

Athena SWAN Silver Department award renewal application



Name of institution: University of Edinburgh

Date of application: April 2016

Department: School of Informatics

Contact for application: Professor Mirella Lapata

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Date of previous award: 2013

Date of university Bronze and/or Silver SWAN award: 2006/2009 (Bronze), 2015 (Silver)

Level of award applied for: Silver

2. The self-assessment process – maximum 1000 words

Describe the Self-Assessment Process. This should include:

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

The self-assessment team (SAT) consists of the Informatics Equality and Diversity Committee (E&D Committee), plus additional members co-opted for key activities, such as the staff/student data brainstorming workshop (pictured below) which helped to inform our latest Athena Swan Action Plan.

SAT team and supporters who attended the staff/student data brainstorming workshop for our Athena SWAN Action Plan



The Committee was established in 2013 from the previous SAT, and is chaired by the Informatics Equality and Diversity Coordinator, formally allocated to the role as an academic administrative duty as a direct outcome of our last Action Plan (2013 Action 1.d).

The core team includes academic representatives from all institutes, at all career stages, undergraduate and postgraduate students and members of support staff who deal with staff/student recruitment and retention. The Head of School is an ex officio member. As a result of feedback on our last submission, the number of men has increased from four to six, (from 25% to 33% male). Five members of the team served on our last submission (indicated with an asterisk* below). The rich cultural diversity reflects the international nature of our staff and student body. The cumulative experience of the team is wide,

covering part-time working, promotion, recruitment, maternity leave, fixed-term contracts, phased return and flexible retirement. Most of the SAT team are in dual career relationships with some kind of caring responsibility.

Table 1: Informatics Self Assessment Team (SAT) / E&D Committee		
Name	Role	Experience
Professor Mirella Lapata, Chair of E&D Committee (2013 - present) and submission group	Informatics Equality and Diversity Coordinator. Personal Chair in Natural Language Processing	PhD alumna. Two periods of maternity leave since re-joining Informatics in 2005, after lecturing at Sheffield. Children aged 9 and 5.
Lindsey Brown	Computing Support Officer	Studied here as a mature student. Adult children.
Dr Christophe Dubach*	Lecturer	Over 10 years' experience of the School as MSc/PhD student, postdoc and lecturer.
Dr Vashti Galpin*, main organiser of Informatics Research Society	Senior Research Fellow. SAT data analyst	Research interests include women in computing. Experience of part-time (p/t) and fixed contract work, non-standard career path.
Professor Johanna Moore (ex officio)	Head of School. Chair in Artificial Intelligence	Academic since 1976. Head of School since August 2014. Mother of two adult children.
Nantas Nardelli UG Student Representative	Final year undergraduate and Research Assistant	Former class rep and undergraduate school rep.
Helen New, Athena SWAN Coordinator and member of Athena SWAN submission group (until maternity leave in Dec 2015)	Informatics Athena SWAN Co-ordinator and Institute Portfolio Manager	Former University-level Athena SWAN coordinator (maternity cover) with prior experience of early-career researcher challenges. Two small children. P/t.
Anda Nicolson. Member of submission group	PA to Head of School	Admin rep. Working full time while studying for an undergraduate degree.
Professor Helen Pain	Personal Chair. Recruitment Officer, Informatics Student Services	Alumna and long-standing member of staff. Experienced phased return after surgery and promotion during sabbatical.
Dr Ajitha Rajan	Lecturer. Chancellor's	Took maternity leave elsewhere as

	Fellow. Personal Tutor (undergraduates). MSc Admissions Officer	a postdoc. Joined Informatics when 9 months pregnant. Two young children.
Dr Subramanian (Ram) Ramamoorthy*	Reader in Robotics	Joined the School as a lecturer in 2007. In a dual career marriage. Father of a 10-year old daughter.
Dr Michael Rovatsos	Senior Lecturer, Director of Centre for Intelligent Systems and their Applications	Passionate about Equality and Diversity issues. Bilingual upbringing. Joined School in 2004 from Greece via Germany.
Dr Guido Sanguinetti*	Reader	Shares childcare of three primary-school-aged children with wife who works freelance in the Arts.
Alina Selega PhD Student Representative	2nd year PhD student	Personal experience of and interest in under-representation of women in technical fields. Active in tackling the imbalance.
Heather Walker, Athena SWAN Coordinator. Member of submission group (maternity cover, Dec 2016-present)	Communications Officer	Maternity cover for two p/t roles. Background in equality and diversity. Author, LGBT Pathways to Parenthood (Equality Network 2013). P/t carer for elderly mother.
Dr Mirjam Wester*	Research Fellow	Has taken maternity leave three times since joining in 2003. P/t since 2005. Children 10, 7 and 4.
Martin Wright Member of submission group	Director of Professional Services.	Over 30 years management experience, 15 in HE. Former Senior Lecturer (Leeds Met). Father of two secondary school children.
Julie Young Member of Athena SWAN submission group	Head of Finance and Research Services and Head of Informatics HR.	20 years' service. Started as p/t Grade 4 Accounts Administrator on 1 year fixed-term contract and gradually progressed to current post. Mother of three. Equality and diversity integral to daily role.

- b) **an account of the self assessment process, with reference to year-on-year activities since the original Department award application, details of the self assessment team meetings, including any consultation with staff or individuals inside or outside of the university, and how these have fed into the submission;**

The SAT team met 13 times as the School's Equality and Diversity Committee since our Silver Award was granted, twice in 2013 and 2014, five times in 2015 and monthly in 2016 in the run up to this submission. In addition the Equality and Diversity Co-ordinator and/or Athena SWAN Co-ordinator meet the Director of Professional Services every month.

In 2015/16, between full team meetings, a sub group - the Athena SWAN submission group - took forward key actions as the submission date approached. The sub group consisted of the Chair, Athena SWAN Coordinator, Director of Professional Services, Head of Finance and Research Services (who manages the HR admin team) and PA to the Head of School.

Table 2: Dates of SAT/ Equality and Diversity Committee meetings	
Year	Dates
2016	20 January, 10 February, 10 March, 28 March
2015	4 February, 17 June, 25 August, 8 October, 14 December
2014	12 March, 19 June
2013	13 November, 26 November*
*NB. New Equality and Diversity Coordinator took up post in August 2013 and took the autumn to populate the committee prior to the first meeting in November.	

Minutes are available to staff and students via the School's intranet.

The SAT team reports to the School's Strategy Committee, which meets monthly and is chaired by Head of School, Professor Johanna Moore. The SAT Chair and Athena SWAN Coordinator are members of the University's Athena SWAN network and the College Equality and Diversity Committee (2013 Action 1.g).

Budget

The Equality and Diversity Committee has a budget of £10k per year to promote and support events, training and internships.

Table 3: Activities supported through the Equality and Diversity Committee budget

Hoppers	Student-run women in technology group. Holds regular 'lunch and learn' and other skill building events, plus Staff & Student Mixers. 258 members. Celebrated 10th anniversary Dec 2015. Named after 1950s programming pioneer 'Amazing Grace' Hopper.
Careerwise summer internships	Supports/promotes two female 3rd year undergraduate internships. Annual since 2013.
Informatics Jamboree	Social community building event for all students, staff, family members. Held April 2014, March 2015, revised event with increased emphasis on equality and diversity planned for May 2016.
Women in Computing events	Organised by / with Hoppers 2014, 2015, 2016.
Travel funds	Supported members of School to attend networking/career development events e.g. Grace Hopper conference, BCSWomen Lovelace Colloquium, womENCourage and London Hoppers Colloquium (2014-2016).
BCSWomen Ada Lovelace Colloquium	Hosted / provided speakers (Oct 2015).
Equal Bite	Hosted an Equal Bite workshop to develop a crowd-sourced 'recipe' book focusing on gender equality in higher education (Jan 2016).
Inspire summer school	New! Offering S4 girls who love technology an opportunity to learn new skills at a residential summer school, 4-6 July 2016. Organised nationally by the Engineering Development Trust (EDT).

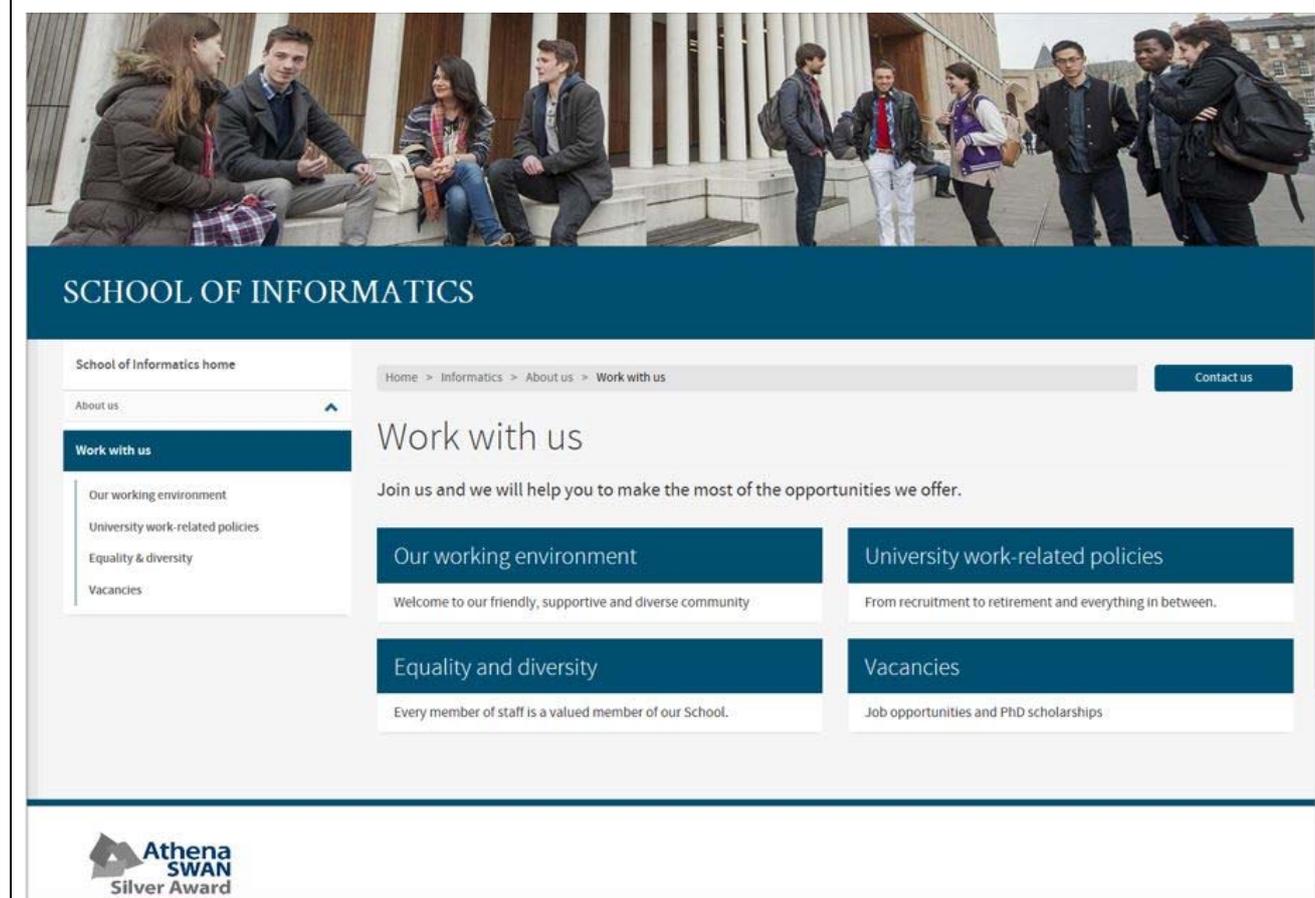
"I have left this internship with more strings to my bow - programming in Java, Unix and a broad network of great, intelligent people." Dominique Osborne (Careerwise intern 2015)

Equality and Diversity / Athena SWAN continues to be a regular item at the School General Meetings, attended by all staff (2013 Action 1.h). Equality-related activities, events and career development opportunities are routinely circulated to staff and students via email, a new quarterly staff newsletter (initiated September 2015) and social media (primarily the School's lively Facebook and Twitter accounts).

Informatics women continue to encourage and promote girls and women in science (see section 6vii). Since 2014 the Equality and Diversity Committee has awarded prizes to female students, including the Claire Jones Prize for best performing female MSc student. Claire was an Informatics PhD alumna who died from cancer in 2005.

In April, we launched 'Work with us', a new section of our School website, which describes the School's inclusive family-friendly ethos, commitment to equality and diversity including the 10 principles of the Athena SWAN Charter, information about induction, training and employment policies, sources of funding for women in science and technology and other useful resources (2013 Action 1.b).

Screenshot: Work with us section of our School website



Data is collected and analysed annually as part of existing management processes (e.g. appraisals, staff recruitment and promotion, student gender analysis, training evaluation feedback). In addition, the University's Equality and Diversity Monitoring and Research Committee publishes statistical annual reports of student and staff data by 'protected' equality characteristics including gender and ethnicity. We also consult Informatics staff and students through surveys and School meetings, and are in regular contact with the University's HR Senior Partner for Equality, Diversity and Inclusion and University Athena SWAN lead.

Other data was collected prior to or during the self assessment process (e.g. the staff/student equality culture surveys which took place in October 2015 provided comparison data with the survey run before the last submission in 2012, with results outlined in section 3 below).

Data collection has improved at School and University level since the last submission but some questions in our culture survey now need to be reviewed e.g. to make it more relevant to support staff.

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

The team will meet four times per year.

Table 4: Provisional dates of future SAT team meetings	
Year	Dates
2016	15 June, 21 September, 14 December
2017	15 March, 21 June, 30 September, 13 December

The team will continue to report to the School Strategy Committee, with membership reviewed every 12 months to make sure it retains the right balance in terms of gender and range of experience.

Moving forward, the Athena SWAN submission group will become the Athena SWAN Implementation Group (2016 Action 5.1.i). Chaired by the Head of School, the Implementation Group will meet five times per year and include staff with mainstream responsibility in areas which require action under the latest Action Plan. Additionally, funding has been secured for a new part-time role, to allow responsibility for specific Athena-SWAN-related tasks to be undertaken by HR admin staff (2016 Action 5.4). We are also launching an informal Women in Informatics group (2016 Action 4.1.ii), open to all female staff, which aims to support and encourage more women to become active in encouraging girls and women in Informatics. The group will exist both as an email network (staff-Hoppers), to improve communications about events and initiatives relevant to female staff, and as a group which comes together, at dedicated receptions hosted by the Head of School, to celebrate female role models and champions (female or male) of women in Informatics.

In terms of challenges facing our School with regards to gender equality, we believe the core issues are common to the majority of Informatics and Computer Science departments in Higher Education, as summarised in the diagram below.

Diagram: Pipeline for increasing the numbers of women in Informatics	
Pipeline	More female applicants / students
	Undergraduate
	Postgraduate taught
	Postgraduate research
	More female staff
	Applications
	Conversion to appointments
	Better female career progression
	Support transitions and promotions
	More women in senior roles

[Word count 986]

3. A picture of the department – maximum 2000 words

- a) Provide a pen-picture of the department to set the context for the application, outlining in particular any significant changes since the original award.

i. Staff

The School of Informatics (computer science) is the largest in the UK, with 247 academic and research staff (19.4% female). Thanks to the actions outlined in our last Athena SWAN submission, the number of women in senior roles has grown from four to seven, and we have had three promotions to Senior Lecturer and two to Professor. Eight of our 41 professors are women. Our Recruitment Officer and MSc Admissions Officer, both academic posts, provide positive female role models in key outward-facing positions. Our Head of Computing User Support is also a woman.

1	Head of School	Prof Johanna Moore
2	Deputy Head of School (one of two Deputies)	Prof Jane Hillston
3	Deputy Director of Graduate School	Prof Alex Lascarides
4	Director of Informatics Computing	Prof Perdita Stevens
5	Director of the Institute of Perception, Action and Behaviour	Prof Barbara Webb
6	Deputy Director of the Laboratory for Foundations of Computer Science	Dr Mary Cryan
7	Head of Finance and Research Services (support role)	Julie Young

Although the proportion of female research staff has declined due to fluctuations in research funding and general mobility of fixed-contract staff, the proportion of female academics has increased.

ii. Students

We teach five single honours and 11 joint undergraduate degrees in and offer a wide range of MSc and PhD opportunities. Of our 1289 students (22.5% female), 702 are undergraduates, 268 taught postgraduates and 319 postgraduate research students, including 284 PhD students.

While Universities UK reports a decline in students studying computer science, our intake has grown. Following the implementation of Athena SWAN actions – such as regularly reviewing and enhancing our student recruitment materials to include more female images, case studies and videos; ensuring female staff and students are visible at open days; promoting our ongoing support of Hoppers; and by providing tailored communications for applicants who receive offers – the proportion of undergraduate applications from women

has increased from 16.9% (2011/12) to 20.7% (2015/16). The proportion of women receiving offers is consistently higher than for men (52.3%: 44.8% in 2015/16).

We continue to support female students e.g. by striving to ensure that there is never an isolated female in a non-honours tutorial group (minimum of two) and by offering and acting on requests for students to change to a gender-specific Personal Tutor.

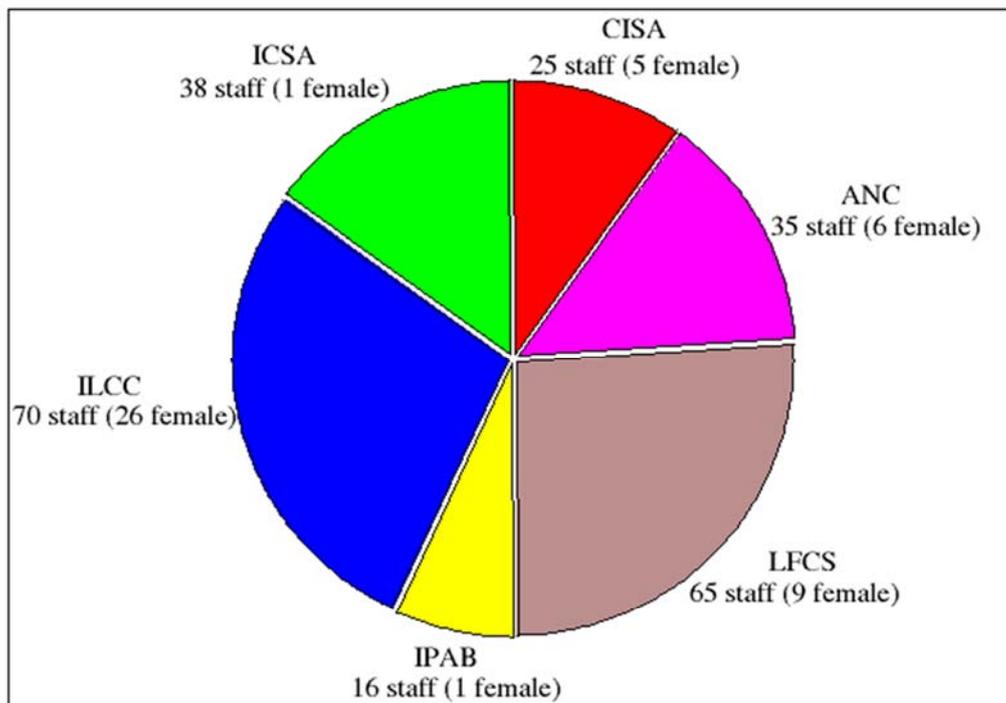
After using targeted marketing and tailored communications for postgraduate applicants, detailed in our last submission, and adding explicit reference to our Athena SWAN Award on our website and in our postgraduate prospectus, we have seen the proportion of applications from women to taught postgraduate programmes increase from 24.2% (2011/12) to 30.3% (2015/16). The proportion of women receiving offers is consistently higher than to men (59.3% to 57.4% in 2015/16). With internal communication of funded PhD study opportunities to taught postgraduates, the proportion of women in our postgraduate research student cohort has increased slightly from 17.3% (2011/12) to 18.4% (2015/16).

(iii) Academic structures

Undergraduates and taught postgraduates are supported by the Informatics Teaching Organisation, PhD students by our Graduate School. Teaching is organised around degree programmes, across research institutes. As well as institutes, PhD applicants can apply for funded places through three EPSRC Centres for Doctoral Training which are closely linked to institutes. Every institute is represented in our SAT.

Institute of Adaptive and Neural Computation	ANC
Institute of Language, Cognition and Computation	ILCC
Institute of Computing Systems Architecture	ICSA
Laboratory for Foundations of Computer Science	LFCS
Centre for Intelligent Systems and their Applications	CISA
Institute of Perception, Action and Behaviour	IPAB

Figure 1: Academic and research staff across institutes



Although two institutes have only one female member of staff each, the School is interdisciplinary, with collaborations transcending institute boundaries. Just as male staff are often members of more than one institute, the female lecturer in ICESA is also a member of LFCS, and the female Director of IPAB is also an associate member of ANC.

iv. Community

Institutes contribute to School culture, via social events, seminar series and informal PhD communities. At the same time, there are also School-wide gatherings, from inaugural lectures and a Research Day, to our social Jamboree for all staff and their families. An Informatics Research Staff Society (IRSS) enables interaction between institutes, as well as providing research staff with support, information about career development and a voice on committees. IRSS receives funding from the School's researcher development funds.

The School community also benefits from three lively student societies: Hoppers (women in Informatics), CompSoc and SNACK Club (postgraduate).

“At undergraduate level, Hoppers continues to encourage female students through Lunch and Learn events on topics such as Supercomputers, by launching Apiary Coding: Collaborative Learning for women and non-binary folk, and offering career development events like their recent Amazon Tech Interview Workshop, Resume Prep with Microsoft and a talk by MathWorks, as well as Staff & Student Mixers.” Professor Mirella Lapata, Co-ordinator, Equality and Diversity Committee

In the 2015 staff survey, 95% of female staff agreed Informatics is a great place to work for women and over 95% of men agreed it is a great place to work for men.

- b) **Provide data and a short analysis for at least the last five years (where possible with clearly labelled graphical illustrations) on the following, commenting on changes and progress made against the original action plan and application, and initiatives intended for the action plan going forward.**

Student data

- (i) **Access and foundation male and female numbers – full and part time.**

The recent report by Universities UK, 'Patterns and trends in UK Higher Education 2015,' notes falling numbers of students using access and foundation courses. This is certainly true of female applicants.

We participate in the Lothians Equal Access Programme for Schools (LEAPS) which works with local schools to support applications to higher education by under-represented groups. Three LEAPS-eligible females applied for 2015 entry. One was rejected and the others were offered conditional places: one declined and the other applicants did not meet the conditions of their offers. In the same cohort, out of 32 LEAPS-eligible males (who made a total of 42 applications), eight applicants were rejected and nine were offered conditional places but did not meet conditions.

Table 7: Undergraduate applications / acceptances through the Lothians Equal Access Programme for Schools (LEAPS) programme

Year of Entry	Applications*		Offers made		Actual entrants	
	Female	Male	Female	Male	Female	Male
2011/12	7	27	5	26	2	7
2012/13	0	36	0	29	0	11
2013/14	5	43	4	38	3	12
2014/15	3	44	3	37	1	7
2015/16	4	42	3	30	0	9 (1 deferred)

**Please note: table refers to applications not applicants. Some applicants apply for more than one course.*

We accepted one male student through the Scottish Wider Access Programme in 2012/13 and two in 2015/16.

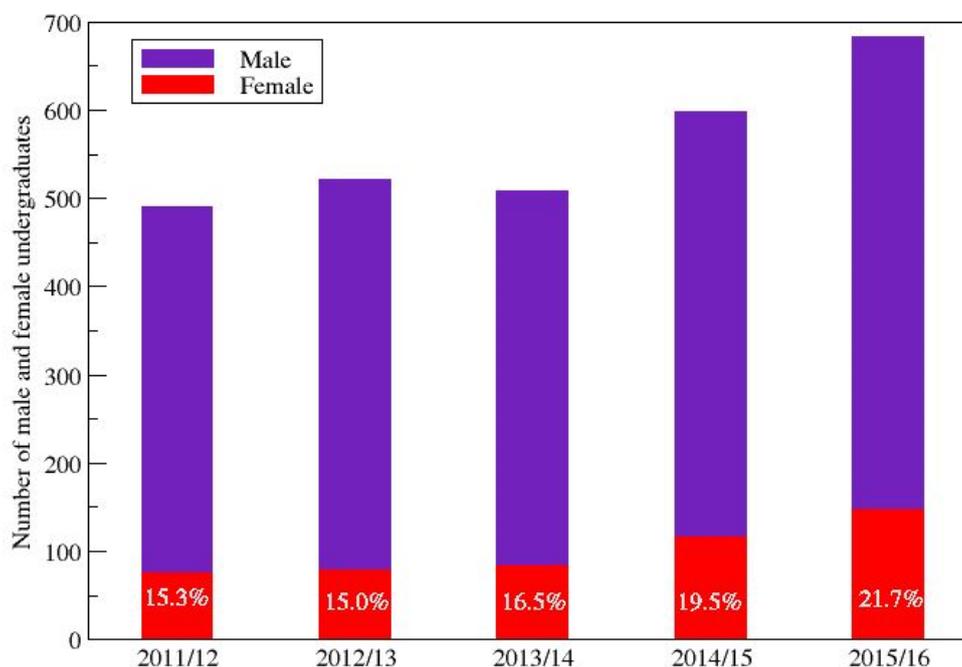
Each year, the School takes part in the Sutton Trust Summer School, aimed at widening participation among pupils aged around 16. This year, we will also participate in the Inspire summer school for Year 11/S4 girls.

- (ii) **Undergraduate male and female numbers – full and part-time.**

All our undergraduate courses are full-time. The proportion of female undergraduates has increased steadily from 15.3% (2011) to 21.73% (2015). This outstrips the national trend: UCAS figures, published 21 January 2015, indicate that in 2014, across UK universities, only 13% of new computer science students were female.

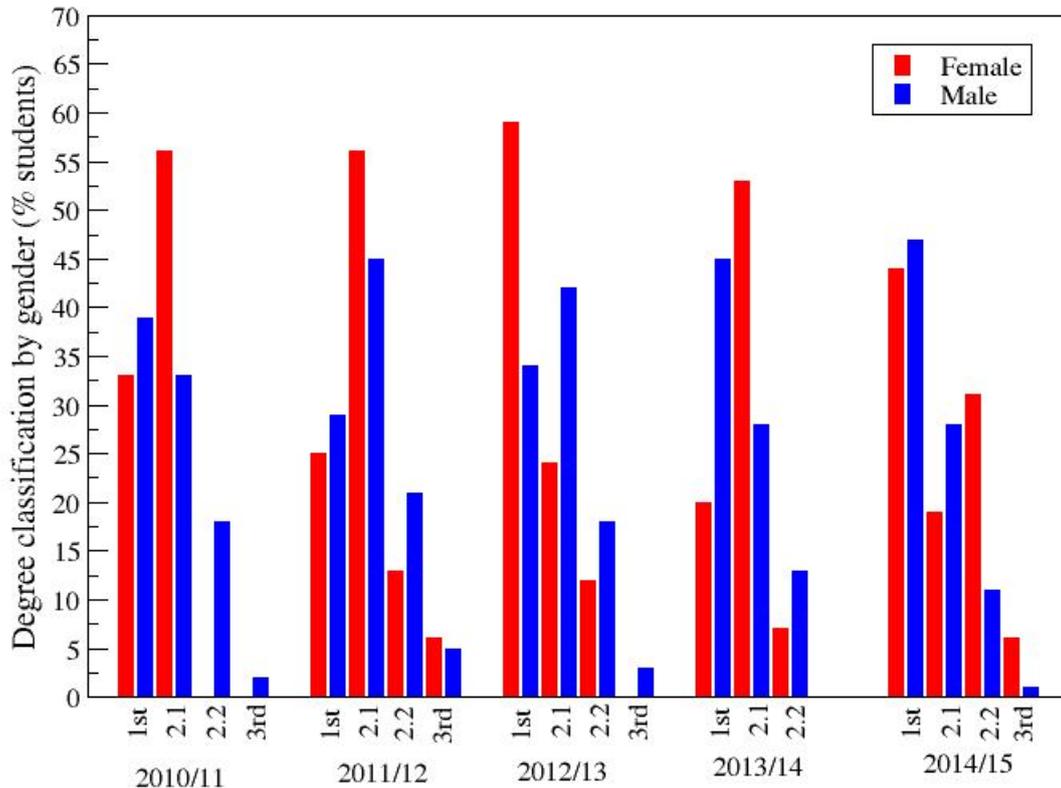
Table 8: Undergraduate taught cohort (full-time students)				
	Full-time undergraduates			
Year	Male		Female	
2011/12	416	84.7%	75	15.3%
2012/13	443	85.0%	78	15.0%
2013/14	424	83.5%	84	16.5%
2014/15	482	80.5%	117	19.5%
2015/16	535	78.3%	148	21.7%

Figure 2: Proportion of male /female undergraduates over the past 5 years.



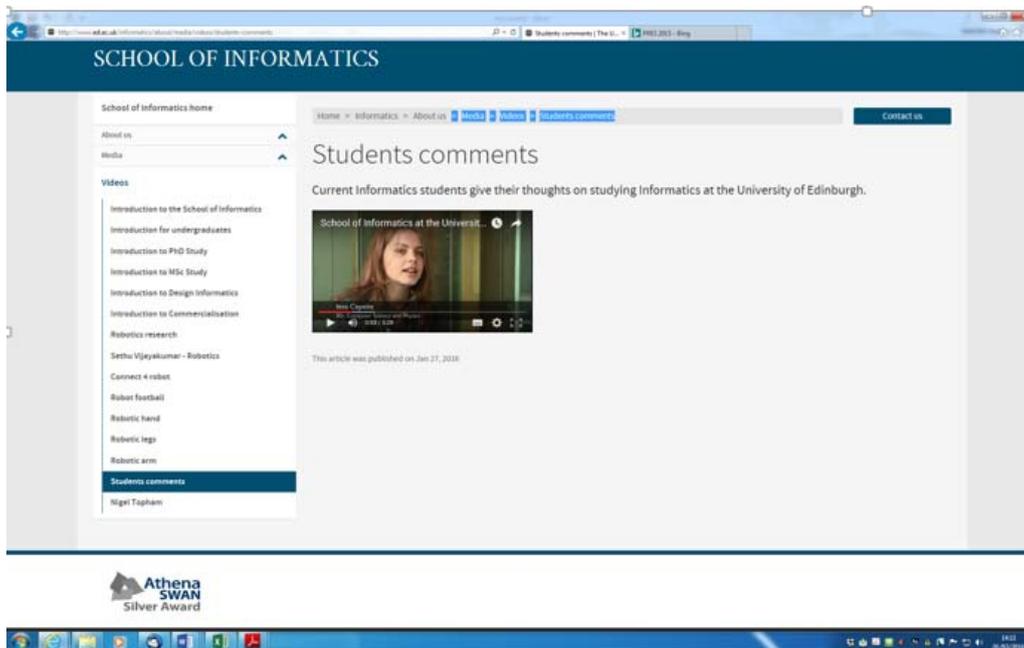
Our female undergraduates show similar average levels of attainment to male students, which indicates that they are equally successful in completing their courses and our assessment processes show no evidence of gender bias.

Figure 3: Degree classification achieved by undergraduates, by gender



Following our 2013 Action Plan, we continue to review our student recruitment materials for gender balance. In 2015 we added seven student case studies (four female) to our website, together with a video featuring two female and five male students.

Screenshot: Current student comment video



Between April 2015-April 2016, the case study landing page was viewed 489 times, and female case studies 326 times, with 145 people watching the video. As the proportion of women applying to our courses has increased, we plan to update and increase the number

of case studies and produce two additional videos, 'Women studying Informatics' and 'Careers in Informatics' (gender balanced).

At open days, female academics continue to give talks and staff information desks while female student ambassadors host visitors and lead campus tours.

"For me, the Post Application Visit Day was what made me choose Edinburgh. As someone with little programming experience, I was worried I would not be able to keep up with the more experienced students. Being able to speak to other girls studying Artificial Intelligence and Computer Science built my confidence in my decision to choose the subject." Current 1st Year undergraduate

In 2014/2015, we included a question in open day evaluation forms which said: "The School has recently won a Silver Athena SWAN Award for being inclusive of women. Did your experience today reflect that inclusiveness?" Of 56 applicants who returned forms, 45 (over 80%) ticked 'yes.'

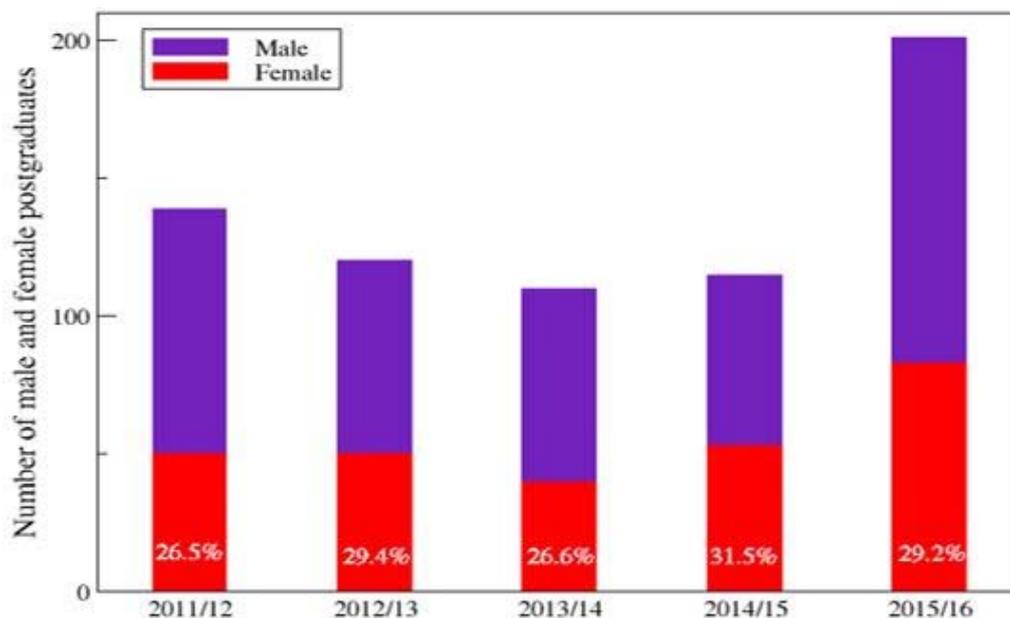
"There were more women than I expected here." "Many of the tour guides were female and we saw women working in the computer labs." "During the initial talk it was mentioned that the university wants to encourage more women to do Informatics" (Qualitative evaluation feedback from potential undergraduates at Post Application Visit Day, April 2015).

However, our recent student culture survey, completed by 63 current undergraduates (24 female, 39 male), revealed there is still more work to do. While some respondents said, "I have never been discriminated against, quite the opposite" and "I would recommend this School as a great place to study for everyone, including trans people," another noted, "The general atmosphere is very macho/laddish." We will work with students and Student Services to improve the student experience for everyone (2016 Action 4.2.ii).

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

Table 9: Postgraduate taught (PGT) cohort (full-time and part-time)								
	Full-time PGT				Part-time PGT			
Year	Male		Female		Male		Female	
2011/12	135	73.8%	48	26.2%	4	66.7%	2	33.3%
2012/213	118	71.5%	47	28.5%	2	40.0%	3	60/0%
2013/14	104	73.2%	38	26.8%	6	75.0%	2	25.0%
2014/15	115	68.5%	53	31.5%	0	NA	0	NA
2015/16	192	70.8%	80	29.4%	9	75.0%	3	25.0%

Figure 4: Proportion of male and female postgraduate taught students (all degrees)



Nationally, according to the Higher Education Statistics Agency, there were 4,960 postgraduates (taught and non-taught, all sexes) in Computer Science in 2014/15, of whom 1,125 (22.7%) were women and 3,835 men. As 29.2% of our taught postgraduates are female, we have more than the national average. Tailored communications to potential students encourage uptake of offers with information about programme structure, specialisms, induction processes and support structures such as the Personal Tutor allocated to every MSc student, who is responsible for their academic and pastoral care. If they wish, students can change to a Personal Tutor of the same gender.

Although the number of part-time students remains low, this reflects national trends:

“Numbers for part-time postgraduate taught degrees [are] down by 9.4% from their 2005-06 level and 18.5% from their peak of 252,030 in 2009/10.” Patterns and trends in UK higher education 2015

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

The number of women studying full time research degrees has increased, from 46 in 2011/12 (17.3%) to 58 in 2015/16 (18.8%). There is a new case study featuring a female PhD student on our website, which carries the Athena SWAN logo throughout (2013 Action 3.4b) and we continue to advertise PhD opportunities to our taught students (2013 Action 3.4d)

Table 10: Postgraduate research (PGR) cohort (full-time and part-time students)

Year	Full-time PGR				Part-time PGR			
	Male		Female		Male		Female	
2011/12	220	82.7%	46	17.3%	9	77.8%	2	22.2%
2012/13	222	83.2%	45	16.8%	7	100%	0	NA
2013/14	237	82.5%	49	17.5%	5	83.4%	1	16.6%
2014/15	255	78.6%	60	21.4%	8	88.9%	1	11.1%
2015/16	251	81.2%	58	18.8%	11	91.67%	1	8.33%

The tables below indicate that PhD students take on average 3-4 years to submit theses. Completion rates have decreased from 51 months (2007/8) to 43 months (2011/12). Attainment levels are similar for women and men.

Table 11: Postgraduate research – male completion rates									
	2007/ 8	2008/ 9	2009/ 10	2010/ 11	2011/ 12	2012/ 13	2013/ 14	2014/ 15	2015/ 16
Male students	28	27	34	27	27	31	28	33	28
Months study to complete (avg)	51	52	52	53	43	36			

Table 12: Postgraduate research – female completion rates									
	2007/ 8	2008/ 9	2009/ 10	2010/ 11	2011/ 12	2012/ 13	2013/ 14	2014/ 15	2015/ 16
Female Students	6	3	11	10	8	10	11	13	13
Months study to complete (avg)	55	45	46	49	43				

The postgraduate community is active, attending regular seminars organised by institutes and running their own School-wide SNACK Club, offering careers-based talks – and pizza!

We had planned to expand our Student Ambassador programme to PhD applicants (2013 Action 3.4c). However, the Postgraduate Research Experience Survey 2015 identified issues around support and communication which changed our approach.

Following a series of PhD focus groups, the Strategy Committee approved the creation of a 'PhD family structure' (2016 Action 3.2) where students will have a defined 'parent' and 'siblings' from different year cohorts, balanced where possible for gender, nationality and institute, to help newcomers settle in and provide peer support. Each family will be able to claim up to £50 per academic year for a 'family outing.'

- (v) **Ratio of course applications to offers and acceptances by gender for undergraduate, postgraduate taught and postgraduate research degrees**

a. Undergraduates

Table 13: Ratio of course applications to offers and acceptances by gender for undergraduate degrees¹							
Undergraduate Admissions		Application		Offer		Acceptance	
		Count	%	Count	%	Count	%
2011/12	Female	215	16.9	89	41.4	29	32.5
	Male	1057	83.1	360	33.5	101	28.1
	Total	1272		449	35.3	130	30.0
2012/13	Female	213	16.5	113	53.5	25	22.1
	Male	1077	83.5	543	50.4	160	29.5
	Total	1290		656	50.8	185	28.2
2013/14	Female	212	15.8	106	50.0	33	31.1
	Male	1129	84.2	622	55.1	139	22.3
	Total	1341		728	54.2	172	23.6
2014/15	Female	279	19.4	190	68.1	50	26.3
	Male	1159	80.6	688	59.3	179	26.0
	Total	1438		878	61.1	229	26.1
2015/2016	Female	407	20.7	213	52.3	45	21.1
	Male	1557	79.3	697	44.8	153	21.9
	Total	1964		910	46.3	198	21.7

While UCAS figures show a decline in female computer science students in the UK, the number of women undergraduates applying to our School has increased. Out of 215 female applicants in 2011/12, 89 received an offer and 29 offers were accepted, compared to 407 applications, 213 offers and 45 acceptances in 2015/16. The proportion of women applying and being offered places has also risen, but proportionally fewer accepted. We will follow up on our decliners' survey feedback to better understand why.

¹ Note that first % column is a 'vertical' percentage comparing the proportion of men and women applicants in a year, whilst the second and third are 'horizontal' where the % is the proportion of the previous state (ie. proportion of those offered who subsequently accepted. Please also note that a small number of applicants did not declare their gender and have been removed from these statistics).

b. Postgraduates

Figure 5: Proportion of male and female postgraduate research cohort (full and part time)

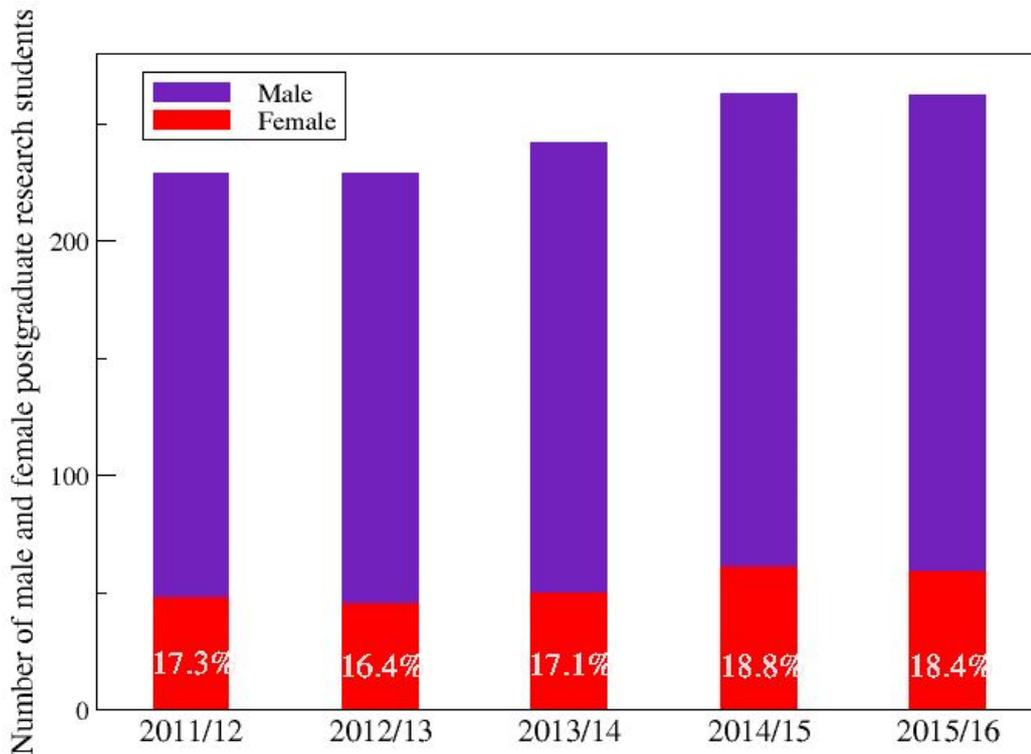
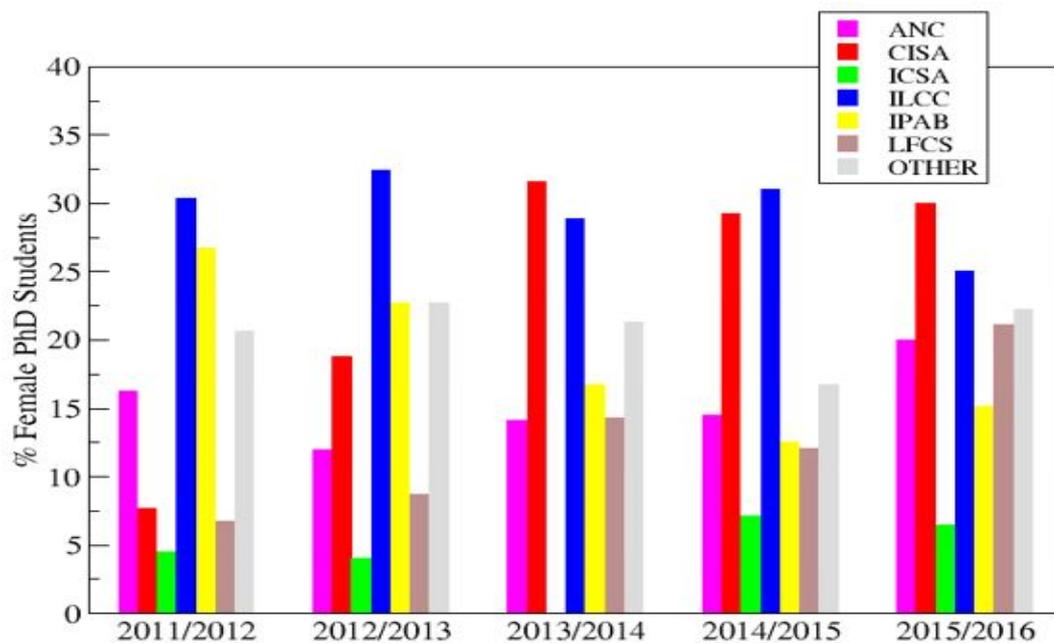


Figure 6: Proportion of female postgraduate research students by institute



The percentages of female postgraduate research students across our institutes vary from about 6% in the Institute of Computing Systems Architecture (ICSA) to 30% in Centre for Intelligent Systems and their Applications (CISA). In the smaller institutes, e.g. IPAB and ICSA, the number of students and staff is so small that one person leaving can have a significant impact on the gender balance of the group.

Taught MSc students

The number of women applying and being accepted for taught MSc programmes has increased and proportionately more are being offered places.

Postgraduate Taught Admissions		Application		Offer		Acceptance	
		Count	%	Count	%	Count	%
2011/12	Female	325	24.2	210	64.4	58	25.8
	Male	1016	75.8	593	58.3	167	25.5
	Total	1341		803	59.8	225	28.0
2012/13	Female	299	24.1	201	67.2	56	27.8
	Male	944	75.9	494	50.4	126	25.5
	Total	1243		695	55.9	182	26.2
2013/14	Female	332	30.3	169	50.9	49	29.0
	Male	763	69.7	319	41.8	119	37.3
	Total	1095		448	40.9	168	37.5
2014/15	Female	347	29.7	172	49.5	53	30.8
	Male	820	70.3	367	44.7	131	35.7
	Total	1168		539	46.1	184	34.1
2015/2016	Female	416	30.3	247	59.3	97	39.2
	Male	953	69.7	537	57.4	235	43.7
	Total	1369		786	57.4	332	42.2

² Note that first % column is a 'vertical' percentage comparing the proportion of men and women applicants in a year, whilst the second and third are 'horizontal' where the % is the proportion of the previous state (ie. proportion of those offered who subsequently accepted).

Table 15: Ratio of course applications to offers and acceptances by gender for postgraduate research degrees³

Postgraduate Research Admissions		Application		Offer		Acceptance	
		Count	%	Count	%	Count	%
2011/12	Female	70	18.5	19	27.1	14	73.7
	Male	309	81.5	75	24.3	61	81.3
	Total	379		94	24.8	75	79.9
2012/13	Female	129	24.0	29	22.5	16	55.2
	Male	409	76.0	83	20.3	63	75.9
	Total	538		112	20.8	79	70.5
2013/14	Female	98	20.5	20	20.4	16	80.0
	Male	381	79.5	103	27.0	63	61.1
	Total	479		123	25.7	79	64.3
2014/15	Female	132	21.1	22	16.7	21	95.5
	Male	495	78.9	99	20.0	79	79.8
	Total	627		121	19.3	100	82.6
2015/2016	Female	123	20.2	24	19.5	21	87.5
	Male	481	79.8	115	23.9	99	86.1
	Total	604		140	23.2	120	85.7

Acceptance rates are high across genders and have increased for women since 2011/12 but we would like to see an even greater rise in applications, offers and acceptances (see 2016 Actions 1.3.i-1.3.xi)

³ Note that first % column is a 'vertical' percentage comparing the proportion of men and women applicants in a year, whilst the second and third are 'horizontal' where the % is the proportion of the previous state (ie. proportion of those offered who subsequently accepted).

Staff data

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

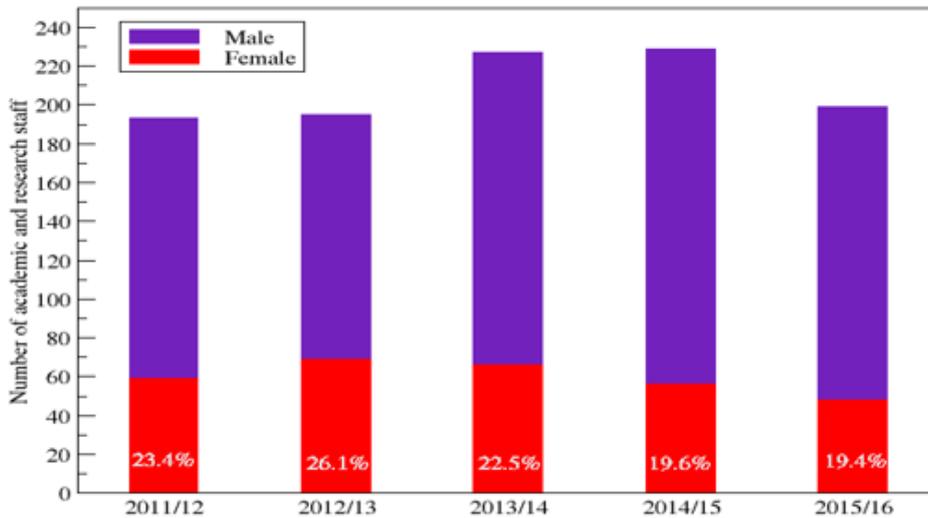
The University uses the following standard academic grades:

Grade	Position
UE06	Research Assistant/Associate
UE07	Research Associate/ Research Fellow
UE08	Lecturer/Research Fellow
UE09	Senior Lecturer/Reader/Senior Research Fellow
UE10	Professor/Personal Chair, or equivalent

Staff appointed to grades UE08-UE10 with contracts requiring teaching and research are termed ‘Academic staff,’ whilst UE06-UE09 research-focused roles are ‘Research staff.’

There are 247 academic and research staff in the School (48 women, 199 men).

Figure 7: Proportion of female:male academic and research staff



Overall, the proportion of female academic staff has increased and research staff has declined (Figs 7-11). Disaggregating the data for research and academic staff reveals an increase in female UE08 research staff in 2014/15, from 15% to 20%, when a number of women were recruited. The decrease in female UE09 academic staff in 2014/15 and 2015/16 is due to promotions offset by an increase in the percentage of female UE10 staff for the same year. There are no research staff at grade UE10. The proportion of female UE09 research staff shows steady increase since 2011/12, with an overall increase for UE08 female research staff. With the exception of UE06 in 2012/13, the percentage of female research staff is highest for UE08 and UE09 grades, whilst there is greatest turnover at lower grades. There have been several promotions for female researchers at levels UE07 and UE08.

Figure 8: Female research staff – grades per year

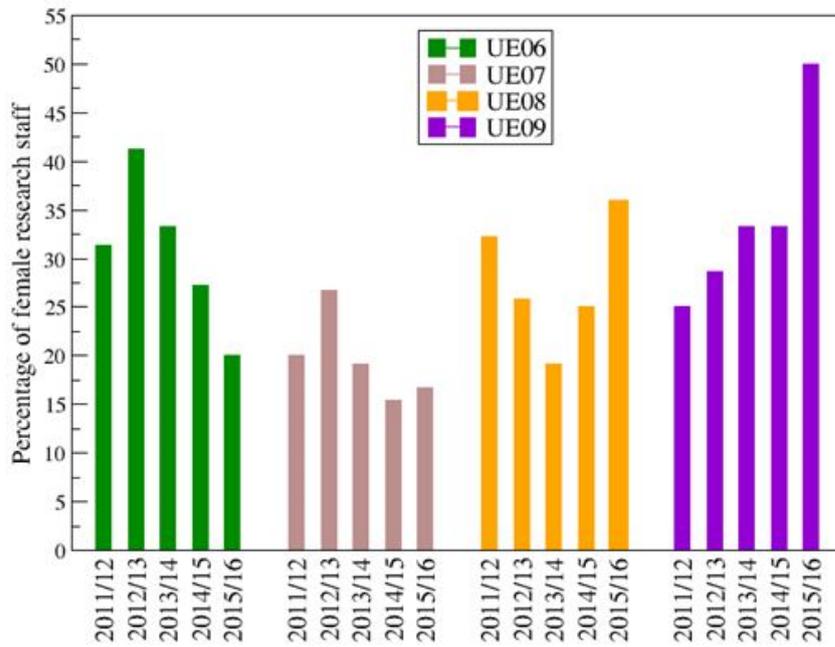


Figure 9: Female academic staff – grades per year

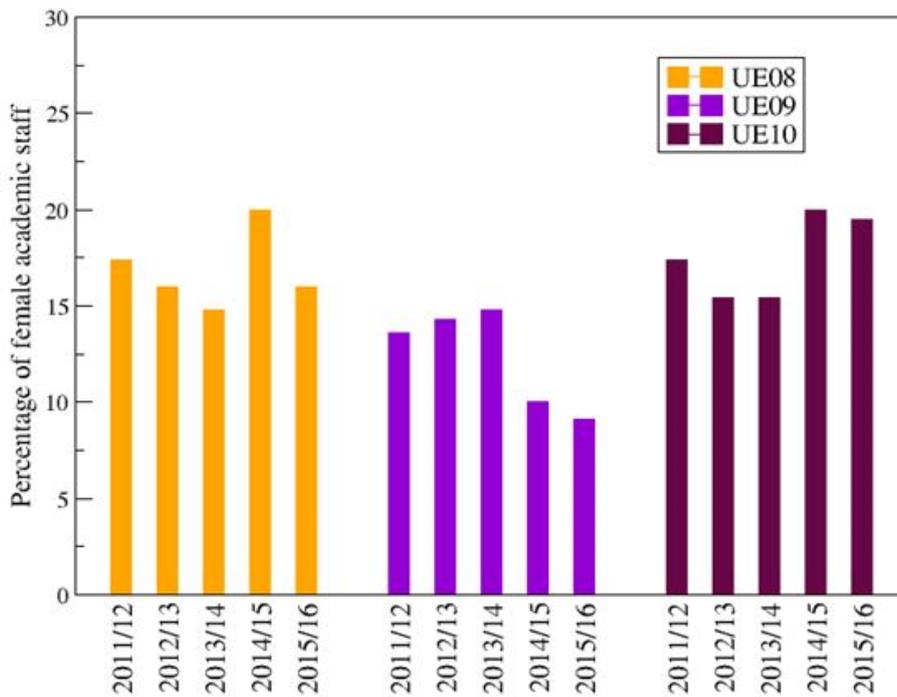
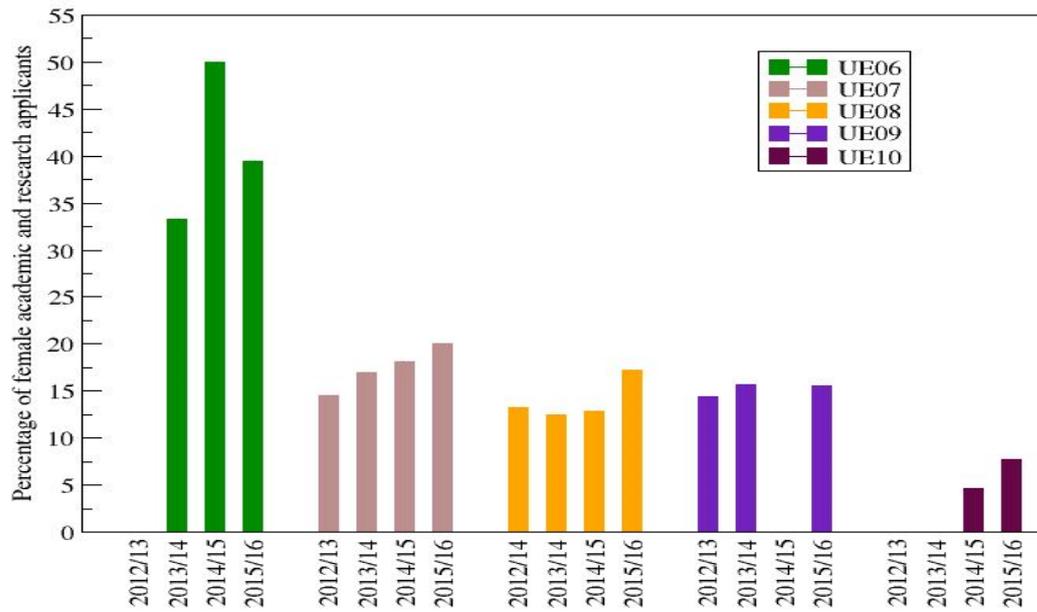


Figure 10: Female academic and research staff – applications per year



Although we did not hit our ambitious target of 25%, the proportion of female applicants for academic and research positions has increased for all grades since 2012/13.

Grade	% increase in proportion of female applicants
UE06	6.5
UE07	17.6
UE08	7.5
UE09	31.4
UE10	20.0

(vii) Turnover by grade and gender – where numbers are small, say why individuals left

Table 17: Turnover by grade and gender					
	UE06	UE07	UE08	UE09	UE10
2010/11					
Male	17	27	7	2	4
Female	12	4	1	0	1
Total	29	31	8	2	5
2011/12					
Male	20	21	4	2	2
Female	18	8	1	0	0
Total	38	29	5	2	2
2012/13					
Male	23	38	5	0	1
Female	14	13	0	0	0
Total	37	51	5	0	1
2014/15					
Male	4	24	2	1	2
Female	4	4	0	0	0
Total	8	28	2	1	2
2015/16					
<i>Male</i>	5	11	3	3	0
<i>Female</i>	0	3	1	0	0
<i>Total to date*</i>	5	14	4	3	0

* *Italics* = data to date

Fewer women are leaving the School. Most staff turnover continues to be in grades UE06-UE08, rather than in more senior permanent positions, as a consequence of the fixed-term contracts that predominate for research appointments. Turnover does not appear to be abnormally high or to affect women disproportionately. We continue to monitor data annually.

Staff reaching the end of fixed-term contracts are encouraged to enter their details in the University's online Talent Register, which University recruiters are obliged to use. In addition, Portfolio Managers in School identify opportunities for redeployment across a portfolio of funding awards.



"I did my MSc here in 1994/5 then became a researcher, working on lots of grants, many of which overlapped. Our Portfolio Manager is good at keeping a handle on when money is running out and making sure no-one falls off the staff list if she can help it. I received a letter saying funding was running out and telling me about the University's Talent Register but I never had to use it. I went to see the head of institute about bridging funding, to keep me going until the next grant came in. Together we realised that now would be a good time for me to apply for a PhD studentship, so I'm doing that and 10% of paid work on another grant." Amy Isard, Research Fellow and PhD student

[Word count 1986]

Supporting and advancing women's careers – maximum 5000 words

Please provide a report covering the following sections 4 – 7. Within each section provide data and a short analysis for at least the last three years (including clearly labelled graphical illustrations where possible) on the data sets listed, commenting on changes and progress made since the original application, and including details of successes and where actions have not worked and planned initiatives going forward.

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

4. Key career transition points

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

Table 18: Job applications and success rate by grade and gender								
Grade/ gender	Applics received	Appointed (%)	Applics received	Appointed (%)	Applics received	Appointed (%)	Applics received	Appointed (%)
	2012/13		2013/14		2014/15		2015/16	
UE06								
Male	N/A	N/A	44	3 (6.8)	24	2 (8.3)	72	2 (2.7)
Female	N/A	N/A	22	2 (9.1)	24	-	47	-
Total	N/A	N/A	66	5 (7.6)	48	2 (4.2)	119	2 (1.7)
UE07								
Male	214	17 (7.9)	288	25 (8.7)	272	18 (6.6)	96	2 (2.1)
Female	43	5 (11.6)	59	2 (3.4)	60	4 (6.6)	24	1 (4.2)
Total	296	22 (7.4)	347	27 (7.8)	332	22 (6.6)	120	3 (2.5)
UE08								
Male	294	2 (0.7)	56	1 (1.8)	54	1 (1.8)	48	2(4.2)
Female	46	1 (2.2)	8	1 (12.5)	8	-	10	1 (10)
Unknown	9	-	-	-	-	-	-	-
Total	349	3 (0.9)	64	2 (3.1)	62	1 (1.6)	58	3 (5.2)
UE09								
Male	64	6 (9.4)	118	1 (0.8)	-	-	-	-
Female	13	1 (7.7)	22	-	-	-	-	-
Unknown	13	-	-	-	-	-	-	-
Total	90	7 (7.8)	140	-	-	-	-	-
UE10								
Male	-	-	-	-	20	1 (5.0)	4	1 (25.0)
Female	-	-	-	-	1	-	1	-
Total	-	-	-	-	21	1 (4.8)	5	1 (20.0)
* We are unable to provide accurate figures prior to October 2012 when the University ERecruitment system was introduced. We do not retain application information in paper form for more than 6 months.								

Informatics' HR admin team, 'InfHR,' supports all aspects of the recruitment and employment process so short listing, interviewing and selection are carried out consistently and comply with University equal opportunities policies. There is at least one woman on every panel for academic posts. Selection identifies best fit of candidate for the post, regardless of gender.

In addition to the University's relocation package, the School offers generous 'start up' funds for new lecturing staff and above.

For contract research positions (mostly UE06 and UE07) the proportion of women recruited often exceeds the proportion of men.

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

Table 19. Applications for promotion and success rates by gender and grade						
	UE08		UE09		UE10	
	Applied	Successful	Applied	Successful	Applied	Successful
2011/12						
Male	2	2	5	5	3	3
Female	0	0	1	1	0	0
2012/13						
Male	0	0	6	5	1	1
Female	0	0	1	1	0	0
2013/14						
Male	2	2	4	4	1	0
Female	0	0	2	1	2	2
2014/15						
Male	1	1	4	4	1	1
Female	1	1	0	0	0	0
2015/16						
Male	1	<i>Pending</i>	4	<i>Pending</i>	3	<i>Pending</i>
Female	1	<i>Pending</i>	0	<i>Pending</i>	1	<i>Pending</i>

Promotion success rate is close to 100% amongst female applicants, with no evidence of gender bias. Overall promotion rates for female staff are in line with total female staff numbers. Promotions outcomes for 2015/16 are pending at time of writing.

Routes and timetable for promotion are set by the University. When dates are announced, an email is sent to appropriate staff and their line managers, inviting applications.

Institute Directors proactively identify potential applicants amongst academic staff. Potential cases are then discussed by a meeting of the professoriate. Cases selected to go forward are assigned a mentor to help them prepare the strongest possible application for consideration at College and University level. All applicants receive feedback, which helps unsuccessful candidates to improve their case for next time. This careful selection and support is reflected in success rates.

Research staff have a number of complementary routes. Most are approached by the Principal Investigator (PI) of their research, some consult InfHR, some may also take advice from senior role models e.g. Head of School. The staff member and PI co-develop the case. At any point staff can also self-nominate.

Detailed process guidance is available and we have developed training workshops for those contemplating promotion (2013 Action 5.6a).

An alternative route to promotion is through the creation of a new post at a higher grade on a research grant, the researcher being a named researcher for the position. In these cases a rigorous HR procedure assesses grade appropriateness. This helps to retain experienced researchers. Female members of our SAT have been promoted this way. We will continue to:

- organise workshops on the promotion process (2016 Action 3.1.ii)
- offer and promote mentoring (2016 Action 3.1.iv)
- promote and support participation in the Aurora leadership development programme for women (2016 Action 3.1.vi)
- promote career coaching through Equate Scotland's Coaching for Success programme (2016 Action 3.1.vii)
- encourage more staff to undertake the University's four-day modular Leadership Programme for senior staff (2016 Action 3.1.viii).

"I had 6 sessions with an external life coach (2013). I had been doing a phased return to work after illness, and was then on sabbatical. In some of the sessions I focused on planning to go for promotion. It was very useful and my promotion was successful. I should also add that I met with various other senior staff to get advice on going for promotion - all extremely helpful. Plus I had an appointed mentor who provided a lot of useful advice, encouragement and guidance" Professor (female)

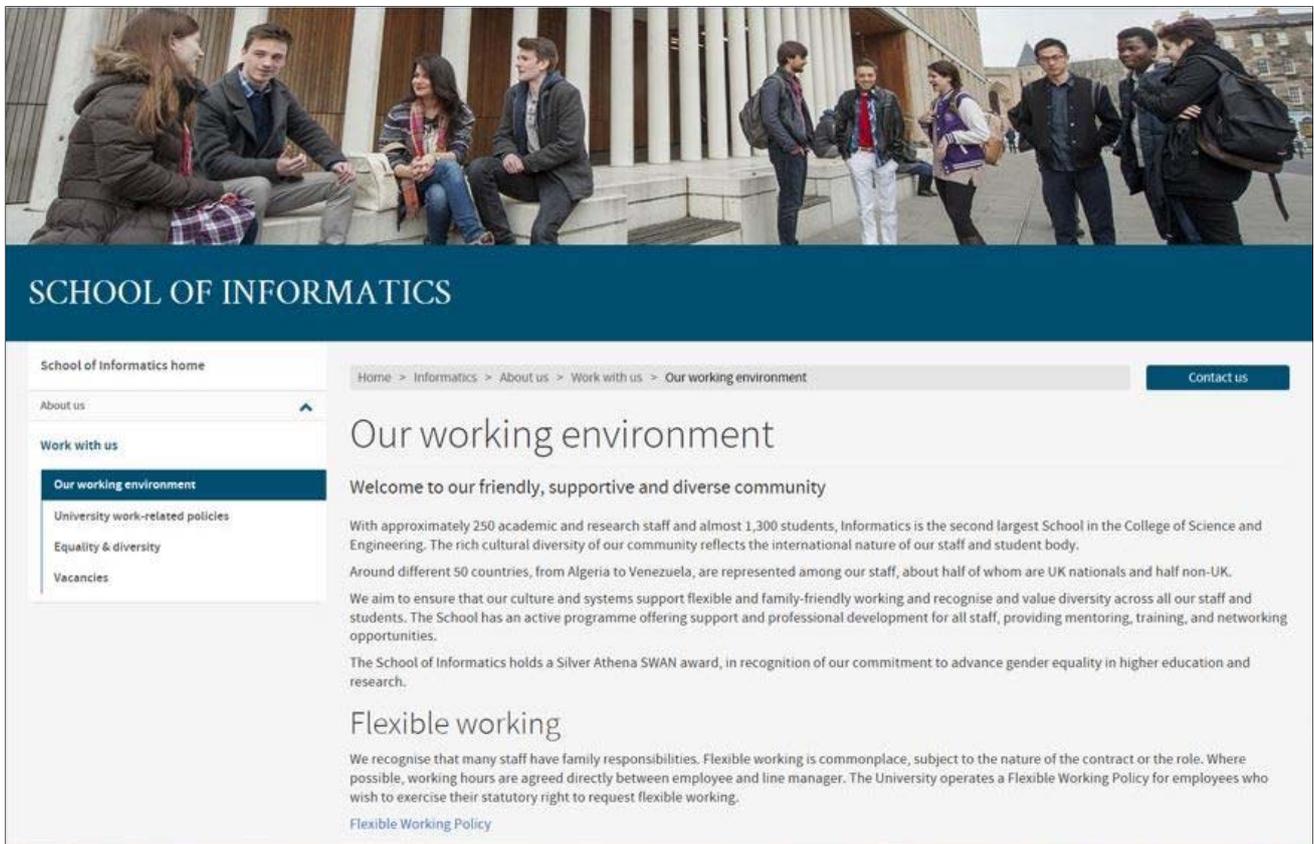
This year, two women have expressed an interest in taking advantage of Coaching for Success.

Our latest staff survey emphasised the importance of a productive Performance and Development Review (P&DR), which we are taking forward in 2016 Actions 3.1.xi, 3.3 and 3.4. In addition, the new section of our website, 'Work with us', now includes a link to the P&DR process for reviewers and reviewees described in detail on the College's website.

(iii) **Impact of activities to support the recruitment of staff – how the department’s recruitment processes ensure that female candidates are attracted to apply, and how the department ensures its short listing, selection processes and criteria comply with the university’s equal opportunities policies**

All job advertisements now include a statement about our family-friendly culture and systems, which says: “We aim to ensure that our culture and systems support flexible and family-friendly working and recognise and value diversity across all our staff and students. The School has an active programme offering support and professional development for all staff, providing mentoring, training, and networking opportunities. The School of Informatics holds a Silver Athena SWAN award, in recognition of our commitment to advance gender equality in higher education and research.”

This statement also appears in the new ‘Work with us’ section of our website:



We are also beginning to ensure that, where possible, job ads include a female point of contact. For professorial appointments this is Head of School, Professor Johanna Moore.

The University requires all staff involved in recruitment and promotion panels to undergo Unconscious bias training, and offers online learning modules in:

- Recruitment, selection and the law (one to two hours online)

- e-Diversity in the workplace (one to two hours online)
- Overcoming unconscious bias (15-30 minutes online)

The School requires interview panellists to undergo this training as outlined in Table 20 below.

In March 2015, the SAT team invited Dr Peter Jones, Chartered Psychologist and Psychometrician, to deliver training on ‘The impact of implicit bias in higher education,’ which was open to all staff. This session explored the potential impact of implicit bias on attracting and assessing students, selecting staff and supporting them in their careers. Dr Jones also summarised research around ‘what works’ in mitigating implicit bias and introduced a model for making personal change.

Staff who missed the session were offered the opportunity to attend one of two further sessions, organised by the College of Humanities and Social Science, December 2015. Our next step is to organise a tailored session with senior staff before rolling the training out to out to other colleagues (2016 Action 4.1.i).

Table 20: School of Informatics’ requirements for interview panels			
	Online training courses		
	Recruitment, selection and the law	e-Diversity in the workplace	Unconscious bias
Panel chair	Essential	Strongly encouraged (essential from 2017/18 – Action 2.ix)	Essential
University of Edinburgh panel members	Strongly encouraged	Strongly encouraged	Essential
External members	Recommended that similar training be undertaken as provided by own institution/organisation		
Please note: (i) Training should have been undertaken within the last two years; (ii) staff are also encouraged to undertake the one day Recruiting for Excellence course, available face-to-face and bookable through the University’s staff/student portal MyEd; (iii) staff are asked to advise Informatics HR when they have completed the training. (iv) Training reports will be requested from University HR Services for auditing.			

- (iv) **Impact of activities to support staff at key career transition points – interventions, programmes and activities that support women at the crucial stages, such as personal development training, opportunities for networking, mentoring programmes and leadership training.**

The University administers an online staff exit survey which aims to identify why staff leave. The most recent summary of feedback on our School (January - August 2015) included 15 responses from academic/research staff leavers and five from support staff (total 20, 14 male, 6 female). All respondents felt the description of the role provided in recruitment material was accurate. Eight said they had received an induction, five said it was useful. Holidays, internal communications (intranet, newsletters, wikis, etc.), ability to balance work and personal commitments and the physical working environment were all positively rated. Equality of opportunity was rated 'good' (the highest available rating) or 'fair' by all who responded. Career development/ progression, communication within team and work-related training received lower ratings. Ten respondents 'always' received an annual appraisal - three 'sometimes'. Responses on line management/supervision were mixed, indicating room for improvement. Discussion of opportunities for career advancement was rated particularly low. Four respondents said that they were not made aware of training and development opportunities. Reasons for leaving included career advancement (seven) and end of funding (six). Six respondents cited dissatisfaction with the job and two cited relationship with manager. Multiple responses (up to three) were permitted.

The School considers exit survey feedback alongside current staff surveys, takes the findings very seriously and has taken steps to improve induction, the annual Performance and Development Review, and communication about training and development opportunities.

Induction

Our School's Strategic Plan for 2016-19 includes a commitment to "review and improve our induction processes and support for personal and career development, including through mentoring of early career staff by senior academics."

With effect from April 2016, a revised induction process for new academic and research staff will include enhanced pre-start information and a more structured 'longitudinal' approach to ensuring that staff are supported through their first months in the School. Each individual's induction will be monitored by the School's HR admin team, who will be able to signpost additional support, if required.

Annual Performance and Development Review

The annual Performance and Development Review (P&DR), launched in 2011, has been established as a standard process within the School, with in excess of 90% completion achieved in 2014/15. On an annual basis, InfHR contacts all staff and their line manager or, for academic and research staff, their selected appraiser 2-3 months before the due date of the P&DR, to allow time for the meeting to be scheduled and paperwork completed. Academic P&DR documentation has been updated to include explicit reference to teaching and admin duties, as well as research and impact.

We will continue to ensure that career review opportunities are taken up by all staff, in line with University policy but, as recognised in our School' Strategic Plan 2016-19, "We need to make performance and development review a more meaningful experience for more of our staff and ensure that more staff participate in the staff development opportunities available to them." We are reviewing our P&DR process to ensure that staff development needs,

training and promotion opportunities are a priority topic for discussion (2016 Actions 3.1.v, 3.1.xi, 3.3 and 3.4)

We are investigating whether we can use the School duties database to make information on current teaching and admin duties available to appraisees and appraisers.

Training

The University offers a wide range of training, learning and development opportunities throughout the academic year, advertised via the staff/student portal MyEd and/or on its Institute for Academic Development and/or Teaching Matters websites. Topics range from Designing and Delivering Lectures to Allocating, Monitoring and Supporting Work, Creating a Data Management Plan for your Grant Application, and everything in between. In addition the School has its own Staff Development budget and the Equality and Diversity Committee uses its budget to support training and networking.

We will introduce regular, targeted staff communications to draw attention to forthcoming training events and other opportunities organised by the School (e.g. promotions workshops), University (via the University portal MyEd) and external providers (e.g. Leadership Foundation for Higher Education, Equate Scotland) etc. (2016 Action 3.1.xii).

Leadership training

We would like to support all our line managers to undertake more training. Examples of regular University courses which we will promote include Leadership styles, Developing your Staff, Giving Effective Feedback, Practical Project Management and Bite-sized Project Management. The University also offers a comprehensive four day modular Leadership Programme for senior staff currently in headship roles or who may be in such roles soon.

In 2017/18, the School will identify and/or develop a suitable training programme for staff with management and supervisory responsibilities, similar to the 'The PI Briefing - Managing your Research Group' which is compulsory for all existing and new Principal Investigators in the Schools of Clinical Sciences and Molecular, Genetic and Population Health Sciences, and then hold a refresher course every five years. (2016 Action 3.4).

In 2015, for the first time, the School took part in the Aurora Leadership Foundation for Higher Education (LFHE) women-only leadership development programme. This will be offered on an annual basis in future. One Grade UE09 academic received funding from the University to attend. The School is happy to fund more places and will encourage more staff who are at the appropriate career stage to attend.

Networking

The Equality and Diversity Committee organises and/or promotes a number of events to encourage networking within the School, across the University and in the wider science and technology community. As well as social networking through the Jamboree, (April 2014, March 2015, May 2016), in-house seminar series and Hoppers events eg Staff & Student Hoppers Mixers (January 2015, April 2016), professional networking opportunities have included the BCSWomen Ada Lovelace Colloquium (April 2015), Women in Computing events, attendance at a Breakfast Seminar, 'Women in Technology: Bridging the Gender Gap?' (February 2016) and a Scottish Informatics and Computer Science Alliance (SICSA) Q&A with Dr Maria Klawe (March 2016).

The Equality and Diversity Committee routinely sponsors female staff and students to attend networking events, and has provided travel funds for members of the School to attend the Grace Hopper conference, BCSWomen Lovelace Colloquium, annual ACN Europe womENCourage event and London Hoppers Colloquium (2014-2016).

The Informatics Research Staff Society (IRSS) organises events for researchers e.g. annual welcome / networking event in October, monthly get-together with cake and biscuits and in 2015, a lunch-time event on research data management. This year a session on P&DRs is planned after the University launches an update of its Code of Practice for the Management of Research Staff.

Mentoring

Across the University, the Mentoring Connections programme provides all staff with time and space to meet with a mentor/mentee to talk through a variety of issues that affect them at various stages of their career and development, for example work-life balance, career development, or promotion paths. We will publicise this more widely within the School (2016 Action 3.1.ix).

“Our new Head of School had encouraged me to go for promotion, and I was appointed a mentor for this process. A College meeting, on the appointment of Personal Chairs on the basis of teaching, led me to apply on the strength of both my teaching and research contributions. My mentor, the meeting organiser and various senior colleagues helped me to focus my Chair application to maximise my chances of success. I was also offered one-to-one coaching through a scheme for female staff, paid for by the School: this was extremely helpful for reflection on both work and personal life.” Professor (female)

5. Career development

(i) Impact of activities to support promotion and career development – appraisal, career development process, promotion criteria.

The Equality and Diversity Committee ran a promotions event in 2014 for all academic and research staff, with the Head of the Promotions Committee, followed by three promotions workshops, October-December 2015 – one for junior staff, one for senior staff and one for early career researchers. The workshops included talks followed by a Q&A session. Both the Head of School and Director of Professional Services attended.

All those who attended found the events useful. Some indicated that it would be helpful to have the events earlier in the year, to provide better alignment with the University's promotions timetable, and this has been taken on board.

(ii) Impact of activities to support induction and training – support provided to new staff at all levels, and any gender equality training.

In recent years the University has recruited 214 'Chancellor's Fellows' of whom 10 have been recruited by Informatics. These are high-potential academics in the early stages of their careers. In 2015 the School arranged a networking lunch so that current and former Chancellor's Fellows (now staff) could meet the Head of School, Director of Professional Services and Equality and Diversity Co-ordinator to discuss their experiences of the School so far.

All the participants said they found the event useful, especially the interaction with Head of School and their peers, and would welcome the opportunity to take part in a similar event once or twice a year. In turn, the Head of School valued their feedback on issues which are now being addressed, such as standardisation of the induction process, regular induction events for new staff and an induction to teaching for those with limited or no previous experience of Scottish/UK higher education.

iii. Impact of activities that support female students – support (formal and informal) provided for female students to enable them to make the transition to a sustainable academic career, particularly from postgraduate to researcher, such as mentoring, seminars and pastoral support and the right to request a female personal tutor.

Every undergraduate has as a Personal Tutor, a member of the teaching staff who provides academic guidance and support. The School also offers Peer Assisted Learning (PAL), where students in the first year of their degree are supported in their studies by older students (PALS group facilitators).

Two of our students - Alexandra Kearney (2014) and Lisa Isabel Xie (2015) have received Anita Borg awards for women in computing, following mentoring by staff.

PhD students receive support through their supervisor and other Graduate School staff, and a peer support structure is being set up through the establishment of the 'PhD family' described in section 3.

SNACK Club provides informal career-development support. In February this year, Rosa Filgueira and three other postdoctoral researchers shared their experiences of academia with a packed audience. In October, the SNACK Club heard from eight speakers who had recently had internships at Google, Microsoft, Microsoft Research, Oracle and Samsung



“SNACK offers students the opportunity to give and attend talks and share experiences in a more personal and friendly way – and it is a popular event for networking.”
Ludovica Luisa Vissat (pictured right)

Postgraduates, like undergraduates, have access to a wide range of careers advice, events and opportunities, including activities to support entrepreneurial ideas. For example, in April of this year:

- the Careers Service ran courses on LinkedIn, CVs and interview techniques
- Launch.ed, the University's enterprise initiative, offered free 1-2-1 meetings with an expert adviser to discuss business ideas
- for the third year in a row, our Graduate School commissioned professional communications training, repeating the course over two days to meet high demand.

In October 2014, the Equality and Diversity Committee supported a peer engagement event for female PhD students focusing on building networks, reducing isolation and exchanging information about future career paths. The event was organised by postgraduate students Clare Llewellyn (a member of the E&D Committee at the time) and Alyssa Alcorn.

In February 2016, PhD student and SAT member Alina Selega attended a Women in Technology breakfast seminar on behalf of the Committee.



"Attending the Women in Technology breakfast seminar gave me new insights into the means of attempting to tackle the gender imbalance problem and importantly, justifications for such means. Understanding the different experiences of men and women in STEM, the effects of the current gender distribution on the field, and what exact goal we are trying to achieve is essential when addressing this problem." Alina Selega

Our Action Plan includes two new initiatives: Hoppers event promoting postgraduate study and PhD opportunities in the School to current undergraduates and an annual Graduate School workshop, aimed primarily at first year PhD students interested in making the transition from PhD to researcher. (2016 Actions 1.2.ii and 2.iii).

6. Organisation and culture

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

The predominant mechanism of selection for committee service is by role rather than by individual. As a result, the Head of School (currently female) chairs the Building Committee, Strategy Committee and Health and Safety Committee. The Recruitment Committee and Equality and Diversity Committee are chaired by the Recruitment Officer and the Equality & Diversity Coordinator (both female). The Board of Studies and Teaching Committee are chaired by the Director of Teaching and the Research Committee is chaired by the Director of Research (both male). The leadership roles within the school are assigned as part of the annual allocation of duties (described under Workload Model below). The Head of School encourages women to consider senior management roles but as leadership positions within the School that confer committee memberships are typically rotated every three years, the situation of committee overload on female staff is closely monitored and avoided.

Role	Name	Gender
Head of School (Chair)	Johanna Moore	Female
Director of Commercialisation	Colin Adams	Male
Deputy Head of School	Stuart Anderson	Male
Deputy Head of School	Jane Hillston	Female
Director of ICOSA	Murray Cole	Male
Director of ANC	Nigel Goddard	Male
Director of ILCC	Jon Oberlander	Male
Director of CISA	Michael Rovatsos	Male
Director of LFCS	Don Sannella	Male
Director of IPAB	Barbara Webb	Female
Director of Research	Michael Fourman	Male
Director of Teaching	Björn Franke	Male
Director of Computing	Perdita Stevens	Female
Director of Graduate School	Nigel Topham	Male
Director of Professional Services	Martin Wright	Male
Equality and Diversity Coordinator	Mirella Lapata	Female
Research staff representative	Markus Guhe	Male
Secretary to the Committee	Anda Nicolson	Female

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

Table 22: Female:male ratio of staff by gender and contract			
	Gender/total	Fixed-term contract	Permanent
2011/12	Male Female Total	97 36 (27.1%) 133	96 25 (20.7%) 121
2011/13	Male Female Total	103 47 (31.3%) 150	92 23 (20.0%) 115
2013/14	Male Female Total	136 46 (25.3%) 184	90 22 (19.6%) 112
2014/15	Male Female Total	137 30 (18.0%) 167	92 25 (21.4%) 117
2015/16	Male Female Total	109 24 (18.0%) 133	90 24 (21.1%) 114

Graphical analysis (below) illustrates the overall gender split across the two contract types. The first graph shows the number of staff on fixed term contracts, the second - permanent. The proportion of female fixed-term staff fluctuates across years, reaching a high of 31.3% in 2012/13 and low of 18% in 2014/15. Such fluctuations are due to fixed-term contracts which depend on the availability of grants and variations in the distinct discipline subfields, which have different proportions of qualified women, as witnessed by our institutes. The increase in female staff on fixed-term contracts in 2012/13 was due to an increase in external research funding, with recruitment to new research posts. The proportion of female permanent staff shows a slight increase.

Figure 11: Proportion of female:male staff on fixed-term and permanent contracts



(iii) Representation on decision-making committees – evidence of gender equality in the mechanism for selecting representatives.

As with School committees, the predominant mechanism of selection for service on College of Science and Engineering Committees is by role.

Table 23: Representation on College Committees		
College Committee	Informatics rep	Gender
Computing and IT	Professor Perdita Stevens Director of Computing	Female
Computing Professionals Advisory Group	Alastair Scobie Head of Computing	Male
Equality and Diversity	Professor Mirella Lapata Equality and Diversity Coordinator	Female
Learning and Teaching	Dr Michael Rovatsos Postgraduate Research Selector	Male
Library	Professor Stephen Gilmore Convenor of Library Committee	Male
Quality Assurance	Dr John Longley Director of Quality	Male
Recruitment	Professor Helen Pain Recruitment Officer	Female
Research	Professor Michael Fourman Director of Research	Male
Research Training	Professor Nigel Topham Director of Graduate School	Male
Strategy and Management	Professor Johanna Moore Head of School	Female
Student Support	Dr Julian Bradfield Senior Personal Tutor	Male

It is worth noting that during the search for the new Head of School in 2013, female staff were consulted separately and given an opportunity to express their views in a supportive, confidential atmosphere.

(iv) Workload model – describe the systems in place to ensure that workload allocations, including pastoral and administrative responsibilities (including the responsibility for work on women and science) are transparent, fairly applied and are taken into account at appraisal and in promotion criteria.

Our work allocation process is well established, and the model was welcomed by the 2013 Athena SWAN panel. However – as some staff have raised issues about fairness and transparency (e.g. “I don't feel work is allocated on a clear basis, and therefore have no idea how fair it is,” respondent, staff culture survey 2015) – the School is currently reviewing its workload process, so the workload model which follows is subject to change:

To facilitate appropriate balancing of teaching and admin duties, eligible teaching staff are expected to teach a standard load of one honours course, one non-honours, two groups of tutoring and some project supervision (honours, MSc, PhD). Admin roles are designated as: ‘major’ (e.g. Head/Deputy Head of School, Year Organiser, Director of Studies/ Institute/ Teaching/ Graduate School), or ‘minor’ (e.g. programme co-ordinator, investigator on

'standard' research grant, seminar organising, representative to external committee). The various categories are not numerically weighted.

Contract research staff on projects held within the School are encouraged to make small contributions to teaching, commensurate with their abilities and background, in areas such as tutorial provision, project supervision and guest lecturing (subject to the agreement of the PI and any funding constraints).

Where appropriate and by agreement, other members of the School (e.g. computing staff, PhD students) are encouraged to contribute to teaching, in particular through tutoring, demonstrating, marking and project supervision. Low research load may be anticipated and recognised by agreement between individuals concerned and the Head of School and Director of Teaching. Where agreed, this may lead to an increased teaching or admin load.

A small number of staff may receive lower teaching and admin loads as determined by the Head of School (for example for newly appointed lecturers, staff facing exceptional circumstances or in recognition of an exceptionally high workload in other areas). As indicated in Action 3.1.xiv this will apply to maternity returners under our revised workload model.

"Throughout my illness and time off, I could not have been better supported. I was taken off various admin and teaching duties whilst awaiting surgery. Then once I was well enough to return to work I was given a lighter load." Professor (female)

Information on the final allocation of duties is available to staff on our intranet, together with the mechanism for work allocation.

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

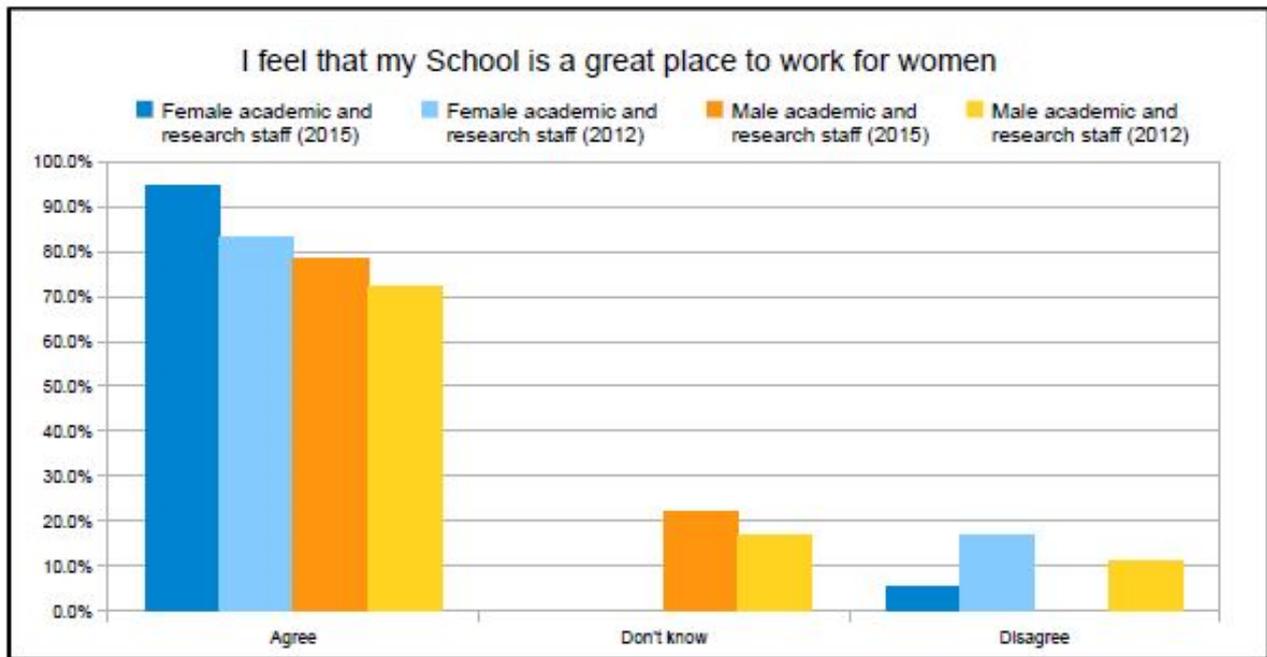
General School Meetings are held in core hours (10am-4pm), often late morning to accommodate part-time workers. The day of the week on which the meeting is held is varied, too. The time/date of many other meetings are decided through Doodle Poll, which allows potential participants to indicate a variety of times / dates when they are available.

The School Jamboree, institute staff/student socials, Christmas lunches and parties are usually held in the daytime/at lunchtime. Fridays are avoided where possible, as Edinburgh schools finish at lunchtime that day.

(vi) Culture – demonstrate how the department is female-friendly and inclusive and ensures visibility of women, for example external speakers. 'Culture' refers to the language, behaviours and other informal interactions that characterise the atmosphere of the department, and includes all staff (academic, technical and support) and students.

When staff were asked, in our 2015 culture survey, if they agreed or disagreed with a variety of statements which explored the female-friendly ethos of our School, the feedback was overwhelmingly positive.

Figure 12: Staff culture survey responses on whether Informatics is a great place for women to work (2012 and 2015)



Most female staff agreed that work within Informatics is allocated on a clear and fair basis, irrespective of gender, that meetings are completed in core hours to enable those with caring responsibilities to attend, that the School provides staff with useful mentoring opportunities (both as mentor or mentee) and offers the same career development opportunities to staff working part-time /flexibly and full-time.

In responding to the 2015 survey, 100% of male staff understood why positive action may be required to promote gender equality. Over 90% of women agreed that line managers are supportive of requests for flexible working (e.g. requests for part-time working, job share, compressed hours) and are confident line managers would deal effectively with any complaints about harassment, bullying or offensive behaviour.

Compared to 2012: 10% more female staff (over 80%) agreed that networking opportunities are provided within the School. They feel encouraged to take up development opportunities and find the annual appraisal helpful. The proportion of women who have experienced a situation where they have felt uncomfortable because of their gender has decreased from over 30% in 2012 to 20% in 2015. In general 80% of female academic and research staff felt that they had never felt uncomfortable in our School because of their gender. All male staff (100%) agreed that work-related social activities in the School are welcoming to both women and men. They also understood to a greater extent in 2015 than in 2012, why it is important to engage with gender equality and that the School has clear policies in

relation to gender equality (e.g. on discrimination, parental leave, carer's leave, flexible working).

Although there was much to celebrate in quantitative feedback, in qualitative feedback some individuals expressed views that 'Official procedures for staff-development, promotions, etc. all very gender neutral and positive; colloquial environment not gender neutral' and 'I sense a systemic bias within the School, where a woman's contribution to a meeting is ignored but when the point is repeated by a male colleague it is not ignored.'

In addition, while most experience the positive side of flexible working, there was some suggestion of uncertainty for fixed-term contract staff, e.g. 'The question about work-life balance is tricky because many of us are working on contracts. You can have a nice work-life balance but it's not clear that you'll have a job in 2 years if you don't put in more hours. This is not specific to the school, but more contract based research work.'

These issues were discussed during the staff/student data brainstorming workshop which helped to inform our Action Plan.

(vii) Outreach activities – level of participation by female and male staff in outreach activities with schools and colleges and other centres, and how the department ensures that this is recognised and rewarded (e.g. in appraisal and promotion).

Each year since 2013 the Equality and Diversity Committee has supported two Careerwise summer interns to experience life as an Informatics researcher within the School, and in 2014 the Equality and Diversity Coordinator organised a week's work experience for two female pupils from Gracemount High School.

Fourteen staff (5 women, 9 men) and several PhD students are known to be involved in outreach. An outstanding example from among our female staff is Dr Areti Manataki (pictured left / described below), with additional ad hoc activities by Dr Kira Mourão (STEM ambassador, First Lego League schools competition on robotics, Careers events at Craigmount High and Mary Erskine Schools); Professor Helen Pain (Informatics organiser, Sutton Trust Summer School; also organises workshops to develop software for children with autism; speaker: University of the 3rd Age 2015); Professor Perdita Stevens (Scottish Mathematical Council's Primary Mathematical Challenge 2015); and Dr Kami Vaniea (Christmas Cybersecurity Lecture 2015). Two female PhD students deserve particular mention: Amy Guy, Secretary of Prewired, a regular programming club for people under the age of 19 in Edinburgh and Tania Marques, who ran 'How can robots communicate like humans?' at the Explorathon 2014 Marie Curie



Researchers' Night.

Between 2014-16, our unofficial 'outreach champion' Dr Manataki has run:

- Game On!, an introductory programming workshop for children at the Edinburgh International Science Festival with student helpers Maria Astefanoaei, James Garforth, Yann Sweeney

- Code Yourself! an online introduction to programming, also available in Spanish, run with student helpers Sander Keemink, Maria Astefanoaei and Ludovica Luisa Vissat (over 120,000 participants worldwide so far)
- 'Blend it with the Code Yourself! MOOC' (Massive Online Open Course) workshop for teachers at the Computing at School Scotland Conference 2015
- Coding.Demystified programming workshops for parents and other adults at Prewired2015
- Game maker's guide to software engineering, workshop at Sutton Trust Summer School 2015
- Programming course for Inspire, July 2016.

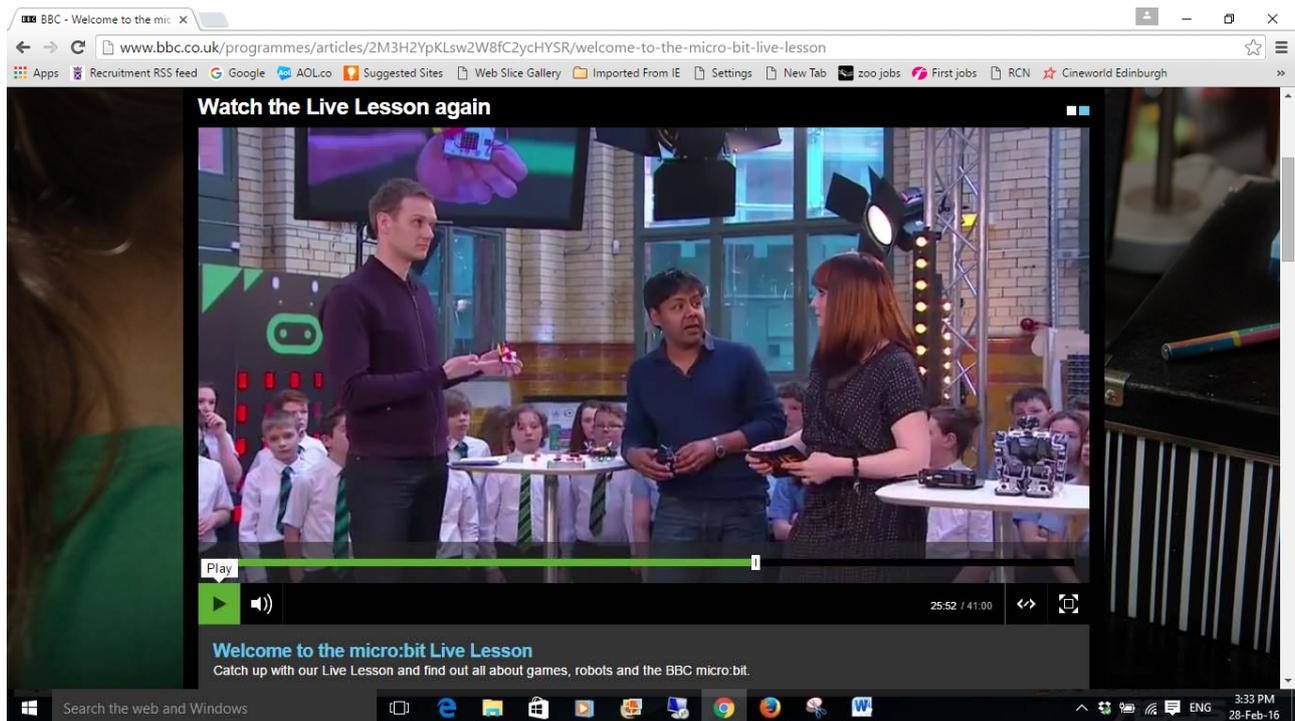
In addition, Dr Manataki was a participant in the Program your own computer game exhibition at Explorathon 2014, gave a talk, My tech story so far, at Code First: Girls intensive weekend, 2014 and has been a judge at the First Lego League, 2014-2016.



Game On! participants at Edinburgh International Science Festival 2016

Among our male colleagues, Professor Sethu Vijayakumar has just been awarded the University's Tam Dalyell Prize for Excellence in Engaging the Public with Science. This year he delivered the Tam Dalyell Lecture on robotics at the Edinburgh International Science Festival, organised a public debate, How Robotics will Shape our Lives, in association with the British Science Association and took part in the launch of BBC micro:bit, an ambitious initiative to inspire children across the UK to learn basic programming.

Screenshot: Professor Vijayakumar (centre) presents a BBC micro:bit Live Lesson, February 2016



SAT team member Dr Michael Rovatsos is also active in outreach. He organised two public lectures as parts of ESSENCE Workshops and Summer Schools (2014 and 2015), gave a TEDx talk, The Society of Computation and the Computation of Society, available on YouTube (2014), hosted two local high-school pupils for a lab work day on 'Explaining Common-Sense Reasoning and Ontologies' and participated in 'Meet the Experts,' Explorathon Marie Curie Researchers Night, explaining 'Common-Sense Reasoning and Human-Level Artificial Intelligence' to children and adults at the National Museum of Scotland (2014). Another SAT team member, Dr Ram Ramamoorthy, helped to run the First Lego League.

Professor Alan Bundy is founder/adviser for a Royal Society of Edinburgh (RSE)/BCS Chartered Institute of IT project to develop materials for the teaching of computing that exemplify the Curriculum for Excellence. He is a key member of the Scottish Professional Learning and Networking for Computing (PLAN C) project and has represented BCS on the Learned Societies' Group on Scottish Science Education, which advises on the teaching of STEM subjects in Scottish schools. He was also a panellist during this year's Edinburgh International Science Festival.

Other staff involved in outreach are Professor Philip Wadler (Computability stand-up comedy, November 2015), Professor Michael Fourman (Edinburgh Fringe show 'The Internet: a dangerous idea?', Cabaret of Dangerous Ideas 2013); Dr Björn Franke (computer science careers events at Fettes College and Broughton High School 2015, 2016); Hugh Leather (Hack the Burgh, 2015, launch of University Programming Club 2016); and Professor Dave Robertson (speaker, Edinburgh International Science Festival 2015).

Since 2012, we have provided a local centre for the Young Rewired State annual week-long Festival of Code and in 2013, a small team of staff and students led by Professor Ewan Klein established Prewired, a weekly drop in programming club for young people in Edinburgh under the age of 19. Offering regular evening sessions, and participation in the Festival of Code, Prewired has been part of the STEM Ambassador network since March 2014.

Our students also help to set up and run SCI-FUN, an outreach initiative within the College of Science and Engineering which delivers interactive science to local secondary schools.

We are improving P&DR documentation to include outreach, so it is better recognised and rewarded.



Nineteen staff and students from across the University, of whom 13 were female, learned basic coding during a free Code Yourself workshop during the University's Innovative Learning Week 2016.

7. Flexibility and managing career breaks

(i) Maternity return rate

Five members of academic and research staff took maternity leave between 2011 and 2016, all returning to work afterwards. The School has breastfeeding and nappy changing facilities (2013 Action 4.3.d).

Maternity policy is defined by the University. All pregnant employees have the right to 12 months Maternity Leave with University-enhanced pay, irrespective of length of service or hours worked. This is made up of 26 weeks of 'Ordinary Maternity Leave' and 26 weeks of 'Additional Maternity Leave.'

We have been the key partner in the development of the University's maternity coaching programme.

"The School of Informatics has championed, and has been a key partner in the development of the maternity/shared parental leave coaching initiative. You should be justly proud of your School's continuing drive for change and willingness to dedicate precious resource to new and untested ideas. You serve as a great inspiration to others as a School with challenges in the early pipeline but, through long-standing recognition of these even before Athena SWAN was conceived, you have worked hard to retain your talent. Well done, and I look forward to continuing our work together!" Dr Caroline Wallace, Senior Partner - Equality, Diversity & Inclusion, University HR Services

(ii) Paternity, adoption and parental leave uptake

Paternity, adoption and parental leave policies are also determined by the University. Nine male academic and research staff took paternity leave between 2011-2016 (three at grade UE07, two at grade UE08 and four at grade UE09). We have had no cases of adoption leave or parental leave in the submission period.

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

One male and one female applied for flexible retirement this year. Both were approved. We have had no formal requests for flexible working within the period.

"On attending a meeting on pension changes, I discovered the concept of flexible retirement, and was granted permission by Head of School to move to an 80% workload, with part pension and part salary, an ideal set up for me!" Professor (female)

Overall, the School has a culture in which informal flexible working is regarded as standard, as illustrated by the findings of our staff survey (see below).

Figure 13: Staff survey responses on flexible working: line manager supports flexible working (agree/disagree) 2015

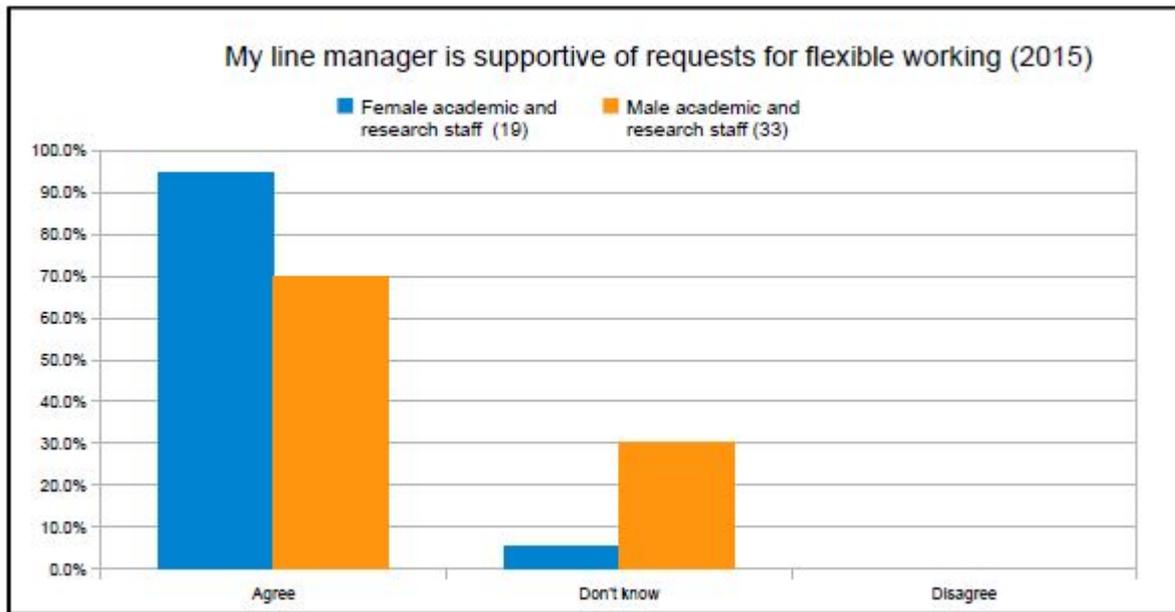


Figure 14: Staff survey responses on flexible working: reasons for not requesting formal flexible working (agree/disagree) 2015

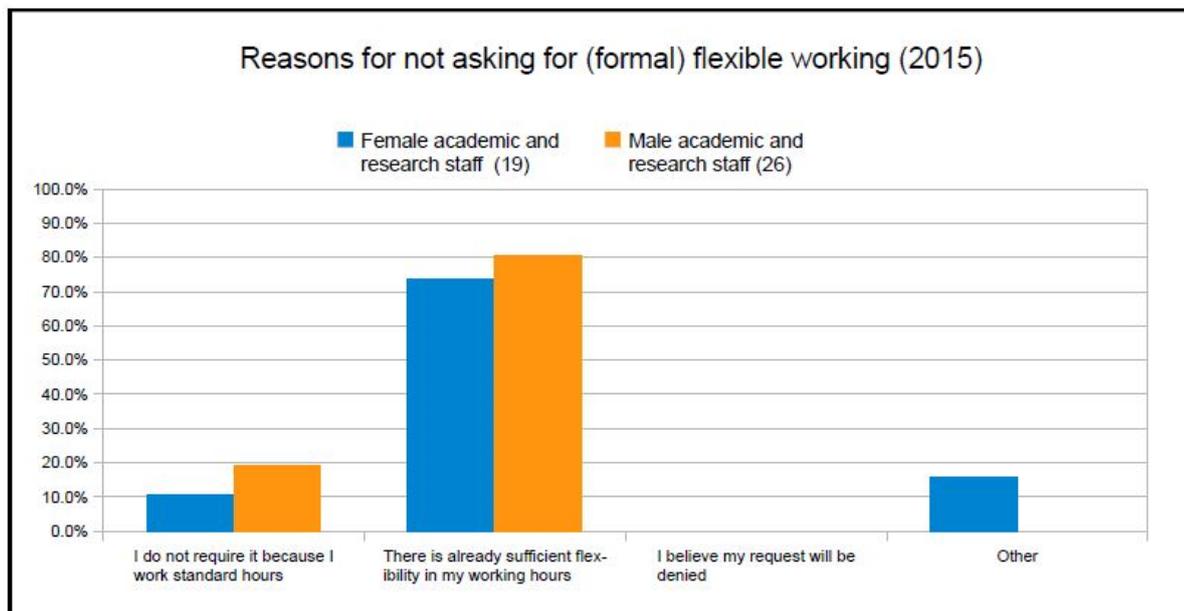
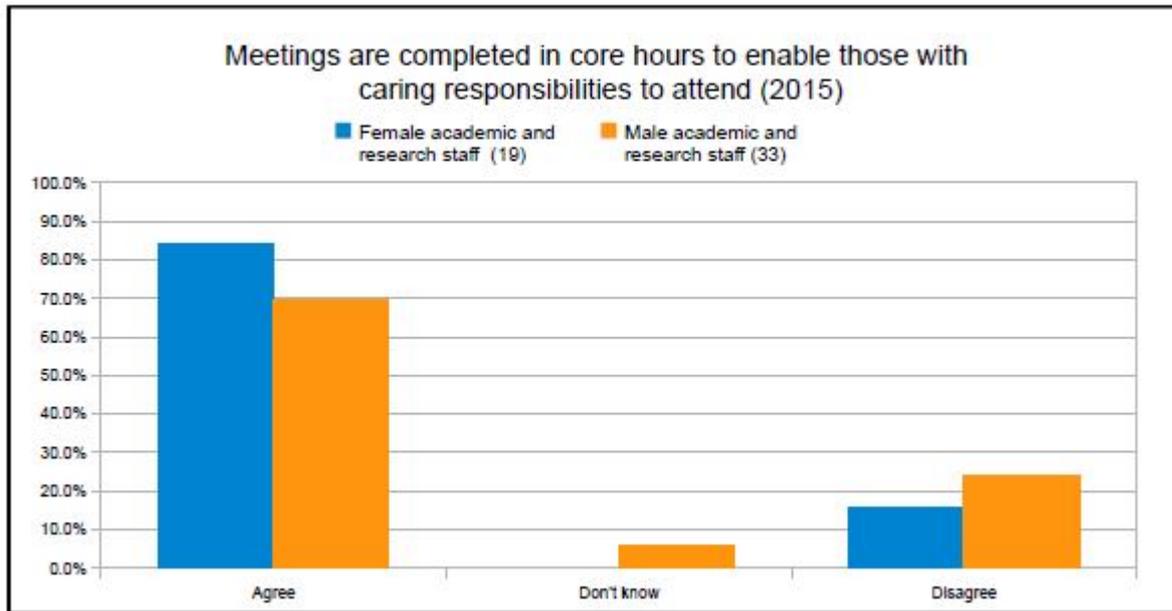


Figure 15: Staff survey responses on flexible working: meetings in core hours (agree/disagree) 2015



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

It is easy for academic staff and researchers to organise their work around other obligations and responsibilities, and many do. Our teaching allocation, and particularly timetabling, is always handled flexibly in order to accommodate childcare responsibilities of staff (e.g. on request avoiding afternoon lectures, or 9am lectures to allow for school/childcare drop-off and collection).

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

When a member of staff says they are expecting a baby, this information is passed to InfHR then, with permission, to the line manager/Portfolio Manager. The Head of HR carries out a maternity risk assessment. InfHR sends the expectant mother a link to the University check list for maternity leave. Letters are sent to the individual, with copies to their line manager/Portfolio Management, so that everyone knows when maternity leave is expected to begin. Cover is arranged by the line manager. Before the mother returns, College HR contact her to ensure she is coming back and make necessary payroll changes. The line manager works with the returner to make sure she is reintegrated into work.

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8. Any other comments – maximum 500 words

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

We continue to benefit from the ongoing activities of by members of the School who are outstanding role models and champions for women in Informatics.

Professor Bonnie Webber was part of the Royal Society of Edinburgh's 'Women in STEM Working Group' which produced the report 'Tapping All Our Talents: Women in science, technology, engineering and mathematics: a strategy for Scotland' (RSE, 2012). She is also a founding member of a small committee set up to increase the number of women nominated for Fellowship to the Society, achieving 30% female nominees in 2014 and 40% in 2015. After Bonnie argued for the setting up a similar committee for the Association for Computational Linguistics in 2015, two women and two men were inducted as Fellows, where only one woman had been inducted each year, 2012-14.

Former SAT Chair, Professor Jane Hillston, a staunch supporter of Edinburgh Hoppers, is a member of the Women in Research Committee of the Computing Academy responsible for the annual Karen Sparck-Jones lecture and London Hoppers event for PhD students and early career researchers. Jane also chairs the Women in Informatics Research and Education (WIRE) working group of Informatics Europe, which promotes gender awareness and good practice in academic departments and, as an ex-officio member of ACM-W Europe, helps to organise an annual WomENCourage meeting for young female students and researchers across Europe.

Current SAT Chair Professor Mirella Lapata mentors female students at undergraduate and graduate level. Mirella reads all the School's applications for the Anita Borg Fellowship, for women undertaking degrees in computer science, and meets with each student individually. She was a member of the self assessment team for the College's Race Equality Charter Mark application.

Fellow SAT team members Dr Vashti Galpin and PhD student Alina Selega also deserve mention. Vashti has published research and spoken internationally on computer science education and women in computing, as well as theoretical computer science. She is a key member of the SAT team, analysing the data from our School culture surveys. In School, she has organised women in computing events and Research Staff Society events. Vashti was ACM Committee on Women in Computing Ambassador for South Africa, 2000-08.

PhD student Alina Selega is a rising star, active since her undergraduate days at York. She regularly takes part in open days and has represented our School externally, attending the Scottish Informatics and Computer Science Alliance (SICSA) Q&A with Dr Maria Klawe and associated lecture, 'Getting More Women into Technology Careers' at St Andrew's University, 30 March – and a Women in Technology networking breakfast, 'Bridging the gender gap,' Edinburgh, 23 February (see p 39).

Not forgetting our male colleagues who champion women in Informatics, e.g. Dr Iain Murray, who supported Alexandra Kearney in her successful bid for an Anita Borg

Scholarship in 2014, and Professor Michael Fourman who supported Lisa Isabel Xie in hers (2015).

[Word count: 475]

9. Action plan

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

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