organization). Research staff input and leadership in this programme, in addition to academic and administrative inputs, has been instrumental in successfully communicating and delivering the principles of the University’s Code of Practice for the Management of Research Staff. In particular, the RDG provides the necessary support to ensure that research staff are not only managed effectively by their line manager/PI but to also ensure that they are given the best opportunity to develop their skills over and above the narrow remit of their research project (including, for example, teaching and outreach opportunities). The RDG also aims to foster a sense of community within a disparate ‘group’ of individuals who traditionally work in isolation to the rest of the School community.

The Research Support Organisation (RSO) is a network run by and for research staff (including PhD students), to provide a ‘voice’ for Research Staff to air views on School issues, allow Research Staff to get to know each other in a social setting, offer advice

and support on Research Staff related issues, promote the sharing of common skills and techniques, provide information on careers, funding, training and other issues relevant to Research Staff, and offer a more structured means of support to PhD students.

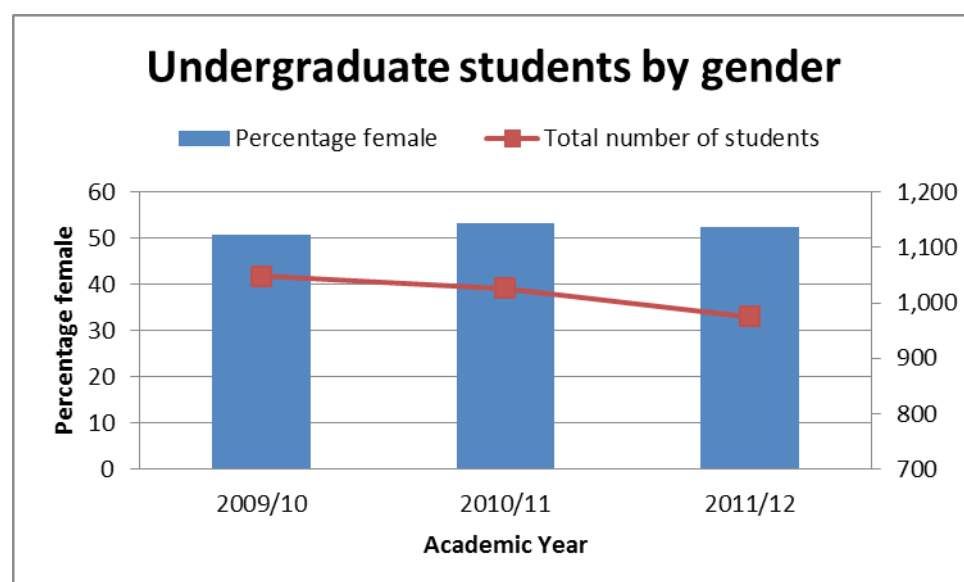
3b Data

Students

(i) Access or foundation courses

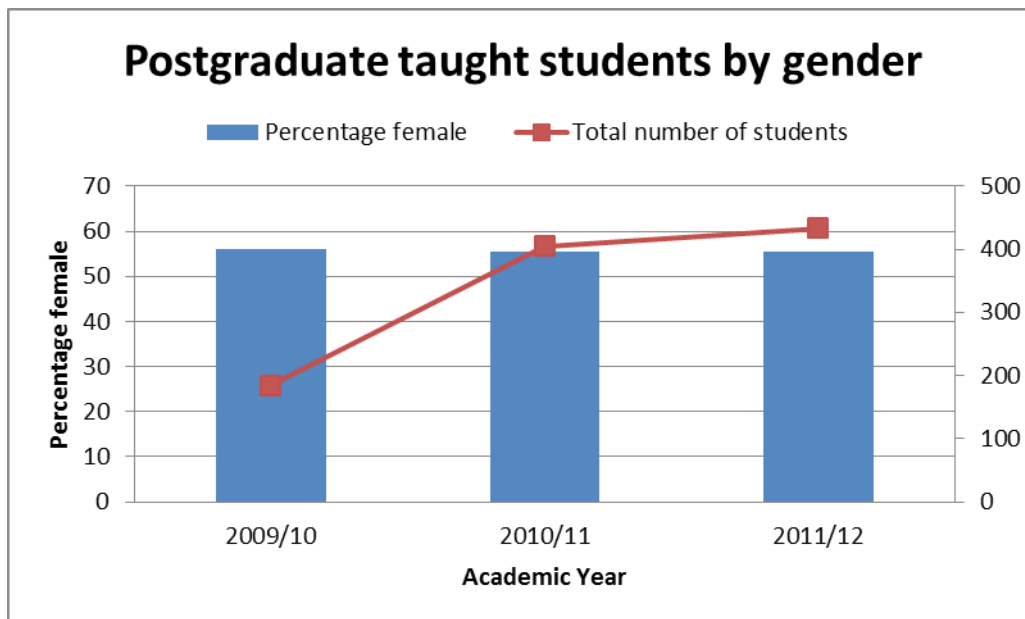
The School participates in the Lothian Equal Access Programme for local schools that do not have a strong tradition of students going on to university, and Scottish Wider Access Programme for adults. Over the period, 20 females and 24 males have completed our summer school programme. These courses are organised at College level, but the School promotes them at Open Days.

(ii) Undergraduates



There is gender parity at the undergraduate level with a small increase of 2% in the proportion of females from 51% in 2009/10 to 53% in 2011/12. The proportion of females is statistically significantly higher than the national average of 47% (HESA 2011/12 data, JACS F6, F7, F8, L7 for all comparisons unless otherwise stated).

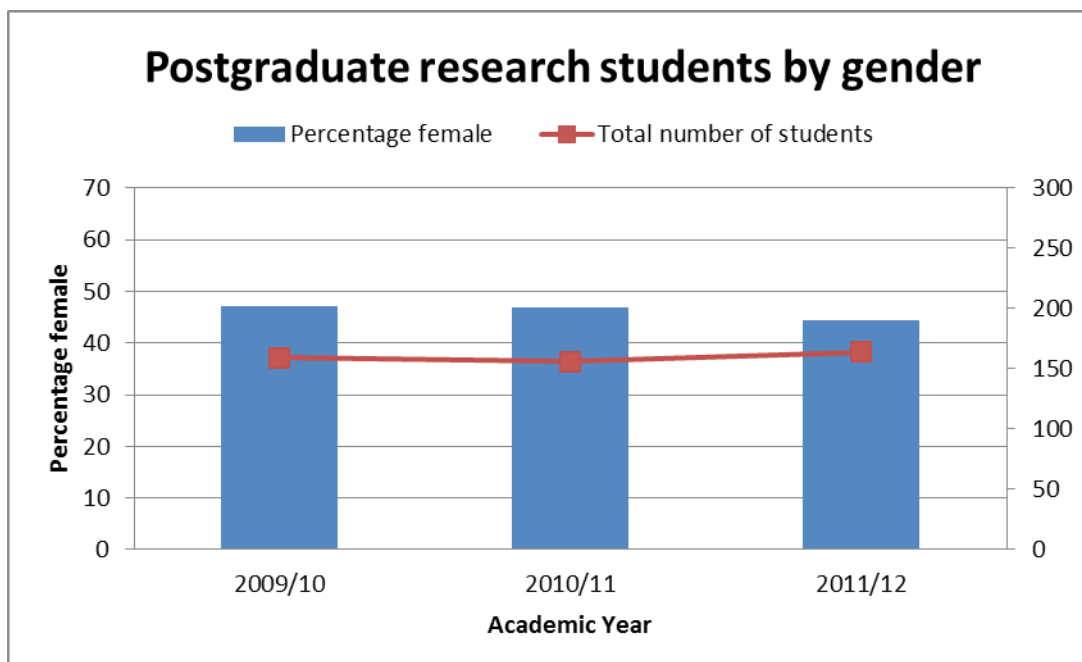
(iii) Postgraduates completing taught courses



There is also gender parity amongst postgraduate taught (PGT) students. The proportion of females has remained constant over the last three years, and at 55% in 2011/12, is statistically significantly higher than the national average of 47%.

We will continue to ensure our recruitment material portrays both male and female students and staff, and to monitor the data in (ii)-(iii) on an annual basis to make sure there are no adverse trends that might need addressing in the future.

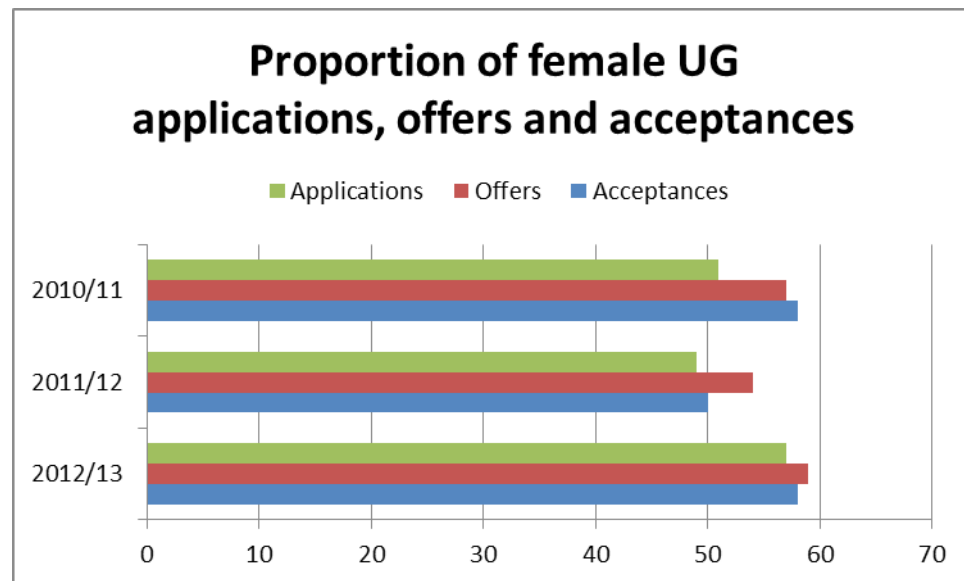
(iv) Postgraduate numbers on research degrees



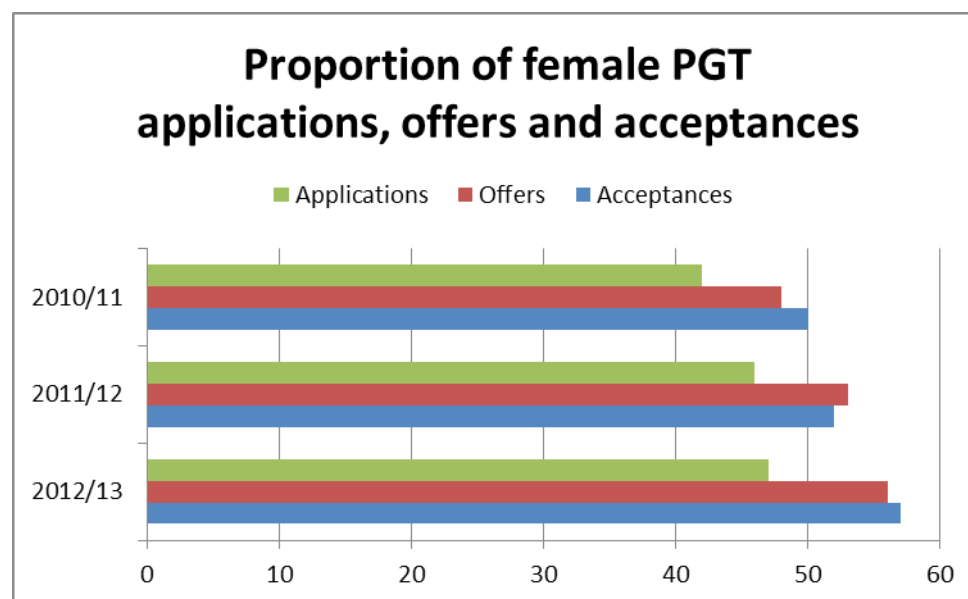
This shows a slight decrease in the proportion of female students on postgraduate research (PGR) courses, by 4% since 2009/10 to 44% in 2011/12. This is lower – but not significantly so – than the national average of 48%. We have checked that completion rates are similar for female and male students; thus, to improve the balance, we need to recruit more females, which we discuss below.

(v) Ratio of course applications to offers and acceptances

Undergraduate degrees

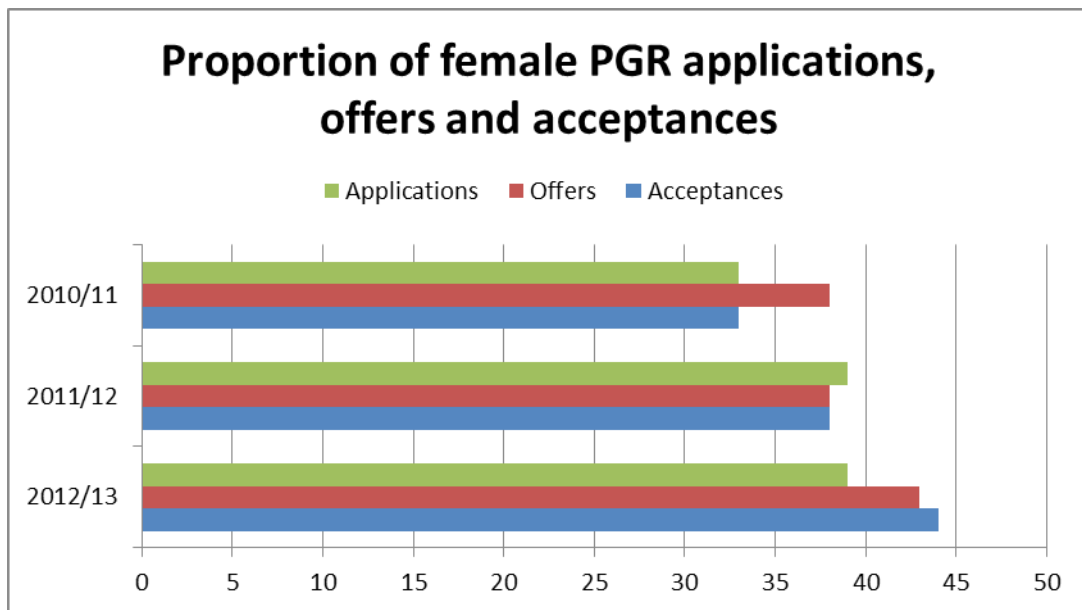


Postgraduate taught degrees



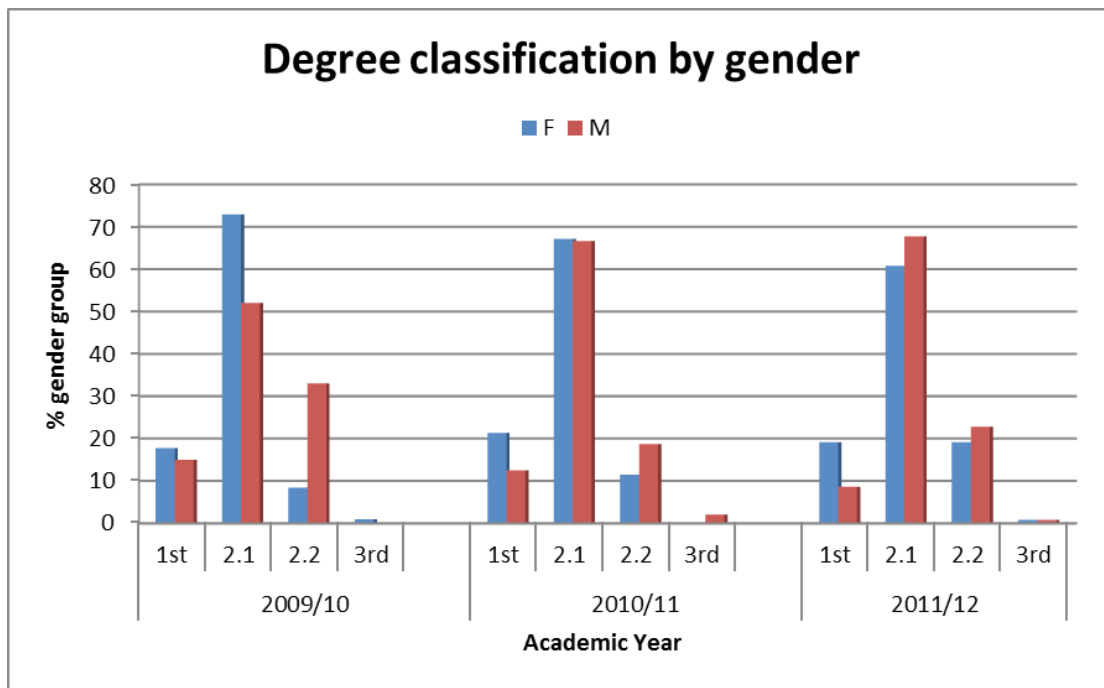
For both undergraduate and PGT degrees, we make offers to females and they are accepted at higher rates than apply, maintaining both cohorts at or just above parity. Again, we will continue to monitor the situation.

Postgraduate research degrees



For PGR degrees, we also make offers to females and they are accepted at higher rates than apply, but the proportion of applications is lower. Our recruitment procedures have not changed over the last few years, but it is possible that the proportional increase in female acceptances reflects the visibility of women academic staff and/or research students when these applicants visited. Our recruitment material features women prominently and more often than men. As these students progress, the trend shown in (iv) of our postgraduate research school becoming slightly more male dominated should reverse. We intend to offer a student project to examine whether there are any perceived barriers to female PGR student recruitment, which will include a survey of female applicants and intake. We will examine whether there is a variation by gender for competitive scholarships we recruit to/recommend for, compared to those applying with their own funding, which could indicate that our selection procedures are not functioning optimally. In any case, we intend to enhance training for potential supervisors and selection panel members.

(vi) Degree classification by gender



More of our female students get 'good' degrees (1st and 2.1) than their male counterparts, both in absolute numbers and as a percentage. The most recent data show a very slight drop which, if it continues, will be investigated and appropriate actions taken where need is identified.

Staff

(vii) Female:male ratio of academic staff and research staff

General staff information: University-wide standard academic grades:

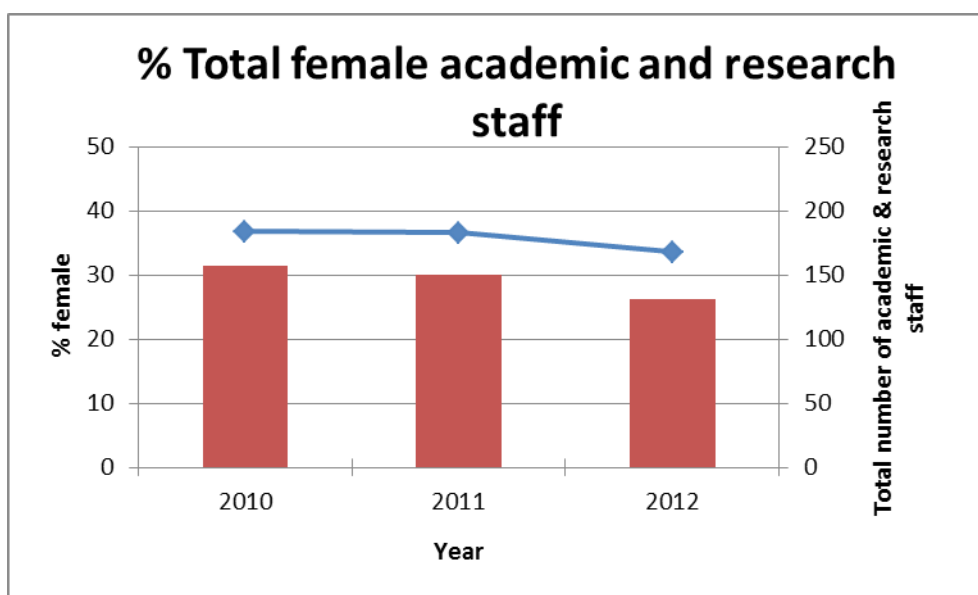
UE06=research assistant/associate

UE07= Postdoctoral research fellow

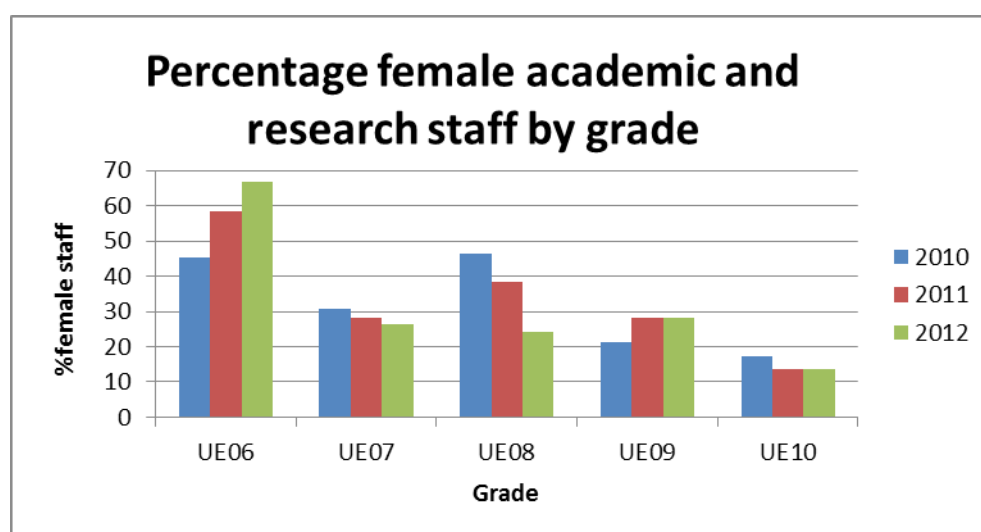
UE08=lecturer/research fellow

UE09=senior lecturer/reader/senior research fellow

UE10=professor/personal chair, or equivalent



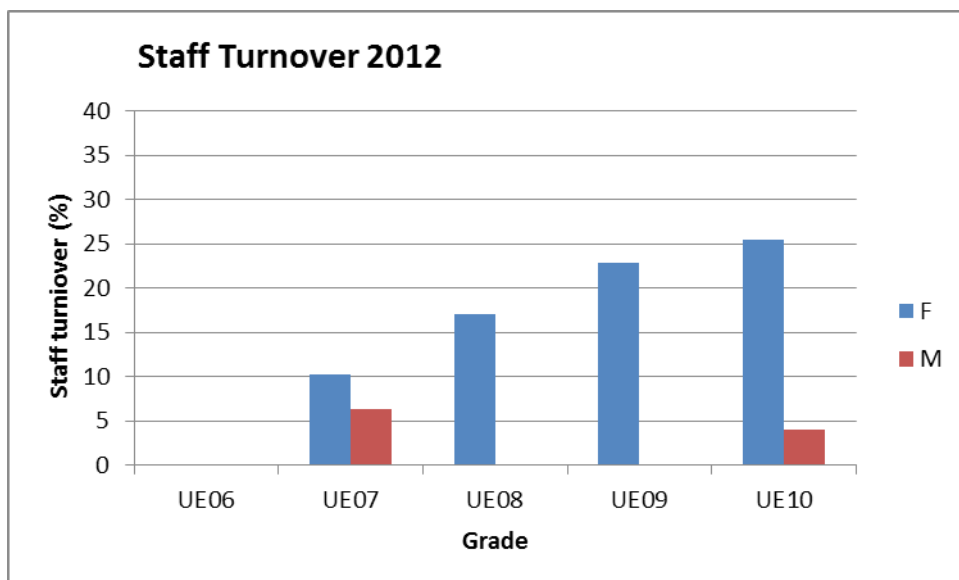
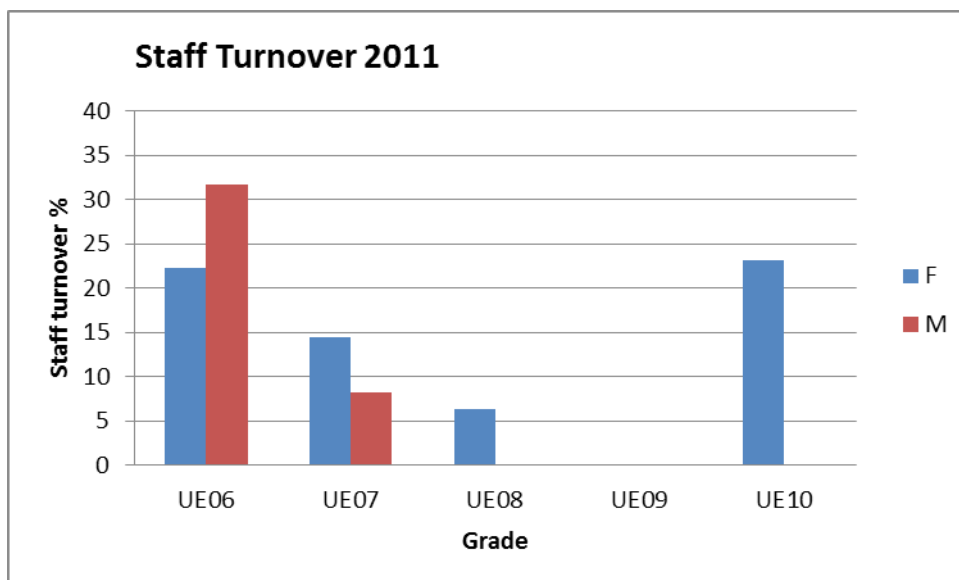
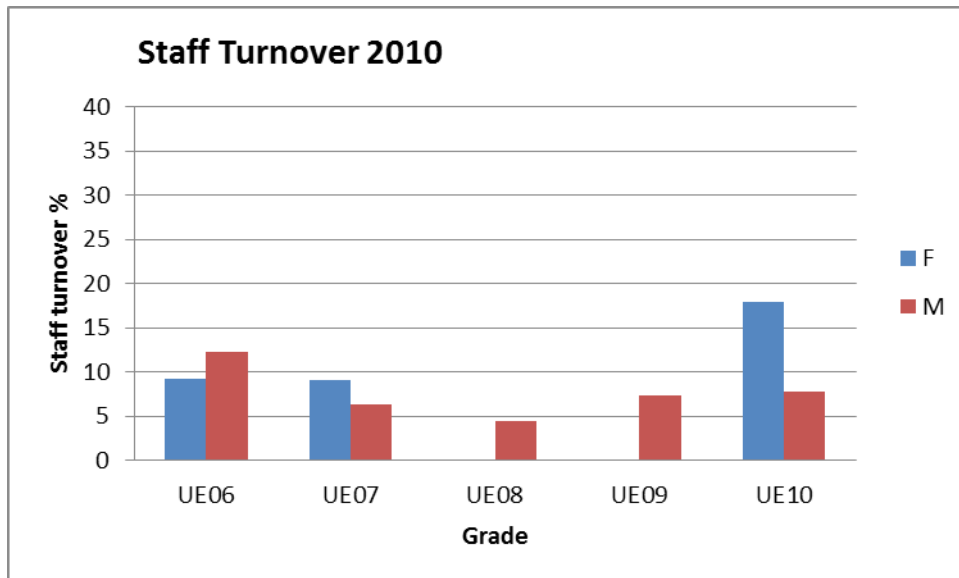
To simplify terminology, henceforth we use ‘research staff’ to refer to grades UE06-7, and ‘academic staff’ (open-ended lecturing/research, or fixed term teaching, staff) for higher grades. The proportion of female staff has dropped from 32% in 2010 (58 females in 184 staff) to 26% in 2012 (44 females in 168 staff), now lower than both the Russell Group average of 32%, and the national average of 35%. Data shown below suggest we are performing poorly on attracting female applicants at all levels, and on recruiting female research staff. We will make changes to our website to highlight family-friendly policies, visible to potential applicants. We will also enhance training for selection panels, including on unconscious bias, and gender differences in letters of reference



The data show under-representation of women, becoming more pronounced with seniority, in the academic staff grades, and no signs of improvement – relative success in the recruitment and promotion of women have been counter-balanced by turnover. All disciplines within the School have a ‘critical mass’ of women. Besides action on recruitment mentioned above, we will encourage women to participate in the SRC’s ‘Career Coaching for Success’ programme. The School has committed to pay for up to 5 per annum, and this figure will be kept under review in case demand is higher. In addition, funding will be available for other SRC and similar events for women. Leadership coaching is offered by the University to men and women; we will personally approach women towards the top of grade UE08 and at UE09 to encourage them to consider taking this. These actions may not improve our retention rate, but are likely to impact positively on women’s performance and promotion.

(viii) Turnover by grade and gender

	2010		2011		2012	
Grade	F	M	F	M	F	M
UE06	1	1	1	2	0	0
UE07	2	3	3	4	2	3
UE08	0	1	1	0	2	0
UE09	0	2	0	0	2	0
UE10	1	2	1	0	1	1



The high percentages of female UE10 staff leaving represent small numbers. Although none had negative reasons for leaving, this is a worrying trend, and the lack of senior women in the School was commented on in our QuickCAT survey returns. The Head of School holds exit interviews with all academic staff who resign – deliberately informal to encourage staff to be frank in their discussions. He will bring an annual summary of interview results to the E&D Committee. Other than that, the numbers are broadly comparable for men and women (though the percentages are higher for women because of their smaller numbers).

(1620 words)

4. Supporting and advancing women's careers

Key career transition points

a) (i) Job applications and success rates by gender and grade

2010	Number of Applications			Number of New Starts	
	Female	Male	Unknown	Female	Male
UE06	35	41	3	4	13
UE07	75	173	9	4	11
UE08	8	19	0	0	2
UE09	0	0	0	0	0
UE10	0	9	0	0	0

2011	Number of Applications			Number of New Starts	
	Female	Male	Unknown	Female	Male
UE06	91	33	3	2	2
UE07	103	191	3	4	10
UE08	21	72	1	0	1
UE09	56	104	2	0	0
UE10	0	16	0	0	0

2012	Number of Applications			Number of New Starts	
	Female	Male	Unknown	Female	Male
UE06	0	0	0	3	1
UE07	0	0	0	4	10
UE08	121*	251*	8*	5	9
UE09	0	0	0	1	0
UE10	0	0	0	0	1

*One advertisement was at grades UE08/9, with one applicant (female) appointed at grade UE09

At UE08 and above, women applicants are more likely to be appointed than men, but we attract far fewer female than male applicants. For the lower grades, we still have lower numbers of female applicants, and are appointing proportionately fewer women than apply for posts. This may reflect our greater rigour in ensuring that we have female representation on selection panels for the higher level posts, and ask all members of them to take the equality and diversity online training. We intend to address the composition and training of selection panels in our Action Plan, since even for the higher grade appointments there is the possibility of unconscious bias

and other issues. The University is planning to trial unconscious bias training, and the School has volunteered to be part of a pilot study. We will also ask selection panel members to take the University's Recruitment, Selection and the Law training. We intend to investigate at an Awayday all stages of the recruitment process, including our advertisements and associated documentation, and writing and reading letters of reference (where research has shown gender bias). This will feed into an enhanced training programme for selection panel members specifically for the School. As mentioned in 3(vii) above, we will also be making changes to our website to highlight family-friendly policies, visible to potential applicants

Last year, the University offered over 100 'Chancellor's Fellowships' – leading to a full academic post with a teaching load increasing to normal over 5 years. These attracted large numbers of high calibre earlier career researchers. In our School, 29 were shortlisted, of whom 8 were female. 5 offers were made, 2 to women, and thus women were proportionally made offers at a higher rate than men from the shortlist, but one withdrew for personal reasons just before taking up the position.

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

2010	Number of Applications for Promotion		Number of Successful Applications	
	Female	Male	Female	Male
UE07	0	1	0	1
UE08	0	0	0	0
UE09	1	4	1	3
UE10	0	4	0	3

2011	Number of Applications for Promotion		Number of Successful Applications	
	Female	Male	Female	Male
UE07	0	0	0	0
UE08	0	0	0	0
UE09	3	1	2	1
UE10	0	3	0	3

2012	Number of Applications for Promotion		Number of Successful Applications	
	Female	Male	Female	Male
UE07	0	0	0	0
UE08	0	0	0	0
UE09	2	0	2	0
UE10	1	0	1	0

The proportion of successful applicants that were women has increased over the last three years, and all promotions in 2012 were of women; however, the numbers are small, so we cannot attach any significance to the improvement. All but one

application by women was successful over the last three years, but this could simply be caused by women either waiting or not being put forward until they were 'over-ready'; also, only two men were unsuccessful in the same period. Academic staff are appraised by their Head of Institute, or his/her deputy, but promotion is kept separate from appraisal (University policy). However, some appraisers are more proactive when discussing progression, including when applying for promotion might be appropriate, and areas where a potential application could be strengthened. Our survey results (of all staff, not just academic) suggested some staff were dissatisfied with the feedback they received on draft promotion applications, and also that some staff find promotion criteria opaque; for both aspects, this is particularly the case for women. We do not know whether female academics feel they are being encouraged to apply for promotion, or whether they are actually applying, at a similar point in their careers to their male counterparts. To better advance women's careers, we wish to become more pro-active in our evaluation of and advice to staff on promotion, and increments (where females are less likely to put themselves forward). Henceforward, all staff CVs will be reviewed annually by SPARC for strengths and weaknesses, determining how well criteria for promotion are met, or if consideration for an increment might be appropriate, and that individual feedback is provided. Such a review can hone activity and CV presentation to improve success rates, and is known to be the kind of support particularly welcomed by women. The University's promotion procedures and criteria take into consideration all aspects of an academic career, and recognise career breaks and part-time working. However, there is no documentation as to how these were factored in at School level. We propose in our Action Plan that a record is kept.

b) (i) Recruitment of staff

Currently, we do not document the composition and training of selection panels for grades below UE08, and the data in a)(i) above suggest we may not always be following best practice. Typically, panels at these grades are Chaired by the PI seeking a postgraduate researcher for his/her grant; as such, they will be aware of University policies and of the general requirement for equal opportunities, but may not have undertaken recent relevant training. Actions for these and higher grade posts are described in 3a)(i). As already noted, we will be improving our website to provide links to the University's family-friendly policies such as flexible and part-time working, and maternity/paternity leave provision. We hope this greater visibility will make the School more attractive to female applicants.

(ii) Support for staff at key career transition points

Although there is some year-on-year variability in proportion of women at researcher grades and then in the transition to the lecturer (UE08) grade, in general these proportions decrease at every point on the scale. We have not previously taken action specifically to support women, but will do so henceforth. We describe first our support for research staff and PhD students, then for academic staff, although many of the development opportunities for research staff are also available to and relevant for academic staff (and their description is not repeated).

Our RDG was formed in 2009 and has a wide programme of career development activities and events for research grade staff; our research staff (both women and

men equally) report that they feel well-supported. We are continuously adding to this programme, based on feedback from staff. The RDG's progress on each point (1-3) of its remit is described, followed by that of the RSO (4-8).

1) Create awareness of the Code of Practice (CoP) and the Concordat. This was achieved by holding an open meeting in late 2009 for PIs and research staff, followed up by establishing and advertising the homepage for Researcher Development with links to the University Researcher Development Programme and the Code of Practice. New staff are introduced to the principles of the CoP at Induction (see below).

2) Establish annual development reviews. RTD's policy encourages research staff to take charge of their own career development together with their PI (or mentor). Through an initial School open meeting (where the CoP was effectively launched) and jointly-run RTD/RSO away-days, we have been successful in engaging the researchers to understand the importance of their development reviews. RTD maintains records of development reviews completed. At RDG's introduction, 80% of research staff took part in a development review with their PI; by 2010, this figure had risen to 86%. This was achieved through working directly with research staff, highlighting the benefits to their own career plans and encouraging them to take advantage of the excellent training courses available through the School and the IAD. Awaydays also offer the opportunity to discuss the benefits of development reviews.

3) Ensure research staff remain an integral part of School business. Research staff are represented on the following School committees: RTD Policy Committee (which reports directly to the School Executive), IT Committee, Libraries Committee, and the Safety Committee. Research staff jointly run the School's annual Postgraduate Research Conference, co-chairing sessions with academics and giving keynote talks at the start of each session. Research staff are involved in the School's UG and MSc teaching, and are involved in the supervision of PhD students and junior research assistants.

4) Buddying arrangements. The RSO nominates one buddy per building over the three sites the School occupies. Each buddy welcomes the new staff member on their first day to act as a point of contact and to show them the more social aspects of the building (coffee time, site food areas, etc) and in general to provide a friendly welcome to the School.

5) Handbook for new researchers. All new staff get a School-specific induction booklet. It is available on the web and includes useful School information, HR and finance information including development reviews, RSO information, School governance and structure, responsibilities of academic staff to students and researchers, and research grant administration.

6) Induction webpages for new staff. In addition to pointing new staff to HR and the Researcher Development Programme induction pages, the School provides all induction information mentioned above on a specific internal website for new starts.

7) Letter to new researchers. The RTD manager sends a letter to all new starts prior to or on arrival, welcoming them to the School and introducing her/himself as their initial point of contact. The letter details what the School provides for them in terms of development, as well as introducing them to the RSO.

8) Induction events. The RTD runs a comprehensive induction programme for new research staff to welcome them into the School and to ensure they have a smooth transition into their new research environment.

RTD encourages research staff to identify a mentor if, for example, there is no PI (in the case of fellows with their own funding) or if the researcher believes she/he would benefit from discussing career options with someone other than their PI.

We have used devolved Researcher Development money to organize School-specific development and knowledge sharing activities for research staff, such as on 'Writing a Scientific Paper' and 'Research Funding Applications', a computing language workshop, and two away-day afternoons for Research Staff with the aim of understanding training and development needs and to showcase new research within the School. This supplements the free support and resources for PhD students, research staff and academic staff offered by the Institute for Academic Development (IAD), including a wide range of training courses covering research, management and learning and teaching. Courses for career development such as CV writing and interview skills are also available. All staff are encouraged to attend relevant courses, and information on upcoming courses is frequently circulated. Appraisal forms include a section where staff can indicate where they feel they would benefit from training, which is discussed with their appraiser. Some courses are modified and run specifically for the School, based on feedback on the more general provision. The University's Career Services offers support and advice for students and recent graduates, providing education and information and offering opportunities for interaction with employers.

Research students within the School come from many different academic and cultural backgrounds and participate in a range of research programmes with their own intellectual cultures. The progress and monitoring procedures developed by the RTD has produced standards set by the College, University and the Research Councils, whilst taking into account the recognized diversity of research staff and students.

Academic and Pastoral Support for All Research Students. Research students work closely with their Supervisor, and also with a larger supervisory team on some projects. In addition, each student is allocated an academic Advisor who is a staff member not directly concerned with the project. The student may also turn to the Head of RTD for further academic advice and support. The Postgraduate Secretaries and the RTD Manager are able to offer advice on non-academic matters, and the student also has access to all the University student advice services. Our orientation material indicates students may request a female mentor or advisor; this has been arranged in a few recent cases (for overseas students).

For our academic staff induction, development and support, we rely mainly on courses run by our IAD and University Human Resources division, with support at School and Institute level. At a later stage in their careers, these staff already have a good grasp of academic activity. IAD's courses include details of flexible working, professional and personal development opportunities, and those offered by HR include introduction to the appraisal process, and equality and diversity training. Those new to the School have a meeting to welcome them with their Institute Head, and a mentor is arranged shortly thereafter. We also have a Handbook for new

academic staff, although discussions while preparing this application have highlighted areas for improvement. These will be addressed by Action 2.2.

Recipients of Chancellor's Fellowships will have a specific induction and mentoring scheme run at University level aiming to give them a sense of identity and ensuring the talents of this group are fully realised, and addressing equality and diversity matters. We will use examples of best practice from this cohort as we aim to improve School procedures.

Prompted by our examination of the staff profile by gender, we instigated a set of focus group meetings with late (3+ year) female and male PhD students separately, to assess their attitudes towards a career in academia, and to understand how and what support and encouragement we could provide to our female students. Whilst the female students welcomed and engaged with the initiative in substantial numbers, only one male student turned up to their focus group meeting, and none offered comments or feedback subsequently. The focus groups identified factors detrimental to women pursuing an academic career including the lack of stability, likely having to move several times on short-term contracts before finding a permanent position, which is difficult for dual-career partners especially if the woman is the junior partner, and the perceived problems of combining motherhood with an academic career, and the emphasis on publications as the main success measure. This cohort suggested that if maternity leave was routinely shared with fathers, having children would affect female and male careers to the same extent. They noted that job advertisements (in general, not specifically the School) for fixed-term contracts were frequently not clear about maternity rights, finding this information was not always easy, and that this subject was impossible to broach at interview since they felt it would put them at a disadvantage. They also felt that they had few female staff role models recognised for their research achievements. Actions in 1.4 of our Plan were partly in response to this. Discussions at a Team meeting over the male lack of interest/concern at this stage suggested they do not feel the same need to plan ahead and, whilst many expected to become fathers, the issues surrounding this did not particularly concern them at PhD stage.

Organisation and culture

a) (i) Representation on committees

The School has very few Committees, and the Committee structure that exists has been very unstable over the past decade. Most decision-making Committees have membership defined by role (e.g. Heads of Institute are members of SPARC). The data in the tables below are of academic and research staff only; for some Committees, support staff are also members, and there are student representatives.

School Policy and Resources Committee

Year	Number of members	Female members	% female members
2009-10	11	1	10
2010-11	8	1	12.5
2011-12	5	0	0
2012-13	5	0	0

Teaching Committee

Membership is those who have roles as Co-ordinators/Convenors of Degree Undergraduate Programmes, and the Director of Teaching and the Deputy Director of Teaching (PGT), both of whom have been men for the 2009-13 period.

Year	Number of members	Female members	% female members
2009-13	10	3	30

Masters Committee

This manages PGT provision, is Chaired by the (male) Deputy Director of Teaching (PGT), and all PGT Course Directors are members. Throughout the 2009-13 period, there have been either 2 or 3 female members.

Year	Number of members	Female members	% female members
2009-13	10	2.5	25

Research Training and Development Committee

Addresses matters relating to PGR students and the development of early career researchers. Membership in the table below relates to those holding roles (e.g. in charge of recruitment, training, etc.). Since 2012, the Chair has been female.

Year	Number of members	Female members	% female members
2009-10	4	2	50
2010-11	4	1	25
2011-12	4	1	25
2012-13	4	2	50

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

Year	Female					Male				
	Permanent		Fixed-term		Total	Permanent		Fixed-term		Total
	N	%	N	%	N	N	%	N	%	N
2010	27	46.6	31	53.4	58	81	64.3	45	35.7	126
2011	26	47.3	29	52.7	55	79	61.7	49	38.3	128
2012	21	47.7	23	52.3	44	78	62.9	46	37.1	124

The lower proportion of women on permanent contracts reflects their greater proportion at lower (particularly UE06) grades, presented in 3c)(vii).

b) (i) Representation on decision-making committees

As noted in 4a)(i) above, our School committee members are primarily determined by role, rather than selection. Avoiding committee overload for our relatively small number of female staff means that on many committees, there are few or no female members. None of the three UE10 female staff are SPARC members, which comes with the heaviest workload; instead, they are undertaking other activities beneficial for their careers and the School. However, this means that senior management is very male-dominated, senior women are not as visible within the School, and therefore not providing role models for our younger female staff. Lower grade female staff are involved in, including Chairing, sub-committees that make recommendations to decision-making committees, some of which they sit on *ex officio*. Discussions at appraisal cover School administrative, in particular, committee, roles, and this is also part of the feedback when staff are planning their paths to promotion. Female staff are encouraged to take on tasks that will enhance their careers, both within and outside the School, including putting themselves forward for external roles such as when vacancies on a Research Council committee are advertised, and we have had considerable success in this (though again, these are not routinely announced within the School at the moment). External opportunities arise at any time of the year, and success cannot be anticipated or assumed, so appointments can lead to overload when combined with existing School duties. Female staff at UE09 and higher grade are frequently asked to sit on selection panels both within the School and for other Schools in the University (and externally); as we note below, this greater burden is not factored into our workload model, but is an area we will be revisiting.

(ii) Workload model

Our Total Work Load Model (TWLM) is new, and thus is still ‘bedding down’. However, experience from other Schools suggests it is helpful in addressing gender issues (KAW met with the Head of Chemistry, recently awarded Gold Athena SWAN status, after taking on Team leadership). Our Qcat survey results suggested particular areas of concern were over the balance between teaching and research for part-time staff, sharing the workload of staff members on leave, and the distribution of activities such as taught field courses outwith the normal working week. We hope the TWLM will lead to a more transparent distribution of tasks, better planning for anticipated absences (e.g. reallocating teaching resulting from maternity/parental leave), and allow better contingency planning, for example if women extend their maternity leave beyond the return date originally proposed, or request to return at a lower FTE proportion than previously indicated. We expect it to help to ensure that part-time staff are given a part-time, well-rounded workload. Athena SWAN Self-Assessment Team membership is recognised in the TWLM. The TWLM takes into account pastoral and administrative responsibilities, and recognises contributions e.g. to outreach. However, it does not formally recognise that women have a greater burden of e.g. selection panel membership since attempts to get women better represented on them mean they have to participate more often. Even with a TWLM, balancing a desire to ensure women are visible at every point (e.g. from potential undergraduate visit open days and schools outreach, though advising women students, to senior management) with manageable workloads, is proving hard. We will explore adjustments to our TWLM to reflect the different demands on women’s time.

(iii) Timing of meetings and social gatherings

Most meetings are held in core hours (10am-4pm). The start time of one of our research seminar series was moved from 4pm to 3:30pm to accommodate those with child-care responsibilities. However, School meetings include a social event that continues after hours, and two afternoon seminar series start after schools finish, one to feature industry speakers who cannot come earlier. While the majority of both female and male respondents to the QCat survey agreed that meetings are scheduled to enable those with caring responsibilities to attend, we will review these timings.

(iv) Culture

Our QCat survey results were largely positive concerning culture within the School, though with females (both staff and students) reporting slightly lower satisfaction. Interestingly, the undergraduate students reported that they had never been told what the expectations were of them regarding language and behaviour within their cohort. Some believed unsupportive behaviour would never happen, others believed it would be dealt with appropriately if it did happen, there were differing views as to whether they thought they knew or could find out how to get action taken if it did, and one or two had witnessed unsupportive behaviour or language. This clearly points to the requirement for a 'code of conduct' to be communicated effectively to the undergraduate population, which we will now do at orientation, with information on the School website as to how to report incidents of unacceptable language or behaviour. Social and networking events and opportunities are well attended (by staff and students of all grades and types) and reported as appreciated by all, and the School is perceived on the basis of our survey results (and by e.g. visitors on prospective student visit days) to be inclusive and friendly. Given their popularity and the difficulties of maintaining a good School ethos across multiple sites, there is a case for increasing the number of such events.

(v) Outreach activities

Large numbers of School female and male, to a roughly equal extent, staff and students participate in a wide variety of outreach activities. A member of staff (male) founded the Scottish Earth Sciences Education Forum, which has had a considerable influence on the new Scottish school curriculum. Both genders of staff and students are involved in Sci-Fun (a mobile 'lab' that goes to schools and events), and in our events at the Edinburgh International Science Festival. One of our (male) staff has received an MBE for services to science engagement in Scotland. He has worked in schools locally and throughout Scotland, for example more recently in the development of Carbon Capture and Storage modules, has long been active in the University's Widening Participation Programme, and works with academic colleagues and postgraduate students in developing and delivering events aimed at the general public. The School provides financial support for such events and activity, as well as recognising it at appraisal and in the TWLM, and it has contributed to several successful promotion applications. We also have popular optional outreach modules in our undergraduate degrees; a female member of staff led this initiative.

Flexibility and managing career breaks

a) (i) Maternity return rate

Maternity leave, 2009/10, 2010/11, 2011/12, 2012/13

Name	Year(s)	Returned	FT/PT before	FT/PT after
Academic 1 (a)	2009	Y	FT	FT
Academic 1 (b)	2010	Y	FT	FT
Academic 2	2010	Y	PT	PT
Academic 3 (a)	2009	Y	FT	PT
Academic 3 (b)	2012	Not yet	PT	PT
Academic 4	2009	Y	FT	FT
Academic 5	2012	Not yet	FT	FT assumed at the moment
Academic 6 (a)	2008	Y	FT	PT
Academic 6 (b)	2010	Y	PT	PT
Research staff 1 (a)	2010	Y	FT	PT
Research staff 1 (b)	2012	Not yet	PT	PT funds
Research staff 2 (a)	2009	Y	FT	PT
Research staff 2 (b)	2011	Y	PT	PT
Research staff 3	2012	Y	FT	FT

Eight members of academic and research staff took maternity leave between 2010 and 2012. All returned to work, or plan to, following their leave period.

(ii) Paternity, adoption and parental leave uptake

There have been no formal requests for paternity, adoption or parental leave in the period. We know that men have taken their statutory paternity leave entitlement, informing their line manager. Some male academic staff who are new parents work flexibly around their teaching and other duties, without consultation or formal agreement. We have not yet had an instance of a male member of staff requesting to share part of his partner's maternity leave; this is an opportunity we intend to highlight on our website.

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

Systems for flexible working are usually managed informally, sometimes between staff and their line manager, but in other cases simply by academic staff members working flexibly whilst performing their teaching and other duties. We do not have data on numbers of applications and success rates, but it is always offered by the School Administrator e.g. to staff returning after breaks who state a wish to return part-time.

At research grades, we have a number of staff, both male and female, on part-time contracts. In some cases, this reflects the funding available, but in others it is at the request of the post-holder for work-life balance or family responsibility reasons. In all cases, the situation represents an agreement between the post-holder and their line manager (usually the PI on the grant providing the funds).

b) (i) Flexible working

The School always aims to go beyond the statutory minimum and University policies in supporting part-time and flexible working. We hope more publicity of these opportunities will demonstrate the School's engagement with the process, make it a more attractive place for women to apply to, and lead to greater take-up.

University HR support Schools in advising on and managing flexible working, but the School makes the final decision, and on one recent occasion, approved proposals that University HR had raised concerns about, based on personal knowledge of the member of staff (female returning after maternity leave) involved. A member of staff currently on maternity leave is intending to work flexibly on her return.

There have been two requests for temporary changes to % FTE worked, both granted, besides the three changes from full-time to part-time following maternity leave indicated in a)(i) above. Some mothers of young children have requested and been granted several adjustments to their % FTE dependent on the numbers and ages of their children. One of the academics listed in a)(i) above requested to work fewer hours prior to her maternity leave and this was granted. Another member of staff (UE10) requested to work fewer hours owing to caring commitments; she reverted to full time after a period of c. 3 years. Two male members of staff (UE10) have permanently changed their % FTE as part of flexible moves towards retirement.

(ii) Cover for maternity and adoption leave and support on return

The School has had a maternity policy in place since 2009. The School covers costs when they are not included in the funding (e.g. EU contracts); there have been three recent instances of this. The School does not automatically employ maternity cover for teaching staff; teaching and administration responsibilities are often divided amongst other staff members. However, it typically has up to 5 Teaching Fellows employed to cover the teaching responsibilities of staff on maternity and other leave. Arrangements for supervising the research students and staff of a woman going on leave are discussed with all concerned before the leave period begins, so that her research group maintains its integrity, and it is easier for her to pick up her research activity again on return. 10 Keeping In Touch days are available for women on maternity leave. If a mother returns to work whilst still breastfeeding then she is provided with the necessary support. Wherever possible, returnees are assigned teaching and administrative duties that they have undertaken before. Some women prefer a period after return in which they concentrate on more structured activity such as teaching, and ramp up their research activity again slowly; others find an immediate return to the levels of research activity that pre-dated their leave, and a lower teaching load, helps ease them back into academia. The School aims to be as flexible as possible in supporting the model that best suits the individual.

(4914 words)

students. RTD drew up a policy to provide guidance across our diversely funded students. At the time, there was no University-wide maternity policy specifically for PhD students. The RTD maternity policy has now been forwarded by the College Dean of Quality Assurance to the Curriculum and Student Progression Committee as an example of good practice.

RCUK Demand Management. Demand management is either in place or anticipated for applications to the national Research Councils for competitive awards such as research grants and fellowships. This has led the School to develop a tool for internal peer-review of applications prior to submission, which we have just begun trialling. Draft applications are submitted at least 3 weeks before the closing date, and sent to two reviewers for constructive feedback. We have run two Workshops to explain and promote the system to School researchers, and information about it is available on the School web pages. We hope this will be particularly beneficial for our younger female researchers, and enable them to submit better applications which are more likely to be funded. Not only will this improve their research outputs, sizes of their research groups and 'income', but also successful researchers are more likely to be invited to join national and international peer-review panels and committees, providing networking opportunities and raising their profiles; in addition, these are important 'metrics' for promotion.

(248 words)

Action Plan

Section	Issue	Actions carried out (C)/planned (P)	Responsibility	Timescale	Intended outcome
1	Undergraduate and postgraduate students				
1.1	Some u/g students report female students are called on less often, or not pushed to answer questions as much as male students	(P) Ensure lecturers and postgraduate demonstrators on training courses are reminded that female and male students should contribute equally in lectures, tutorials, laboratory classes and on fieldwork	IAD	Start of academic year (AY) 2013/4	Next QCat survey reports fewer incidents of females called on/contributing less
1.2	U/g students unaware of expectations for appropriate language and behaviour	(P) Introduce 'Code of Conduct' at induction/orientation in first years Fresher's Week; ensure School website indicates how to report/complain about incidents of unacceptable behaviour or language	Teaching Office (TO)	Start of AY 2013/4	Next QCat student survey shows u/g students aware of expected language and behaviour, and what to do if unacceptable behaviour occurs
1.3	Proportion of female PGR students dropping	(C) Checked that there is not a higher withdrawal rate for female students, or a gender difference in average time to completion (P) Selection panels and potential supervisors reminded about gender differences in letters of reference, and unconscious bias, and encouraged to take training course (see 2.1 below) (P) Survey female applicants and intake to see if there are any perceived barriers and suggestions for improvement	RTD TO to instigate student research project	Annually, just before shortlisting AY 2014/5	Reverse trend of increasing gender imbalance in postgraduate school

		(P) On an annual basis, collect and analyse data by gender for PGR scholarships that we award or recommend recipients for	RTD	Starting AY 2013/4	
1.4	Female PGR students report barriers, misconceptions and disincentives to proceeding to a career in academia	(C) Data show students (and contract research staff) largely unaware of research achievements of female academics in School (C) Focus Groups have shown a marked gender difference between PGR students in years 3+ in career choices, and whether academia is attractive and treats women equitably (P) Include discussion about perceived barriers to progression at RTD early career researchers Workshop Introduce regularly updated 'achievements' section on website, ensuring it highlights women's successes; introduce section with links to University policies on maternity/paternity leave, flexible and part-time working etc. Add Athena SWAN logo if awarded bronze status.	RTD Digital Communications Officer (DCO)	AY 2013/4 August 2013	Next QCat survey and Focus Groups show increased awareness of women's research achievements, and increased interest in academia as a career choice for female PGR students
2		Staff recruitment, progression and retention			
2.1	Low percentage of women recruited at all levels	(P) Make new section of website with links to University policies (see 1.4 above) visible from outside the School, thereby increasing numbers of female applicants (P) Enhanced training of selection panel members on gender issues (P) New training course promoted at a School meeting and trialled on both School sites to	DCO Awayday with key School members to discuss issues,	August 2013 Beginning mid-2014, completed by end of	No longer suggestions (QCat survey and Focus Groups) women of child-bearing age perceived as less preferable candidates Female applications for posts up by 8% by 2017 Chair and at least one other member of all UE06/07 selection panels trained in all E&D issues; all members of higher grade

		maximise uptake	feeding in to University training course	AY 2014/5	panels trained; all panels to include at least one woman (already happens for grade UE08 and above) Female new starts increase from current ~31% to 40% by 2017
2.2	Induction and mentoring	(C) Good induction programme established for research staff (C) All new staff assigned a mentor on arrival (C) In-depth interviews about induction programme with sample of recently-appointed academic staff (P) Continue to monitor satisfaction rates concerning induction programme for research staff (P) Establish better, and better timed (particularly for those starting mid-way through the academic year) academic staff induction, using best practice from research staff programme and experience of recently-appointed female staff; rectify inaccurate and incomplete information in induction booklet for academic staff (P) Provide new open-ended contract staff with information on how probationary year is judged.	School HR; IAD School HR Heads of Institute	Mid-2014 Mid-2014 Start of AY 2013/4	All new staff report (at least) satisfactory induction programme and information, available at appropriate time
2.3	Career advice and development for research staff	(C, P) Offer range of courses through IAD and ensure they are advertised widely (C, P) Provide networking opportunities through Awaydays (C, P) Monitor uptake, quality of and satisfaction with courses, career advice and development	RTD/RSO RTD RSO		Continued development of new ideas for courses, awaydays; high take-up and satisfaction rates with provision

		opportunities (P) In-depth review of results	RSO	AY 2014/5	
2.4	Appraisal	(C) All open-ended contract/teaching staff and 86% of contract research staff appraised annually (P) Allow staff to request an alternative appraiser (C,P) Monitor uptake and highlight benefits of appraisal for early career staff	Heads of Institute RTD, Pls, Mentors	AY 2013/4 AY 2014/5	95% of contract research staff appraised annually by 2017 (this will never reach 100% because of the higher turnover of such staff)
2.5	Promotion criteria and process not well understood or perceived as transparent, and preparation and support to apply for promotion patchy	(P) Ensure better understanding of promotion criteria and process across School through presentations at Institute meetings (P) Annual review of University short form CV for all academic staff. Feedback on strengths and weaknesses, and a timeline for promotion suggested for pre-UE10 staff. Review will consider potential for nomination for increment. University promotion criteria based on achievements over last 5 years; encourage women who have taken career breaks or work part-time to consider achievements over 5 years of effective working time. (P) Introduce a clear record of how part-time working and career breaks were factored into the decision whether to support a promotion application at School level	Head of School SPARC SPARC	AY 2014/5 AY 2013/4 AY 2013/4	Next QCat survey indicates staff have better understanding of criteria and process By 2017, women promoted on average at younger 'academic age' than currently
2.6	Retention	(P) Annual review of summary results of exit interviews conducted by Head of School	E&D Committee	AY 2013/4	Ensure there are no consistent factors influencing women's decisions to resign
2.7	Progression and career	(P) Annual fund established to support women's career development and networking activities	SPARC to set budget	AY 2013/4 AY 2013/4	

	development of women	(P) Up to 5 women per annum at grades UE08/9 funded to follow SRC career coaching programme. (P) Identify women suitable now and expected to benefit in up to the following 3 years for University Leadership training course. (P) Women encouraged to undertake career coaching and leadership training. (C, P) Women speakers invited to research staff career events (P) School offer to host an SRC event, such as an 'Interconnect' lunch for early career researchers and students (C) In response to 'demand management' either in place or anticipated by research councils, School has instigated an internal peer-review process for research proposals on which School staff are PIs prior to submission (P) Review effectiveness of research proposal peer-review system, especially of extent to which women find it helpful in improving their applications	E&D Committee Heads of Institute Heads of Institute, Mentors RTD Athena SWAN Champion Director of Research	Annually Annually AY 2013/4 AY 2014/5 AY 2014/5	12 women completed SRC career coaching training by 2017 3 women participated in University Leadership training by 2017 (Expect this to contribute to improved promotion statistics for women) More female PIs in School by 2017 (which is also expected to contribute to improved promotion statistics for women)
2.8	Low documented take-up of flexible working; part-time and flexible working perceived as	(P) Reinforce message that work-life balance is achievable through success examples on website (see 1.4 above) (P) Short presentation on flexible working and other family-friendly policies at School-wide meeting	DCO Head of School	AY 2013/4 AY 2013/4	Increased awareness of flexible etc working options and fewer negative comments about them in next QCat survey

	having a negative impact on career (see 1.4 above)				
2.9	Workload model and work allocation	(C) Ensured part-time status adequately reflected in TWLM (P) Where possible, women returning after maternity leave are re-allocated teaching and administrative tasks held previously (P) More transparent re-allocation of teaching load of women on maternity leave, making sure it does not unfairly impact others; consider employing a replacement for those with a particularly heavy or specialised load; encourage take-up of KIT days (P) Tasks allocated to women are those recognised as advancing their careers (P) Continue discussions on gender differences in amounts of time spent on 'public facing' tasks, and on selection panels and committees; if necessary, modify workload allocations in TWLM	Head of Institute Head of Institute Head of Institute SPARC	All ongoing	Next QCat survey shows greater satisfaction with workload model, particularly for part-time staff Next QCat survey indicates staff going on and returning from maternity/paternity leave feel better supported, and all staff perceive the workload of staff on leave was distributed fairly Next QCat survey indicates women feel their 'administrative' contributions are adequately recognised, appropriate and proportionate (also expect contribution to promotion statistics)
3	Culture				
3.1	Some seminar programmes have few female speakers	(P) Seminar organisers to be more proactive in seeking women speakers, and to monitor invitations and acceptances to give seminars by gender	Seminar organisers	Starting AY 2013/4	Year-on-year increase in number of female seminar speakers Fewer comments on gender imbalance of speakers in next QCat survey
3.2	Few external female members of School review	(C) Gender imbalance noted on current review panels (P) Equal numbers of women and men on	Head of	2015	At least equal numbers of women on next series of external review panels

	panels	subsequent review panels (in 3 years time). Start gathering names of and approaching suitable women 2 years from now.	School, TO and RTD		
3.3	School meetings and social events made more difficult by split-site nature of School	(C) All School meetings all held within core hours; some post-meeting networking and social events extend beyond them. School-wide meetings held more often, and have a more varied programme than in the recent past, celebrate significant achievements by staff, and are followed by socialising/networking opportunities. Staff and students consistently say how much they value such events. (P) Keep to an absolute minimum networking and social events extending outside core hours	Head of School and administrative team	Ongoing	Continued satisfaction with and high attendance at School-wide meetings and social events

AY = Academic Year

IAD = Institute for Academic Development

TO = Teaching Organisation

RTD = Research Training and Development

DCO = Digital Communications Officer

RSO = Research Support Organisation

SPARC = School Policy and Resources Committee