



**Department  
Application  
Bronze and Silver  
Award**



<b>Name of institution</b>	University of Warwick	
<b>Department</b>	Computer Science	
<b>Focus of department</b>	<b>STEMM</b>	
<b>Date of application</b>	November 2019	
<b>Award Level</b>	<b>Bronze</b>	
<b>Institution Athena SWAN award</b>	<b>Date: April 2018</b>	<b>Level: Silver</b>
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## LIST OF ABBREVIATIONS

AS	Athena SWAN
AP	(Athena SWAN) Action Plan
CDT	Centre for Doctoral Training
DCS	Department of Computer Science
ED&I	Equality, Diversity and Inclusion
ED&IC	Equality, Diversity and Inclusion Committee
FSEM	Faculty of Science, Engineering and Medicine
FT	Full time
FTC	Fixed term contract
HESA	Higher Education Statistics Agency
HoA	Head of Administration
HoD	Head of Department
HR	Human Resources
KIT	Keeping in Touch (Day)
ML	Maternity Leave
OEC	Open ended contract
PDR	Personal Development Review
PG	Postgraduate
PGR	Postgraduate Research
PGT	Postgraduate Taught
PSS	Professional and Support Staff (note that we use this as an umbrella term for administrative and technical staff, who are managed separately in DCS)
PT	Part time
RAE	Research Assessment Exercise
REF	Research Excellence Framework
SAT	(Athena SWAN) Self-Assessment

SPL	Team
SPLIT	Shared Parental Leave
SSLC	Shared Parental Leave In Touch day
UG	Staff and Student Liaison Committee
UoW	Undergraduate
V	University of Warwick
	Volunteer member of SAT

## 1. LETTER OF ENDORSEMENT FROM THE HEAD OF DEPARTMENT

Recommended word count: Bronze: 500 words | Silver: 500 words

An accompanying letter of endorsement from the head of department should be included. If the head of department is soon to be succeeded, or has recently taken up the post, applicants should include an additional short statement from the incoming head.

Note: Please insert the endorsement letter **immediately after** this cover page.

11<sup>th</sup> December 2019

Dear Athena SWAN Charter Managers,

I am delighted to express my strong support for this application for an Athena SWAN Bronze award. When I became Head of Department in January 2018, the Department was highly successful according to many measures. For example:

- Our rank in the Times league table was 3<sup>rd</sup>, the highest the Department had ever achieved;
- We were placed 2<sup>nd</sup> overall out of 89 UK Computer Science departments in the 2014 Research Excellence Framework;
- We were 2<sup>nd</sup> in the 2017 National Student Survey; and
- We held an Athena SWAN Bronze Award.


However, there was no doubt that we faced serious and long-standing challenges in terms of gender equality, even in the context of historical imbalances across the sector. For example:

- The Department had never had a female Professor;
- The Athena SWAN principles had not been embedded uniformly across the Department; and
- Many actions from our 2014 Athena SWAN Action Plan had been subsumed in the challenges of adjusting to a period of rapid growth and change for the Department.

Having a strong personal commitment to inclusivity and respect, I have made it a priority for my Headship to address these issues through policy developments and targeted actions.

Concretely, I am proud to have presided over recruiting a female Assistant Professor and the Department's first female Professor. I have also appointed senior male colleagues to key roles traditionally associated with women, such as Welfare and Communications Lead/co-Chair of the SAT (a Reader with a track record of promoting gender equality in international research) and Admissions Tutor (an Associate Professor with a strong commitment to gender diversity and analytical expertise in bias avoidance).

We are now seeing encouraging developments such as greater participation by women in the leadership of the Department, a stronger promotion pipeline for female colleagues, and a better gender balance at PGR level. I therefore hope and expect that recent



appointments of senior women are leading indicators of a genuine and sustained change with respect to equality and diversity in our community.

However, I do not underestimate the challenges. Even though we have a number of achievements to celebrate, much work remains to be done, of which statistics such as our gender pay gap and our lag behind staff gender benchmarks are clear and uncomfortable reminders.

As Head of Department, I have signalled my commitment to furthering the Athena SWAN principles by:

- Participating in all stages of the preparation of this submission;
- Chairing a consultation event on the Action Plan;
- Joining the University of Warwick institutional Athena SWAN SAT; and
- Committing the Departmental resources needed to implement the Action Plan.

The information presented in the application (including qualitative and quantitative data) is an honest, accurate and true representation of the department. It forms the basis for the Action Plan that will be key to our Departmental strategy that seeks to base our ongoing success on an inclusive and diverse working environment that values the talents and contributions of all students and staff, whatever their gender.

Yours faithfully,

Professor Ranko Lazić  
Head of Department

493 words

## 2. DESCRIPTION OF THE DEPARTMENT

Recommended word count: Bronze: 500 words | Silver: 500 words

*Please provide a brief description of the department including any relevant contextual information. Present data on the total number of academic staff, professional and support staff and students by gender.*

Established in 1967, the Department of Computer Science (DCS) is one of the most successful UK Computer Science departments, regularly appearing in the top five in national league tables. We are currently ranked 5<sup>th</sup> in the Guardian 2020 and the Complete University Guide 2020 tables.

Five years ago, DCS celebrated three major successes:

1. Achieved 2<sup>nd</sup> place among 89 Computer Science departments in the Research Excellence Framework (REF), including 1<sup>st</sup> for quality of research outputs.
2. Won EPSRC funding to establish the Centre for Doctoral Training (CDT) in Urban Science and Progress, providing £3.9M for 50 doctoral studentships over eight years.
3. Awarded an Athena SWAN (AS) Bronze award.



*Computer Science Building, with the Mathematical Sciences Building behind*

Building on these successes, DCS undertook a major strategy review and began a period of rapid growth. Staff and student numbers increased from 53 to 91 and from 554 to 940 respectively between 2014/15 and 2018/19.

Throughout, we have worked hard to maintain and enhance the quality of our teaching and research, and our outcomes for students and staff are very positive. However, the extent of the changes to the department, both physical



and administrative, meant that some AS Actions anticipated in 2014 have not progressed. Key personnel have also changed: a new Head of Department (HoD) came into post in January 2018 and a new Head of Administration (HoA) started in February 2019.

Nevertheless, progress has been made in important areas, for example we have seen a significant and sustained increase in the number of applications, offers and enrolments of female students.

The developments have also brought with them opportunities for inclusivity that were not anticipated in 2014. A new purpose-built interdisciplinary building (the Mathematical Sciences Building) was opened in October 2018, which has allowed us to provide gender-neutral as well as single-sex bathrooms, and further accessible facilities. Through the CDT, we have extended our range of postgraduate research (PGR) into new areas, leading to a higher proportion of female PGR students. New colleagues with experience of gender equality initiatives in other contexts have brought fresh perspectives (see **Section 7**).



*Atrium of the Mathematical Sciences Building*

In view of our radically altered situation, DCS took the difficult decision in 2018 not to resubmit for a renewed AS award, and instead to pause, and reassess our strengths and weaknesses in the new context. This period of reflection has allowed us to re-engage with the Department and to build a broader commitment to our Equality, Diversity and Inclusion (ED&I) strategy (outlined in **Section 3**).

**Table 1** shows the growth in our community, and our gender profile, for the last five years. The gender balance of our taught students is broadly in line with national benchmarks, and the proportion of women at PGR level has grown to be higher than average. However, our staff population is less balanced than average. Our demographics and pipeline are discussed in more detail in **Section 4**.

Staff/student group	Gender	2014/15	2015/16	2016/17	2017/18	2018/19	Benchmark*
UG	Male	346	391	427	513	606	
	Female	68	64	72	81	103	
	% F	16.4%	14.1%	14.4%	13.6%	14.5%	15.3%
PGT	Male	48	36	42	57	85	
	Female	12	18	14	25	31	
	% F	20.0%	33.3%	25.0%	30.5%	26.7%	27.6%
PGR	Male	63	68	72	67	75	
	Female	17	22	28	33	37	
	% F	21.3%	24.4%	28.0%	33.0%	33.0%	27.2%
Academic staff**	Male	32	40	45	50	58	
	Female	8	7	9	8	11	
	% F	20.0%	14.9%	16.7%	13.8%	15.9%	22.3%
PSS	Male	4	5	6	5	6	
	Female	9	10	12	14	15	
	% F	69.2%	66.7%	66.7%	73.7%	71.4%	52.5%

*Table 1: DCS staff and student population by gender, 2014-2019*

\* Advance HR Equality+ statistical report 2018

\*\* Census date for staff data is 1<sup>st</sup> August of the relevant year

**Figure 1** provides an overview of the governance of DCS, showing how staff and student consultative structures feed into formal committees of the Department, the Faculty of Science, Engineering and Medicine (FSEM), and the University of Warwick (UoW).

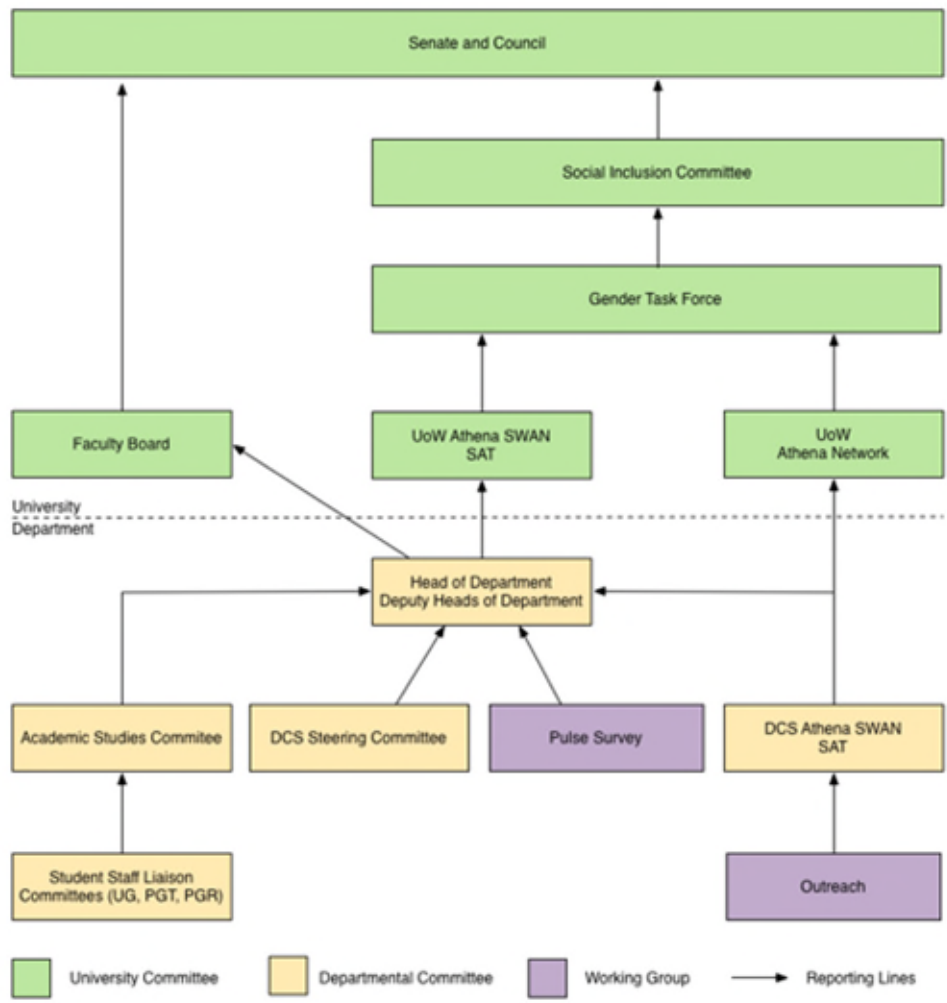


Figure 1: Governance structure of DCS and UoW, relevant to AS

Research within DCS is structured into six themes, which organise many aspects of the research environment for academic staff, including support for developing grant applications.

Theme	Membership (Principal Investigators)
Applied Computing	8M, 2F
Artificial Intelligence	8M, 0F
Data Science	5M, 2F (including the joint affiliation of 1M with Artificial Intelligence and 2F with Human-Centred Computing)
Human Centred Computing	2M, 5F
Theory and Foundations	13M, 0F
Systems and Security	8M, 0F

Figure 2: Research theme structure of DCS

535 words

### 3. THE SELF-ASSESSMENT PROCESS

Recommended word count: Bronze: 1000 words | Silver: 1000 words

Describe the self-assessment process. This should include:

- (i) a description of the self-assessment team

Our Self-Assessment Team (SAT) (**Table 2**) was re-established with new membership in February 2019. Membership was open to any staff or student member of DCS, was widely advertised in Staff Meetings, Staff-Student Liaison Committees (SSLCs) and e-mails from the HoD and Co-Chairs of the SAT. Around one third of members volunteered. Others were approached proactively, either because they held a significant administrative role, or because of their specific expertise.

Collectively, SAT members have personal experience of balancing caring responsibilities with work, flexible working arrangements including working part time, career breaks including transitioning back into full-time and part-time work, and the intersection of gender with protected characteristics such as race and disability.

SAT Member (‘V’ indicates volunteer)	Contribution to submission	Profile
<b>Marcin Jurdzinski (M)</b> <i>Reader</i>	Co-Chair SAT AP	DCS Welfare and Communications Lead  Three months SPL to care for two small children
<b>Maria Ovens (F)</b> <i>HoA</i>	Co-Chair SAT Project management HR policies	University Athena Network Group Two small children Dual career family
<b>Mandy Aldridge (F, V)</b> <i>Taught Programmes Assistant</i>	Student recruitment, attainment and progression	Part time Caring responsibilities for two grandchildren
<b>Claire Algar (F)</b> <i>ED&amp;I Officer</i>	Support and guidance for the application	UoW Athena SWAN SAT Athena panellist LGBTUA+ supporter

<b>Sara Cannizzaro (F, V)</b> <i>Research Fellow</i>	Support with staff survey	
<b>Adam Chester (M)</b> <i>Associate Professor</i>	Support given to students for academic career progression	Director of Degree Apprenticeships One child
<b>Graham Cormode (M)</b> <i>Professor</i>	Support given to academic staff for career progression	Two children
<b>Hakan Ferhatosmanoglu (M)</b> <i>Professor, Deputy HoD</i>	Academic staff recruitment and development Workload model	CDT Director
<b>Maria Ferreira (F, V)</b> <i>Resources Manager</i>	Benchmarking of staff and student data	Dual career family
<b>Tanaya Guha (F)</b> <i>Assistant Professor</i>	Staff induction	Research in image analysis
<b>Tom Gur (M)</b> <i>Assistant Professor</i>	Presentation and discussion of external research in ED&I issues	Organiser, Computer Science Colloquium Two children
<b>Yulan He (F)</b> <i>Professor</i>	Representation on committees	First female professor in DCS
<b>Stephen Jarvis (M)</b> <i>Professor, Deputy PVC</i>	REF submission Support for research funding applications	UoW REF Operational Steering Group CDT Director
<b>Sara Kalvala (F, V)</b> <i>Reader</i>	Promotion for academic staff Visibility of role models	Director of Student Experience

<b>Ranko Lazic (M)</b> <i>Professor, HoD</i>	Integration with DCS Senior Leadership Team	UoW Athena SWAN SAT  Cares for three children with his partner, also an academic
<b>Matthew Leeke (M)</b> <i>Associate Professor</i>	Student recruitment, attainment and progression	Research in software design, analysis and testing
<b>Thejaswini Raghavan (F)</b> <i>PGR student</i>	PGR student experience	PGR student in Theory and Foundations research theme
<b>Alexandra Silva (F)</b> <i>Professor</i>	Critical friend	University College London  A founder and Steering Committee member of Women in Logic
<b>Claire Rocks (F, V)</b> <i>Senior Teaching Fellow</i>	Schools engagement  Flexible working  Graphs	Senior Tutor  Director of Outreach  Part-time  Two children
<b>Paolo Turrini (M, V)</b> <i>Assistant Professor</i>	Departmental culture  Timing of meetings and social gatherings	Sessional Teaching Payroll Coordinator

*Table 2: Membership of DCS SAT*

The SAT is composed of 55% women and 45% men. We recognise the potential burden on women created by high representation on committees in an environment where women are underrepresented numerically. In order to avoid adverse effects, participation is recognised in the DCS workload model, either as a major administrative role in its own right (for the academic Co-Chair), or as part of a wider portfolio. The administrative Co-Chair was relieved of other duties in order to co-ordinate preparation of the submission.

(ii) an account of the self-assessment process

IMPACT DELIVERED SINCE 2014
A significant challenge in 2014 was lack of relevant data. DCS has engaged with the University and more detailed information is now available for UG students and our staff population.
Scores in the biennial UoW Pulse survey on staff engagement and satisfaction have improved significantly.

The full SAT met formally five times (**Table 3**). Minutes are posted on the DCS intranet, accessible to all staff. Sub-groups met regularly from April 2019, with responsibility for identifying ED&I issues relating to the data, proposing appropriate actions to address these issues, and reporting at SAT meetings on their assigned sections.

Date of meeting	Main topics discussed
3 <sup>rd</sup> June 2019	Report from sub-group on preliminary results from AS staff survey (see below for details of this survey)
7 <sup>th</sup> August 2019	Review paper on initiatives to reduce gender imbalances in Computer Science departments Report on qualitative data analysis Tools for collaborative working Call for incubators: EPSRC Inclusion Matters
9 <sup>th</sup> September 2019	Review paper on the importance of male allies Report on review of Departmental induction processes and actions taken/proposed Feedback for DCS community regarding staff survey Action Plan
7 <sup>th</sup> October 2019	Planning for staff consultation on Action Plan Update on drafting
7 <sup>th</sup> November 2019	Feedback from staff consultation on Action Plan (see below for details of this event) Update on drafting

*Table 3: Dates and main topics of SAT meetings*

Sources of data included:

- Quantitative information about staff and student bodies, provided by the UoW Human Resources (HR) and Strategic Planning and Analytics teams
- Benchmarking data from the Higher Education Statistics Agency (HESA)
- UoW Pulse survey
- UoW Marketing data
- Local DCS staff and student records

The DCS Pulse results scores have improved significantly between 2016 and 2018, as follows:

Statement	% +ve	Var. from prev. survey	Var. from Faculty	Var. from UoW	Var. from Russell Group benchmark	Var. from sector benchmark
<b>Q1: I am satisfied in my job.</b>	89%	+19%	+13%	+15%	-	-
<b>Q2: I am proud to work for the University.</b>	89%	+6%	+8%	+7%	+7%	+9%
<b>Q3: I would recommend the University as a great place to work.</b>	88%	+11%	+18%	+17%	+20%	+21%
<b>Q4: I feel a strong sense of belonging to the University.</b>	68%	-2%	+14%	+12%	+10%	+10%
<b>Q5: Working here makes me want to do the best I can.</b>	86%	+21%	+17%	+14%	+13%	+17%

*Table 4: Headline results of Pulse Survey 2018*

The two questions with the highest proportions of negative scores in 2018 were also the two most improved questions since 2016, and above most benchmarks:



Statement	% -ve	Var. from prev. survey	Var. from FSEM	Var. from UoW	Var. from Russell Group bench mark	Var. from sector bench mark
Q13: I am able to speak up and challenge the way things are done at the University.	-26% (+ve answers 51%)	+26%	+9%	+7%	-6%	+4%
Q11: I believe that my PDR assists me with my longer term career development.	-23% (+ve answers 47%)	+22%	+11%	+9%	-	-

*Table 5: Negative/improved results of Pulse Survey 2018*

DCS undertook an anonymous web-based staff survey in May 2019, covering topics relevant to AS, and addressing areas highlighted by the 2018 Pulse survey. Every survey section included free text boxes where respondents could expand on their answers. Participants were also offered the opportunity to meet face to face with SAT members. 35 people participated (20M, 11F, 4 did not disclose gender; 22 academic, 9 Professional Services Staff (PSS), 4 did not disclose staff group). A summary of the results was e-mailed to staff and displayed in the DCS Common Room.

Summary results of the staff survey were as follows:

	<b>Top three responses</b>	<b>Bottom three responses</b>
<b>People expressing concerns</b>	<ol style="list-style-type: none"> <li>1. Parental leave including the management of cover (83% no concerns)</li> <li>2. The ability to work flexibly (81% no concerns)</li> <li>3. Race discrimination (82% no concerns)</li> </ol>	<ol style="list-style-type: none"> <li>1. Value placed on academic administration and service (81% some/many concerns)</li> <li>2. The value placed on Professional Services (69% some/many concerns)</li> <li>3. The value placed on teaching (64% some/many concerns)</li> </ol>
<b>People saying we have things to celebrate</b>	<ol style="list-style-type: none"> <li>1. The value placed on research (100% some/many things to celebrate)</li> <li>2. The value placed on interdisciplinarity (96% some/many things to celebrate)</li> <li>3. Peer support/the distribution of emotional labour (each 90% some/many things to celebrate)</li> </ol>	<ol style="list-style-type: none"> <li>1. Induction (24% nothing to celebrate)</li> <li>2. "Other" discrimination (24% nothing to celebrate) – free text comments referred to ageism, a lack of diversity in social background, and an assumption that everyone shared similar political/philosophical beliefs</li> <li>3. Gender discrimination (23% nothing to celebrate)</li> </ol>

Free text comments provided some nuanced information about cross-cutting concerns, such as a sense of "team spirit", and the gender balance of our staff and students. Our AP seeks to address these issues as well as the concerns from the quantitative aspects of the survey.

To consult students, the HoA attended undergraduate (UG) and postgraduate (PG) SSLC meetings during the Autumn term 2019/20 to brief on AS and invite feedback (face-to-face or anonymous), and solicit ideas for process improvements, observations or views on areas of concern. Students were represented on the SAT, which provided a further avenue for communication with students.



*Figure 3: DCS Director of Student Experience chats with PGR students at the AS draft AP consultation event*

In October 2019, DCS held an afternoon event to further develop the AP. Attendance was good from PGR students and staff at all levels, with 26 academic staff, 4 PSS and 5 PGR (24M, 11F) attending. The event focussed on developing actions from the issues identified through the self-assessment process including data trends and survey responses.

This engagement with the DCS community has resulted in the agreed AP, with those responsible for individual actions fully committed to implementing them within the agreed timeframes. Actions have been organised into five workstreams (**Table 6**) with key departmental roles allocated to oversee the implementation of each workstream, and colour-coded according to their time scale/challenge/impact trade-offs (**Table 7**). Sharing engagement and responsibilities across DCS will help develop vital ED&I leadership skills for further development and implementation of the long-term DCS ED&I strategy.

Action Plan workstreams	Responsible posts
Governance and communications	HoA, ED&I Lead
Increasing the number of female students	Admissions Tutor, Director of Outreach
Improving student experience and attainment	Director of Student Experience
Increasing the number of female academics	HoD
Improving staff experience and career progression	ED&I Lead

Table 6 Workstreams in the AP and posts responsible for their implementation

Colour-coding	Definition
Green	“Quick win” – low cost and/or low-complexity action with clear benefit, that can be actioned swiftly
Amber	Longer-term action, potentially with consultation and/or planning required
Red	Long-term action that may be challenging to implement, but if successful could achieve a more fundamental transformation of DCS

Table 7 The three categories of actions in the AP.



Figure 4: DCS Director of Outreach/joint Senior Tutor presents the section of the draft AP dealing with student recruitment.

The SAT developed a SharePoint site to work collaboratively, and to share access to data, gender equality literature, and information about relevant initiatives at Warwick and elsewhere. Lively discussions on these initiatives took place at SAT meetings and beyond, engaging other members of DCS. The site will be redeveloped into an AS website (**Action 3.1**).

**Action 3.1** Redevelop the successful SharePoint site into an AS website accessible to all DCS staff/students in order to keep AS activities at the forefront of minds, and to enable staff/students to actively keep up to date with AS activities and give them opportunities for continued input into AS matters.

(iii) plans for the future of the self-assessment team

On submission of this application, the SAT will become the DCS ED&I Committee (ED&IC). The ED&IC will continue to meet termly to oversee the implementation of the AP and discuss broader ED&I issues, recognising intersectionality in our diverse staff and student bodies (**Action 3.2**). Membership will be partly rotational, but the Committee will include ex-officio members in order to ensure sufficient continuity (**Action 3.3**). The academic co-Chair will co-ordinate implementation of the AP and continue to engage with the UoW AS Network in order to keep abreast of AdvanceHE developments and sector best practice.

The ED&I Committee will report progress to Steering Committee and Staff Meeting. We will continue the practice of presenting and critically discussing published and peer-reviewed evidence on matters of gender equality and we will share best practice with other departments. The Qualitative Working Group will continue to run the DCS staff survey every second year, when the UoW Pulse survey is not running (**Action 3.4**), and ad-hoc facilitated focus groups will examine topics of interest in more detail. For example, the Quantitative Working Group will collect and analyse data to support equality impact analyses of DCS admissions and recruitment processes.

**Action 3.2** The ED&IC (formerly the SAT) will meet at least once termly ahead of the Departmental Staff Meeting and will report progress to Steering Committee and Staff Meeting.

**Action 3.3** Establish principles for membership of the ED&IC, to include some permanent members (key posts, recognising that post-holders may also change, and some rotational to maximise opportunities for engagement and to bring in specialist expertise as needed).

**Action 3.4** Repeat the AS staff survey biennially, in those years when the UoW Pulse survey does not run.

## 4. A PICTURE OF THE DEPARTMENT

Recommended word count: Bronze: 2000 words | Silver: 2000 words

### 4.1. Student data

If courses in the categories below do not exist, please enter n/a.

- (i) Numbers of men and women on access or foundation courses

n/a

- (ii) Numbers of undergraduate students by gender

*Full- and part-time by programme. Provide data on course applications, offers, and acceptance rates, and degree attainment by gender.*

#### IMPACT DELIVERED SINCE 2014

The number of female applicants for UG study has increased from 141 to 419, and the proportion from 15.5% to 17.6%.

The majority of our UG students are enrolled on one of seven full-time programmes of study:

Theme	Programme of study
Computer Science	BSc Computer Science MEng Computer Science
Discrete Mathematics	BSc Discrete Mathematics MEng Discrete Mathematics
Computer Systems Engineering	BSc Computer Systems Engineering MEng Computer Systems Engineering
Computer Science with Business Studies	BSc Computer Science with Business Studies

Table 8: UG programmes in DCS

**Figure 7** and **Figure 8** show student numbers by gender, for the last five years.

Computer Systems Engineering degrees and MEng Discrete Mathematics were established in 2016/17. The decrease in numbers on BSc Discrete Mathematics from 2016 onwards is due to students enrolling on the MEng instead.

Women appear more likely than men to choose BSc rather than MEng routes, and since 2016/17 are significantly more likely to pick Computer Science with Business Studies; we will investigate the reasons for this (**Action 4.1.1**).

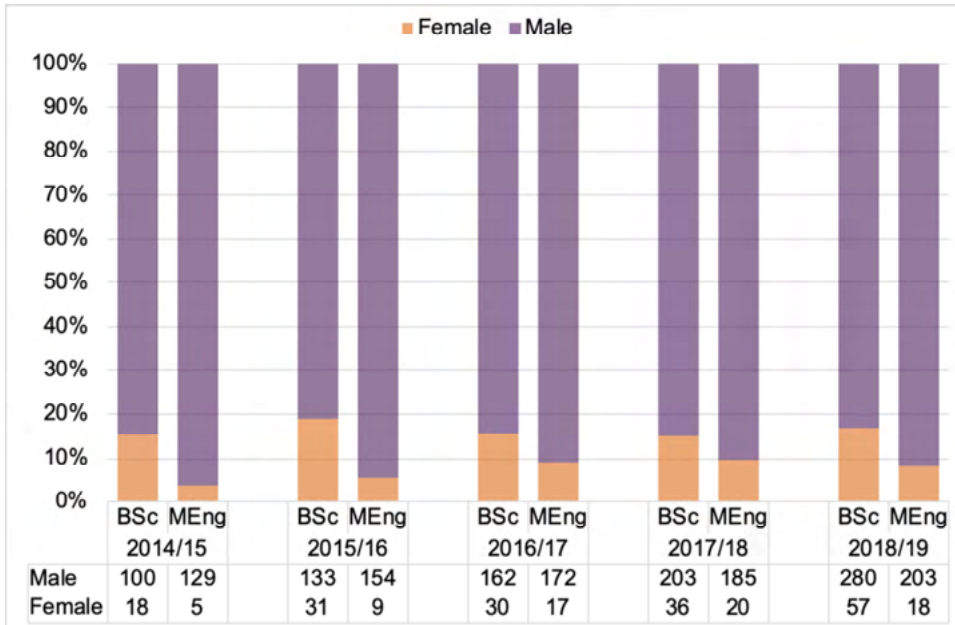


Figure 5: BSc / MEng Computer Science

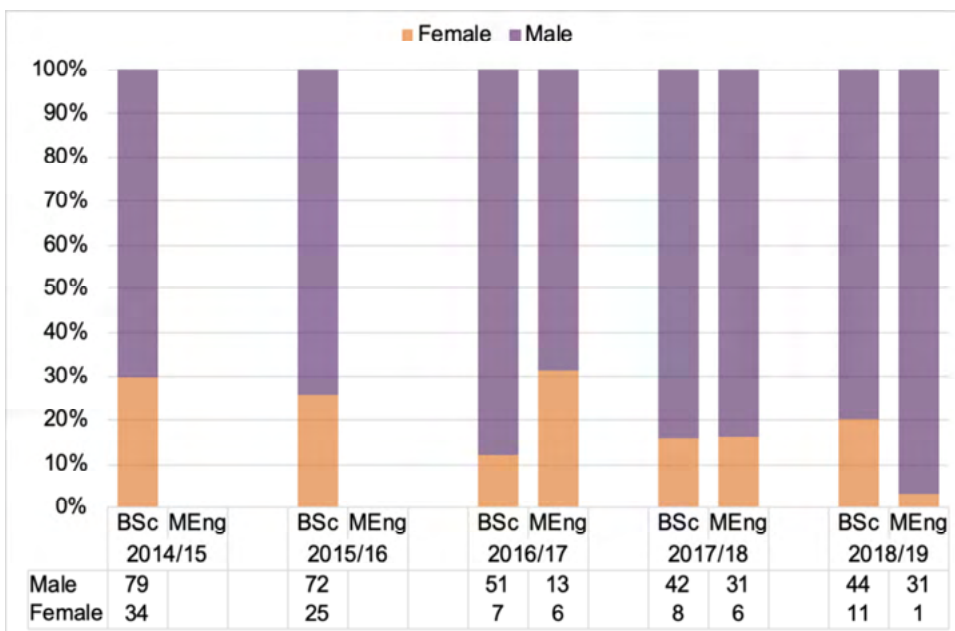


Figure 6: BSc / MEng Discrete Mathematics

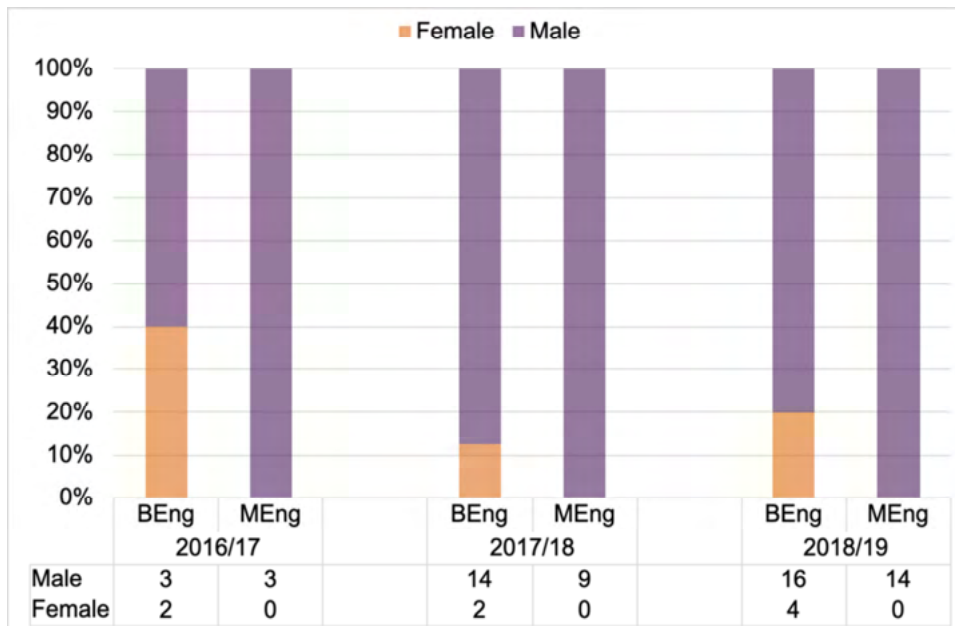


Figure 7: BEng / MEng Computer Systems Engineering

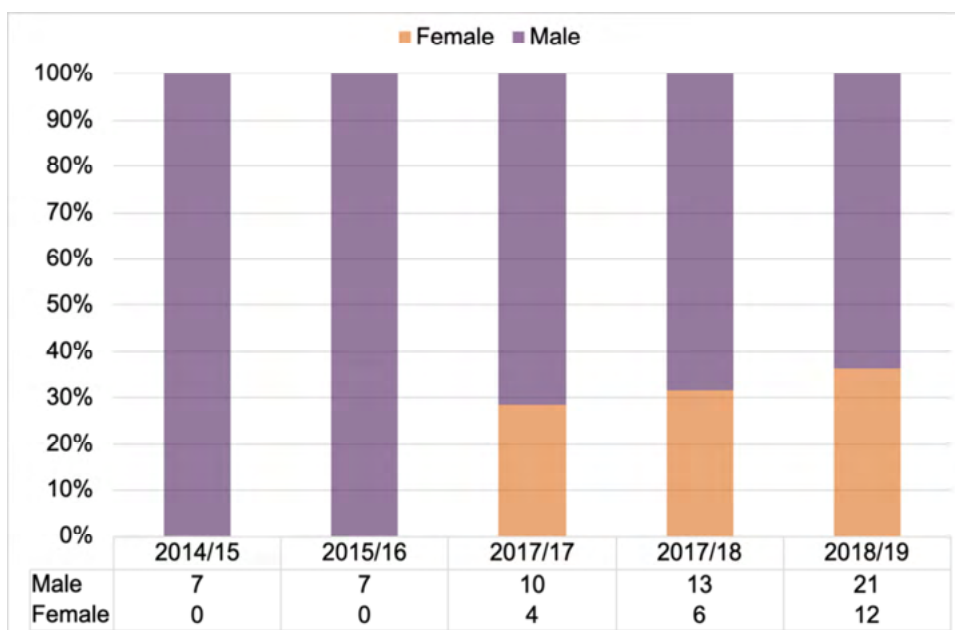


Figure 8: BSc Computer Science with Business Studies

In 2019/20, DCS introduced a Degree Apprenticeship in Data Science, delivered in blocks of on-campus teaching alongside workplace learning, partly in order to increase the diversity of our intake over the long term (**Action 4.1.2**). The first cohort was 4M, 2F.

The proportion of women receiving offers to study on UG programmes is similar to the proportion applying (**Figure 9**). However, conversion is more volatile, and on average we lose women at this stage. The proportion of women who enrol on



such programmes is slightly lower than the HESA benchmark of 15.1%. We will investigate the reasons for volatility in conversion, and the loss of women here, and use our analysis to inform further actions (**Action 4.1.3**).

Year	Applications			Offers			Enrolments		
	M	F	%F	M	F	%F	M	F	%F
14/15	766	141	15.5%	599	103	14.7%	107	20	15.7%
15/16	915	147	13.8%	749	124	14.2%	156	21	11.9%
16/17	1,320	240	15.4%	1,050	197	15.8%	151	36	19.3%
17/18	1,538	290	15.9%	1,290	243	15.9%	200	24	10.7%
18/19	1,958	419	17.6%	1,374	319	18.8%	226	39	14.7%

Figure 9: Applications, offers and enrolments by gender

We recently revised our admissions criteria for 2021/22 entry, having undertaken an Equality Impact Analysis based on male and female applicants' predicted and actual attainment at A-level, to ensure that women would not be disadvantaged. We will monitor admissions data during 2021/22 in order to identify and mitigate any unintended consequences (**Action 4.1.4**).

UoW marketing data suggests female Computer Science applicants are more motivated than males to gain qualifications and become independent (**Figure 10**). We will review our approach to marketing to ensure that these benefits are suitably highlighted (**Action 4.1.5**).

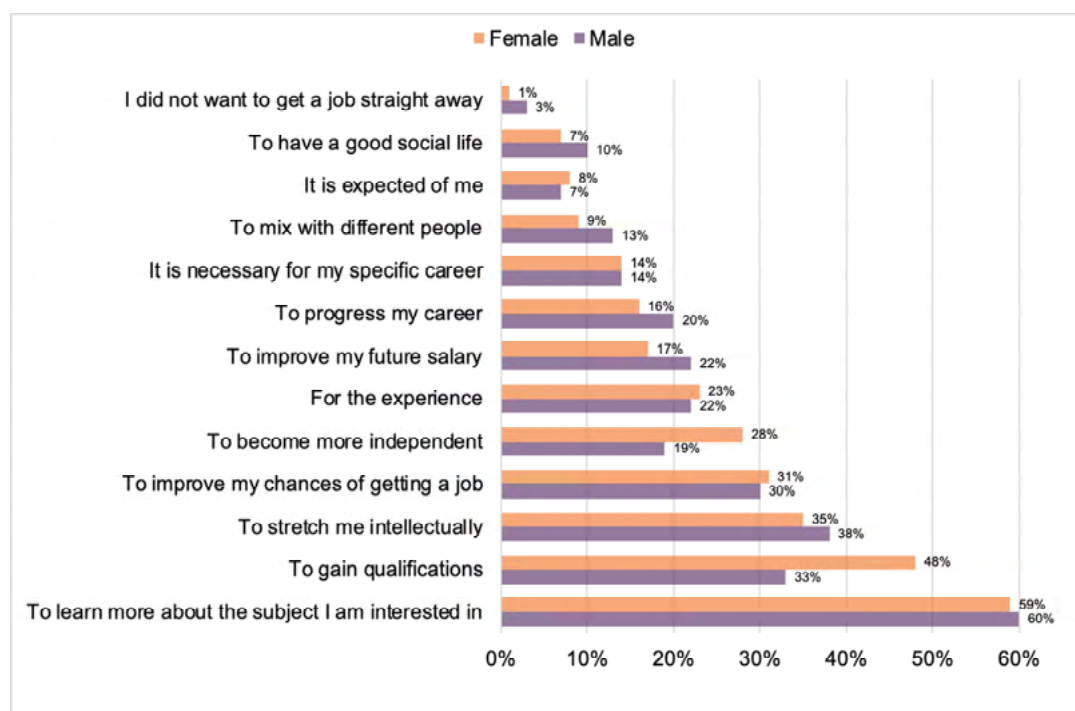


Figure 10: Survey responses from applicants to Computer Science courses at Warwick, indicating their main reasons for wanting to go to university.

As a conversion tool, a practical way of supporting female students, and a signal of our commitment to improving our gender balance, we will create at least five scholarships for women per year (**Action 4.1.6**). The scholarship holders will benefit from academic and career development support and they will be offered opportunities to act as role models to other women.

Our two student bloggers, who are both female, blog about a range of topics including their experiences as women in Computer Science. We will work with the bloggers to find the most effective ways of supporting and promoting their work (**Action 4.1.7**).

The screenshot shows the top navigation bar of the University of Warwick website with links for Home, About, Interests, Bloggers, and Need Help?. Below this is a blue banner with the text 'OurWarwick | Discover University Life'. The main content area features a blog post by Vanshika Saxena, dated 31 Jul 2019, titled 'Of Diamonds, Ribbons and Computer Science'. The post includes a profile picture of the author and social media interaction icons (0 comments, 3 likes, 45 views). The text of the post reads: 'I am female. I love Computer Science. Why? Because I find computers fascinating. Because I love solving problems. Because it blows my mind to consider how this field is transforming almost every aspect of our lives. To learn how it is done is exciting. Now tell me this. Which part of that is 'for boys'? After all, the first computer programmer was Ada Lovelace, a woman! What a legend. (If you haven't already, I strongly suggest you look her up.)'

*Partial screenshot of student blog post*

DCS is currently undertaking a curriculum review. We will emphasise a variety of topics, aiming to speak to the interests of all students, including women and minorities, while avoiding stereotyping (**Action 4.1.8**).

Our female students are slightly more likely to attain a good honours degree than males (see **Figure 11**). This is true across the sector, although DCS students outperform the sector regardless of gender: in the last 5 years, 75.6% of women have attained a 1st or 2.1, compared with 72.3% of men.

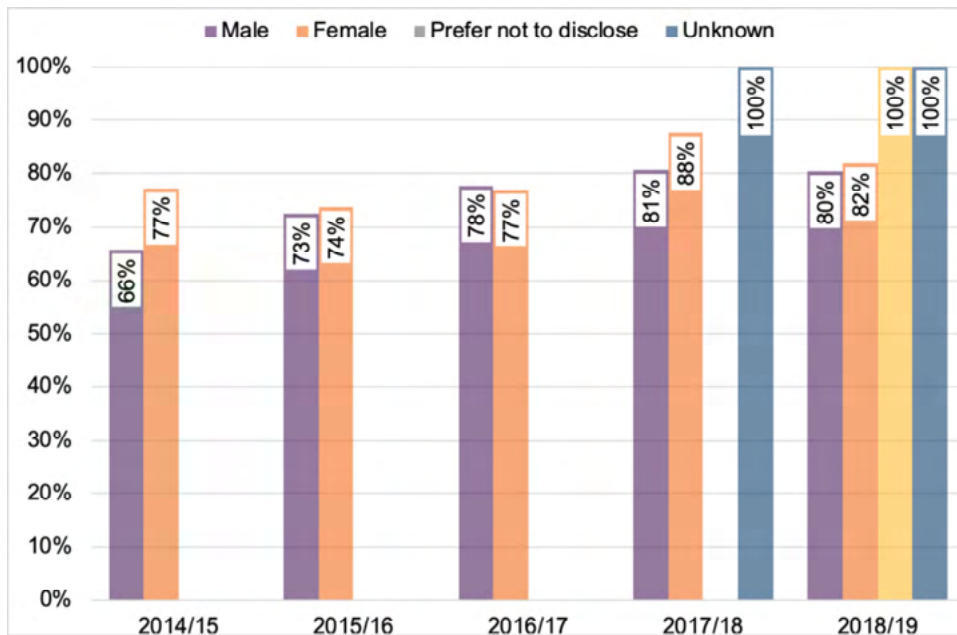


Figure 11: Percentage of students gaining a good honours degree - breakdown by gender

Women are proportionally more likely than men to withdraw, although the absolute numbers are very low (**Figure 12**). Non-completion for both men and women is on a downward trend (despite rising student numbers).

High-level reasons for withdrawal are recorded (**Table 9**), however these may mask complex situations. The data does not suggest that withdrawal is a major problem in our pipeline, however understanding the reasons more fully may help us address issues that could be holding back particular intersectional groups of students (**Action 4.1.9**).

Reason for withdrawal	Male students	Female students
Personal reasons	1	2
Change course/institution	4	2
University education does not suit me	2	0
Mental health	1	0

Table 9: Reasons for students permanently withdrawing before the end of their course, by gender, since October 2018

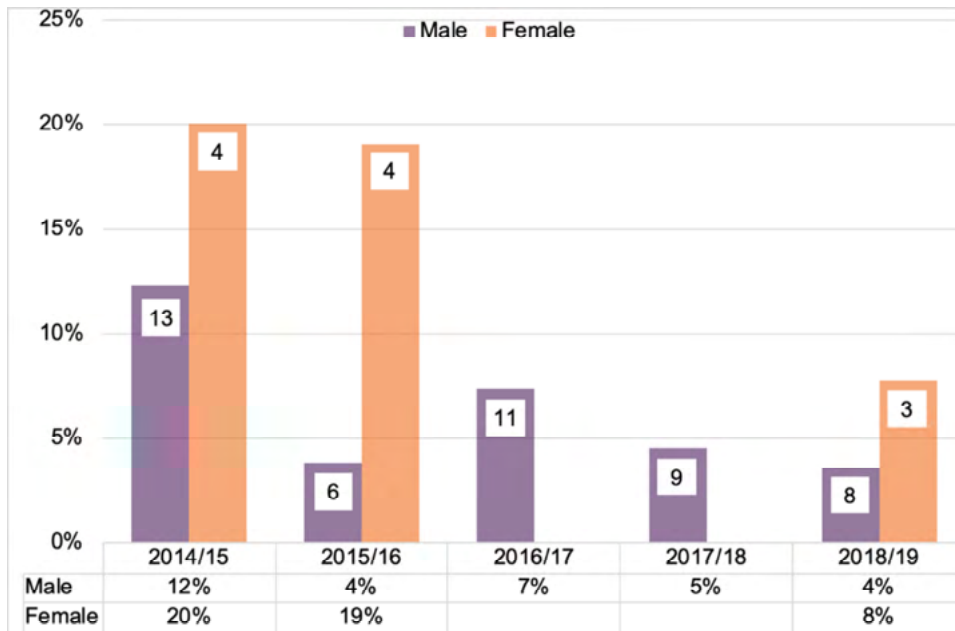


Figure 12: Percentage of students not completing

Internal DCS research indicates that our female students may underperform in first year examinations, relative to male students with matching A-level grades. In response, we have introduced extra provision in programming and mathematics for first years (**Action 4.1.10**).

We have also introduced:

- A “cousins” scheme to address feelings of isolation and lack of confidence often reported disproportionately by female students.
- Since 2018/19, a male and female joint Senior Tutor.
- A Code of Conduct for our teaching laboratories and facilities, to ensure a welcoming environment and a range of social out-of-hours activities.

We plan to further expand support for a range of social activities that female and other minority students will benefit from (**Action 4.1.11**), including encouraging the foundation of a society for Women in Computer Science and offering support for it (**Action 4.1.12**).



*Computer Science Graduation celebration, summer 2019*

**Action 4.1.1** Hold externally facilitated focus group to understand why women are more attracted to studying on some DCS programmes than others.

**Action 4.1.2** Explore ways in which the inherent flexibility of the block-based and distance-learning delivery of Degree Apprenticeships can be utilised in order to increase accessibility, especially for part-time students.

**Action 4.1.3** Investigate reasons for the volatility in conversion rate and the loss of women at this point in the pipeline, and formulate further actions to maximise conversion.

**Action 4.1.4** Monitor our admissions data continuously, to identify and mitigate any unintended consequences of recent changes to admissions criteria.

**Action 4.1.5** Review DCS marketing materials to ensure that the benefits of gaining qualifications and becoming independent are given appropriate prominence.

**Action 4.1.6** Create at least 5 scholarships for female students per year.

**Action 4.1.7** Support and promote the work of our student bloggers (currently both female).

**Action 4.1.8** Ensure that our curriculum review gives appropriate emphasis to a range of topics and learning styles, including those that female students are particularly attracted to.

**Action 4.1.9** Systematically record the reasons for male and female students withdrawing and analyse the data for any trends. Consider the use of exit interviews with a Senior Tutor if appropriate.

**Action 4.1.10** Improve the academic experience of all students, by reviewing and enhancing our “fast track” coding classes and mathematics support.

**Action 4.1.11** Provide financial and logistical support for the development of a wider range of social activities, led by students including women.

**Action 4.1.12** Encourage and support students to establish a student society of Women in Computer Science. Support them (if they wish) to become a chapter of IEEE Women in Engineering / BCS or similar.

(iii) Numbers of men and women on postgraduate taught degrees

*Full- and part-time. Provide data on course application, offers and acceptance rates and degree completion rates by gender.*

**IMPACT DELIVERED SINCE 2014**

The number of female applicants for PGT study has increased from 61 (27.5%) to 399 (39.0%). The number of women enrolling has risen from 12 (20.0%) to 31 (26.7%).

DCS offers two full-time postgraduate taught courses: MSc Computer Science and MSc Data Analytics. The gender of our postgraduate students (PGT and PGR) is not available to DCS by programme. The HoD will engage via the UoW SAT to improve the availability of ED&I-related data (**Action 4.1.13**).

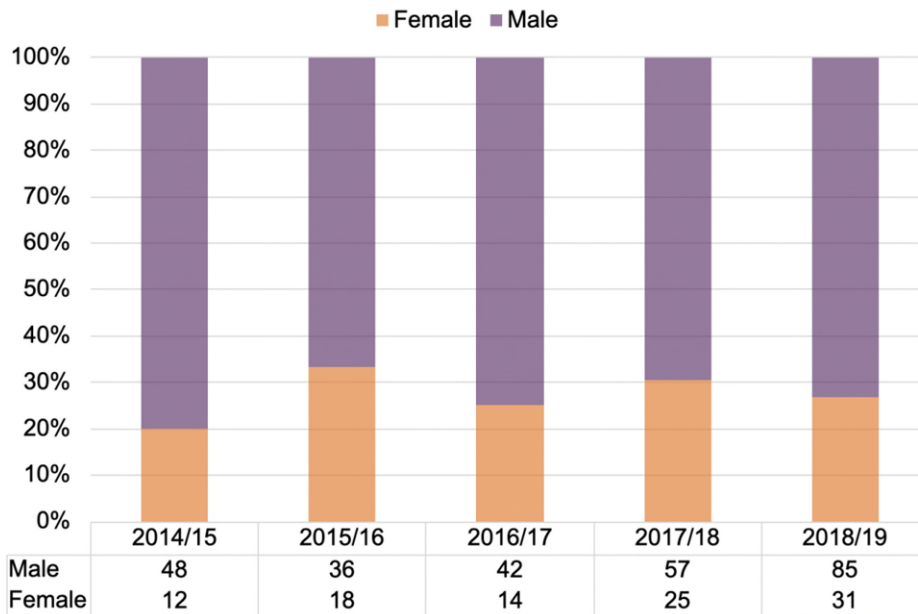
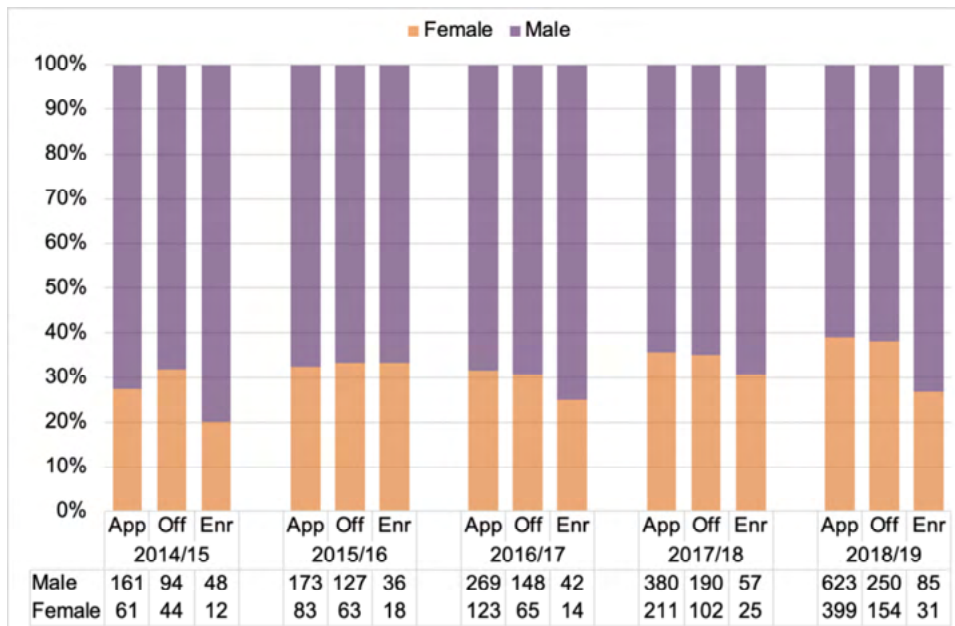


Figure 13: PGT student population by gender (HESA Sector 2017/18 27.6% female)



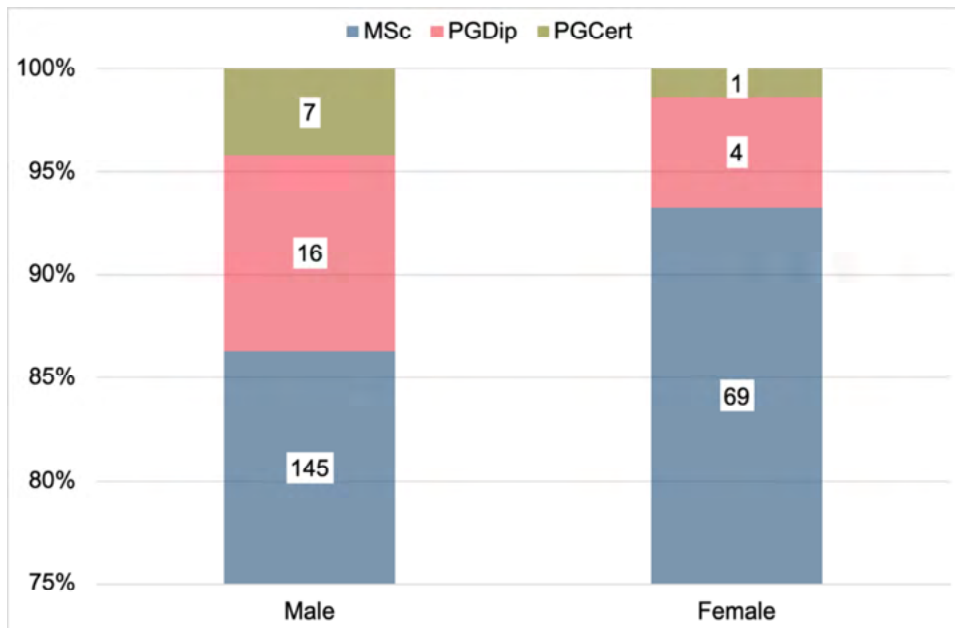
Year	Applications			Offers			Enrolments		
	M	F	%F	M	F	%F	M	F	%F
14/15	161	61	27.5%	94	44	31.9%	48	12	20.0%
15/16	173	83	32.4%	127	63	33.2%	36	18	33.3%
16/17	269	123	31.4%	148	65	30.5%	42	14	25.0%
17/18	380	211	35.7%	190	102	34.9%	57	25	30.5%
18/19	623	399	39.0%	250	154	38.1%	85	31	26.7%

Figure 14: PGT enrolment pipeline by gender 2014-2019

As with our UG degrees, PGT student numbers have risen significantly in recent years. The proportion of women applying and receiving offers is also rising, while the proportion of women enrolling is more variable. Enrolments in 2018/19 were slightly below the HESA sector benchmark of 27.6%, but our five-year average is substantially higher at 31.3%.

At PGT level, attainment of female students is usually slightly better than that of male students, in terms of the proportion graduating with an MSc (**Figure 15**).





Year	MSc				PGDip				PGCert			
	M	F	% M comp	% F comp	M	F	% M comp	% F comp	M	F	% M comp	% F comp
14/15	27	9	90.0%	81.8%	1	2	3.3%	18.2%	2	0	6.7%	14.3%
15/16	27	17	96.4%	100.0%	1	0	3.6%	0.0%	0	0	0.0%	0.0%
16/17	35	14	76.1%	87.5%	10	2	21.7%	12.5%	1	0	2.2%	0.0%
17/18	42	24	89.4%	100.0%	3	0	6.4%	0.0%	2	0	4.3%	0.0%
18/19	Data not yet available, pending formal confirmation of results of Exam Board in November 2019											

Figure 15: PGT completion rates by gender

**Action 4.1.13** HoD will engage via the UoW SAT to improve the availability of ED&I-related data.

(iv) Numbers of men and women on postgraduate research degrees

*Full- and part-time. Provide data on course application, offers, acceptance and degree completion rates by gender.*

IMPACT DELIVERED SINCE 2014

The number of female applicants for PGR study has increased from 32 to 54, and the proportion from 22.7% to 29.7%.

DCS offers two MPhil/PhD programmes: Computer Science and Urban Science. A small number of students (around five in total) are part-time. A tiny number of students (1-2 per year) register for an MSc by Research.

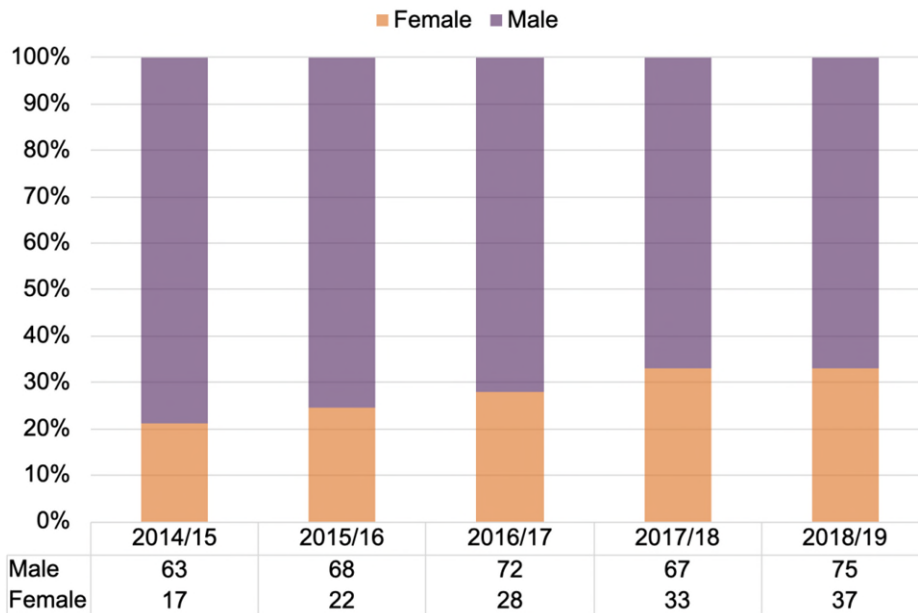
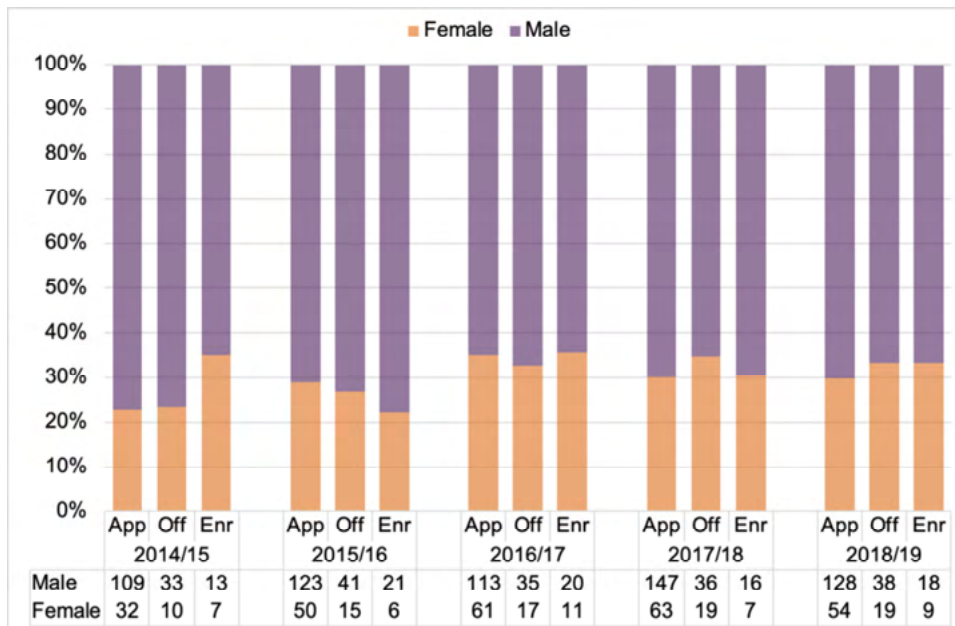


Figure 16: PGR student population by gender (HESA Sector 2017/18 27.2% female)



Year	Applications			Offers			Enrolments		
	M	F	%F	M	F	%F	M	F	%F
14/15	109	32	22.7%	33	10	23.3%	13	7	35.0%
15/16	123	50	28.9%	41	15	26.8%	21	6	22.2%
16/17	113	61	35.1%	35	17	32.7%	20	11	35.5%
17/18	147	63	30.0%	36	19	34.6%	16	7	30.4%
18/19	128	54	29.7%	38	19	33.3%	18	9	33.3%

Figure 17: PGR enrolment pipeline by gender 2014-2019

As with our taught programmes, PGR numbers have risen in recent years (**Figure 16** and **Figure 17**). The proportion of women enrolling in 2018/19 was 33.3%, substantially above the HESA benchmark of 27.2%.

The proportion of female PGR graduates increased sharply in 2018/19, to 39% (see **Figure 18**). This is attributed to graduates from the inter-disciplinary Urban Science CDT, a success story that should inform our future PGR strategy (**Action 4.1.14**).

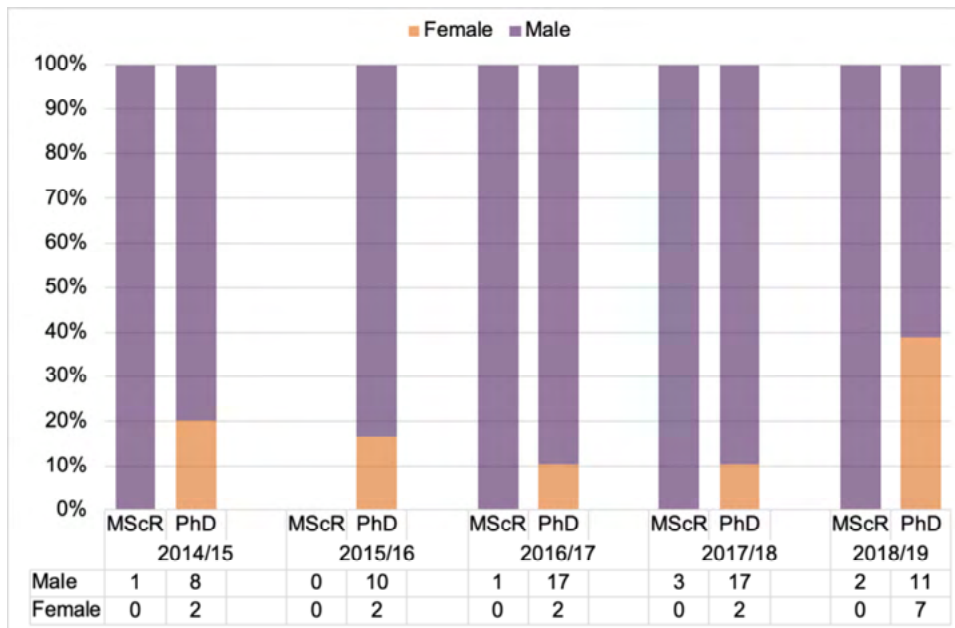


Figure 18: PGR conferrals, by gender

**Action 4.1.14** Review lessons learned from Urban Science CDT in relation to gender equality, and how we can build on this experience to increase the diversity of our Computer Science PGR cohorts.

- (v) Progression pipeline between undergraduate and postgraduate student levels

*Identify and comment on any issues in the pipeline between undergraduate and postgraduate degrees.*



*Computing Laboratory, Computer Science Building*

Within DCS, few students progress from UG to PGT (four in 2019/20). Many of our UGs undertake an MEng rather than a BSc, and typically progress straight to an MPhil/PhD programme for further study. Furthermore, a common reason for undertaking PGT study is to “top-up” a lower UG degree classification, however our PGT programmes typically require a 2.1 for entry.

A small number of taught students progress to PGR study within DCS every year. In 2019/20, seven new MPhil/PhD students (all male) had previously studied in DCS, all on Computer Science programmes (MEng, MSc or BSc). We view increasing the numbers and improving the diversity of the UG/PGT to PGR pipeline as a priority, since it could represent a valuable additional route to increasing diversity in our PGR population (**Action 4.1.15**).

**Action 4.1.15** Establish a system for tracking and monitoring relevant data relating to our “pipeline” students, and formulate further actions to support diversity in the progression to PGR study on the basis of this.

## 4.2. Academic and research staff data

- (i) Academic staff by grade, contract function and gender: research-only, teaching and research or teaching-only

*Look at the career pipeline and comment on and explain any differences between men and women. Identify any gender issues in the pipeline at particular grades/job type/academic contract type.*

IMPACT DELIVERED SINCE 2014
We have updated our recruiting practices to be more inclusive. Recently, we were able to recruit the first female professor to DCS.

Academic job roles at UoW are organised into pathways, as follows:

Level	R&T-focussed pathway	T-focussed pathway	R-focussed pathway
FA9	Professor	Professor (or Professorial Teaching Fellow)	Professor (or Professorial Research Fellow)
FA8	Associate Professor / Reader	Associate Professor / Reader (or Principal Teaching Fellow)	Associate Professor / Reader (or Principal Research Fellow)
FA7	Assistant Professor	Senior Teaching Fellow	Senior Research Fellow
FA6	Rarely used	Teaching Fellow	Research Fellow
FA5	Not used	Not used	Research Assistant

*Table 10: Academic job roles at UoW*

The majority of academics in DCS hold R&T-focussed contracts. The highest proportion of women is at FA8 (either recruited directly or promoted into this level). The largest growth in R&T-focussed staff has been at FA9: the number of Professors has increased from seven to fifteen since 2015, and our first female Professor joined in September 2018.

The low number of women hired at FA7 in recent years has negative implications for our pipeline. Our current focus is on internal promotion to FA9, to achieve better representation of women at senior levels (see **Section 5.10**, in particular **Action 5.1.9** and **Action 5.1.10**).

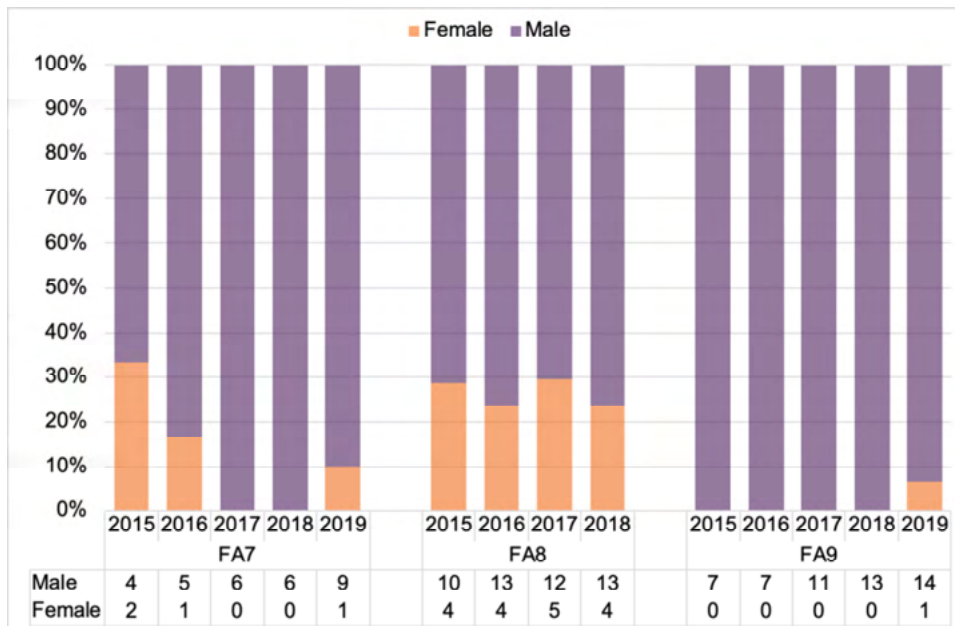


Figure 19: R&T-focussed staff, by level and gender (headcount)

UoW only recently introduced structured career paths for T-focussed staff, and currently there are relatively few people on this pathway in DCS (4M, 2F). Their role is to provide specialised leadership in teaching and learning. A female Teaching Fellow was promoted to FA7 in 2015/16. A further female colleague moved from an FA8 R&T-focussed post to the T-focussed pathway in 2018/19, and was promoted to Reader simultaneously.

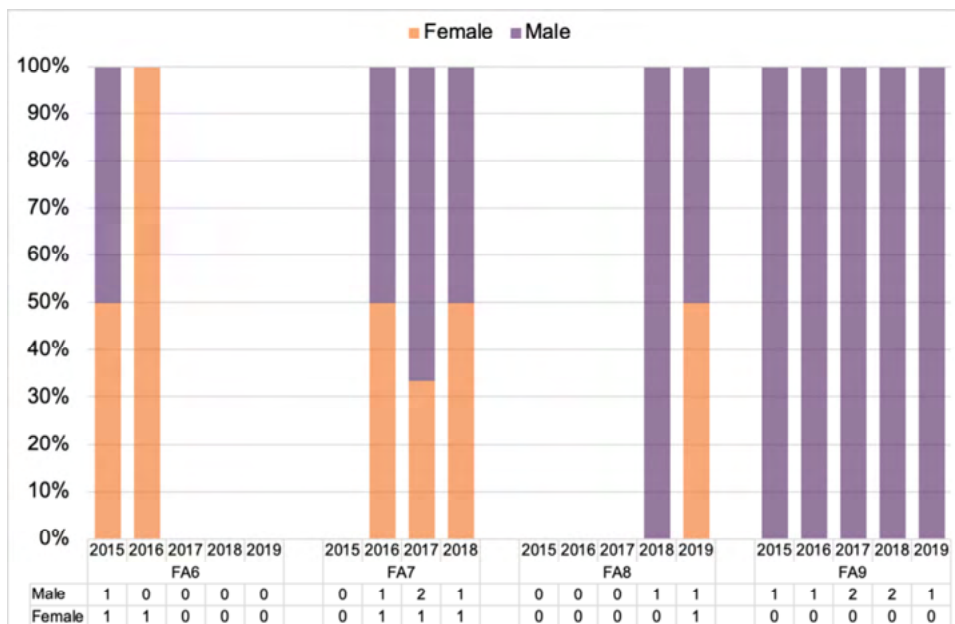


Figure 20: T-focussed staff, by level and gender (headcount)

R-focussed staff in DCS are employed at FA6-FA7 (occasionally FA5), directly on research grants (“postdocs”). These colleagues are mostly on fixed-term

contracts (FTCs), as the funding for R-focussed posts is generally time-limited. They are predominantly male.

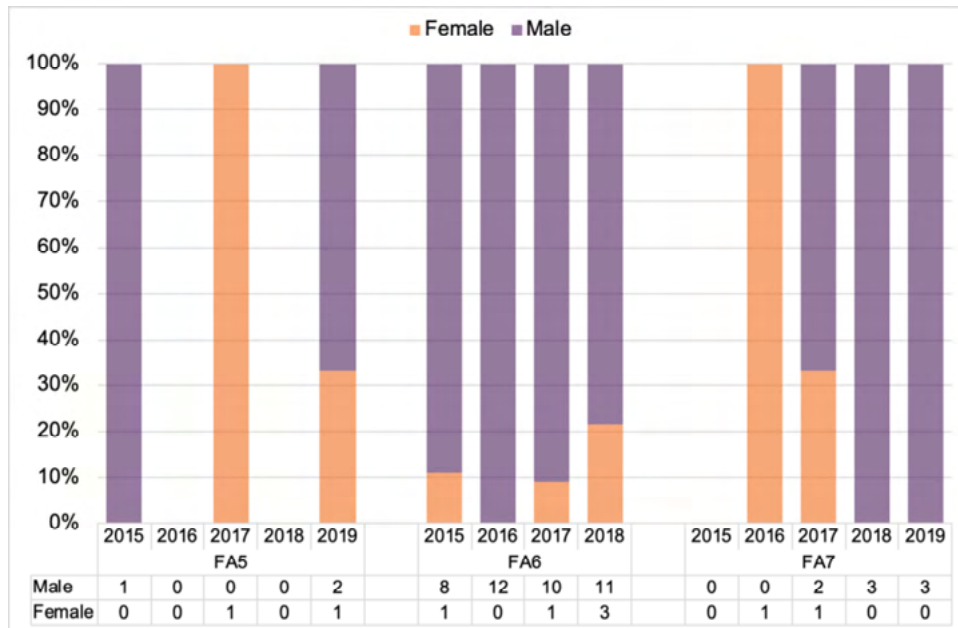


Figure 21: R-focussed staff, by level and gender (headcount)

The majority of PSS are women in administrative roles, with a smaller number of men mainly in technical roles. Recently, men and women have been represented at every level from FA3 to FA8.

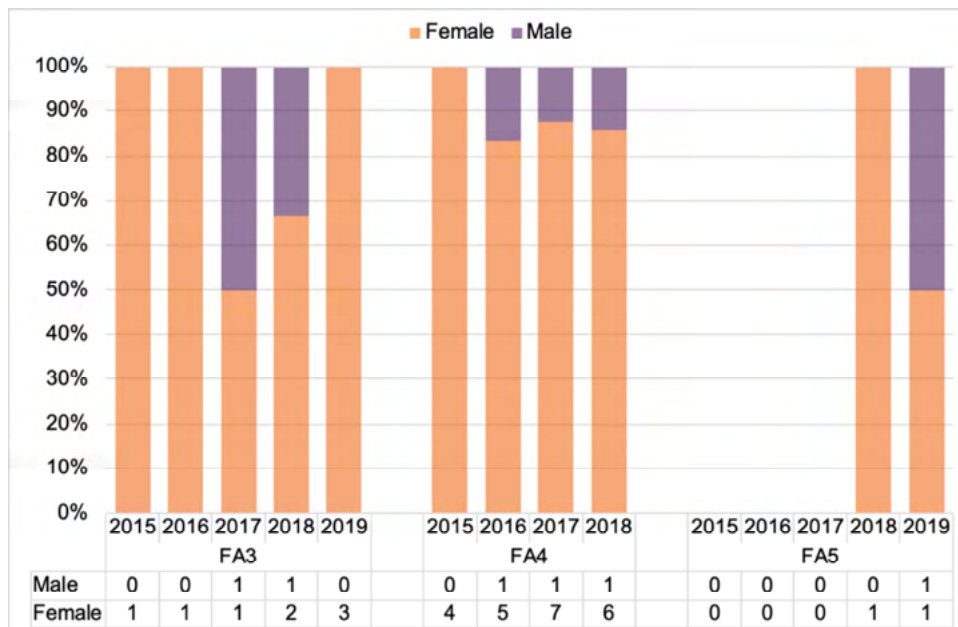


Figure 22: PSS staff FA3-FA5, by level and gender (headcount)



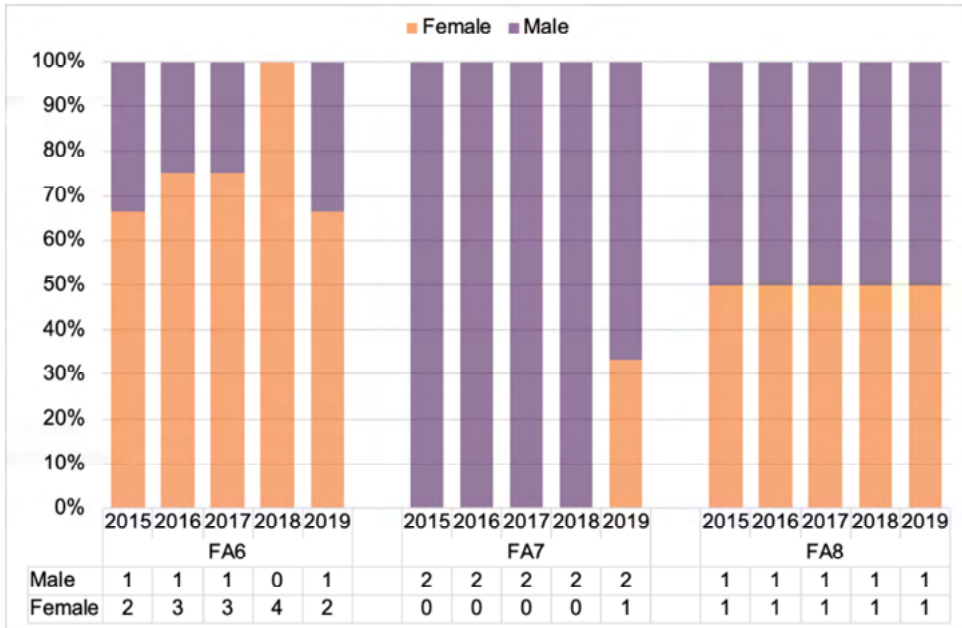


Figure 23: PSS staff FA6-FA8, by level and gender (headcount)

**Figure 24-Figure 28** show the available gender pay gap data for DCS for each salary quartile across all staff groups. The DCS pay gap is higher than the institutional average. It becomes more extreme as salaries increase, and it has not improved over the last three years.

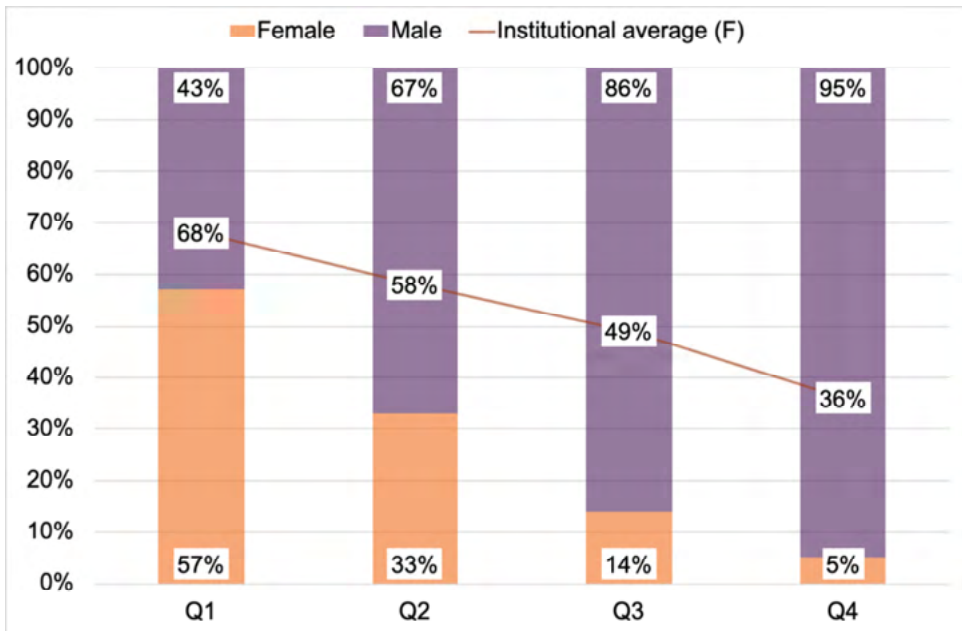


Figure 24: DCS gender pay gap on 31<sup>st</sup> March 2019

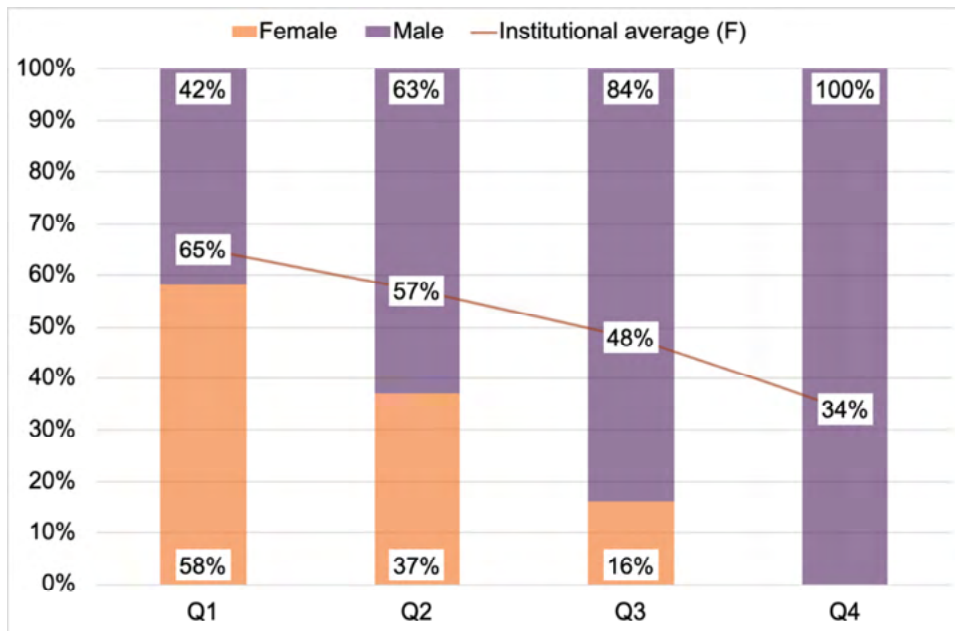


Figure 25: DCS gender pay gap on 31<sup>st</sup> March 2018

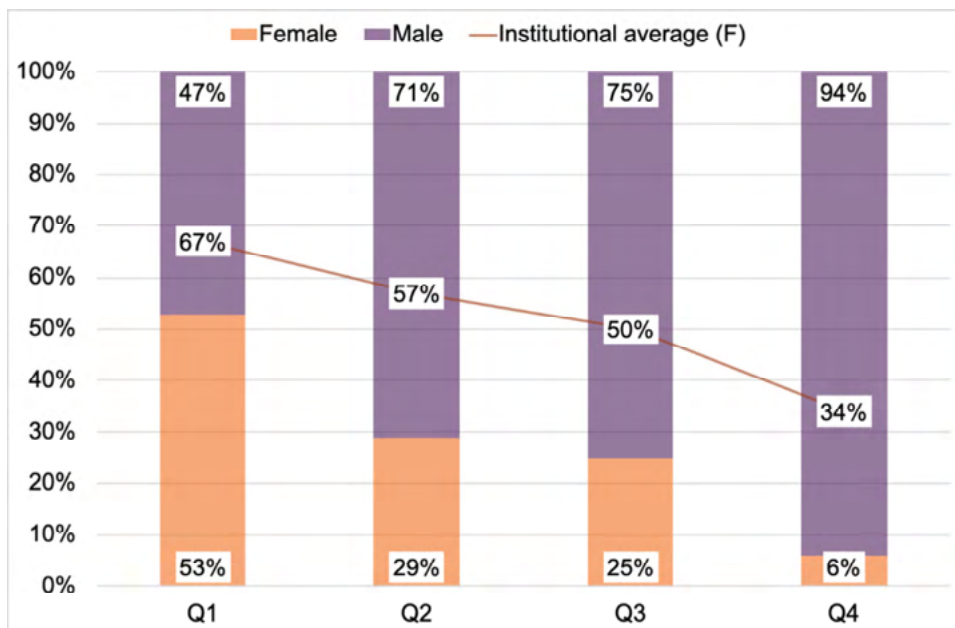


Figure 26: DCS gender pay gap on 31<sup>st</sup> March 2017

Analysis reveals that this gap is structural and is accounted for by women's continued underrepresentation in higher grades and overrepresentation in the lower-paid roles (mainly PSS).

When academic staff and PSS salaries are disaggregated, this becomes clearer (disaggregated UoW figures are not available):

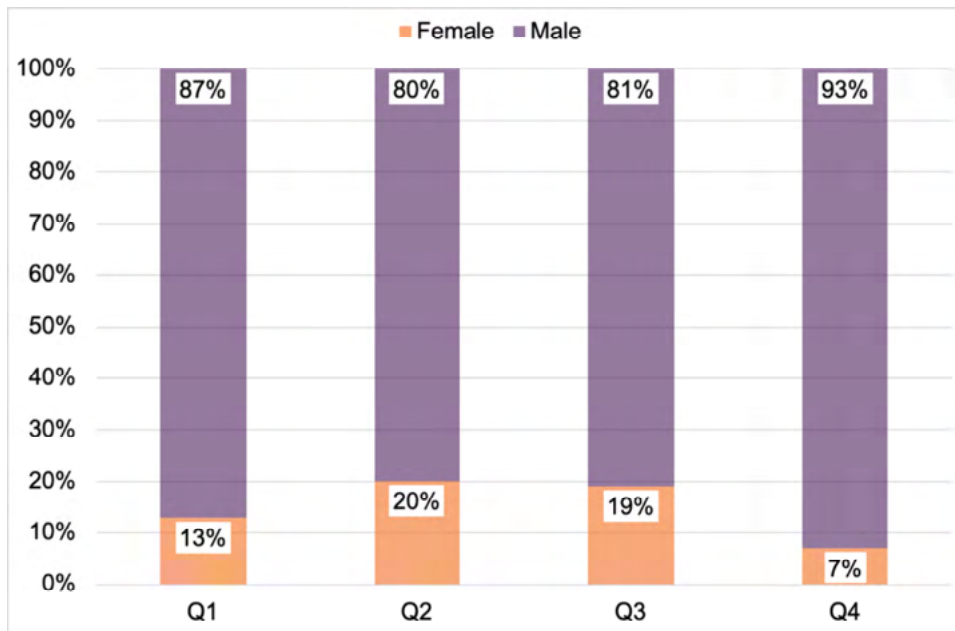


Figure 27: Gender pay gap for 2019, academic staff only

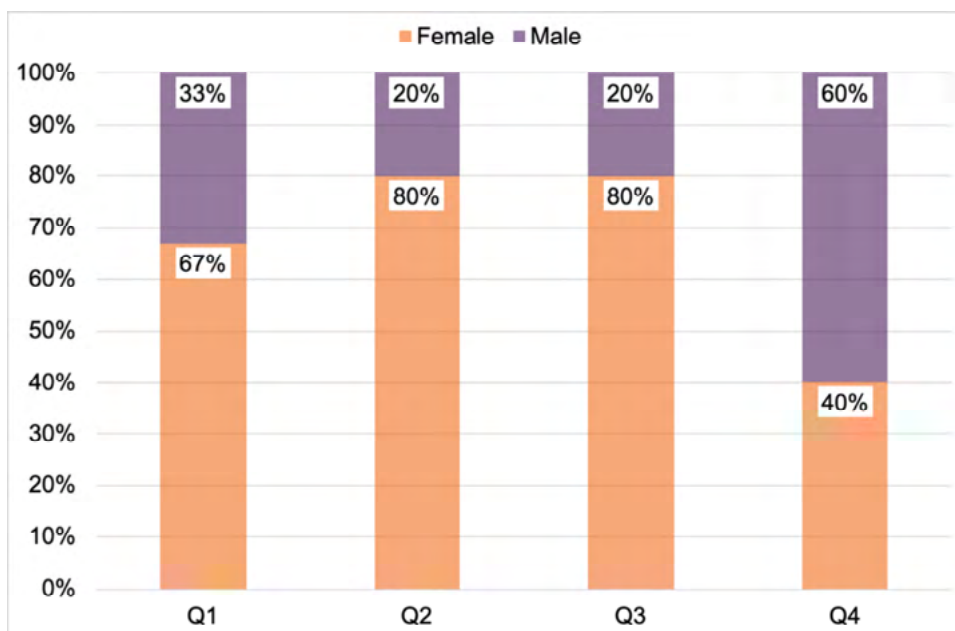


Figure 28: Gender pay gap for 2019, PSS only

**Figure 29** shows the percentage difference between the mean and the median salary of men and women employed at each level. A positive number indicates that the average salaries are higher for men.

Within each level, men are paid slightly more than women, except at FA6, where women have generally remained in post for longer and are higher in the scale. The gap is larger at FA8 (Associate Professor/Reader), where three out of our four Readers are men; and FA9 (Professor), where salaries are individually negotiated and are influenced by length of service.

Due to the persistent and structural nature of our pay gap, it presents a considerable challenge, and DCS will seek institutional support to develop an effective long-term strategy to address it (**Action 4.2.1**).

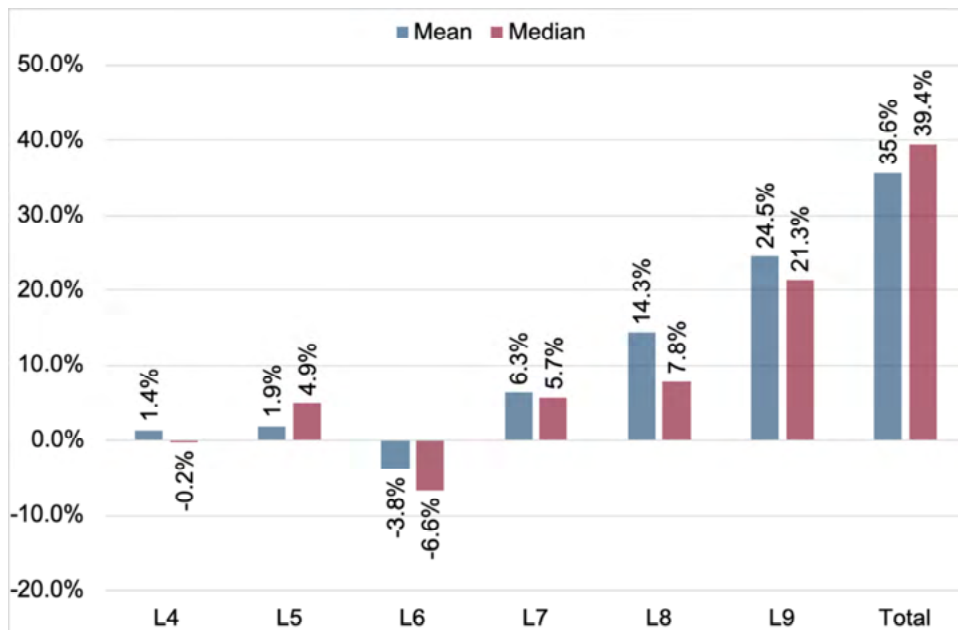


Figure 29: DCS gender pay gap by level, 31<sup>st</sup> March 2019

**Action 4.2.1** Engage with the UoW Pay Action Group in order to identify ways of reducing the gender pay gap at DCS.

#### SILVER APPLICATIONS ONLY

Where relevant, comment on the transition of technical staff to academic roles.

- (ii) Academic and research staff by grade on fixed-term, open-ended/permanent and zero-hour contracts by gender

*Comment on the proportions of men and women on these contracts.*

*Comment on what is being done to ensure continuity of employment and to address any other issues, including redeployment schemes.*

DCS does not employ any staff on zero-hours contracts. Most FTC staff are postdocs (**Figure 30**).

Four months before the end of an FTC, the post-holder meets with their line manager for an end-of-contract consultation. UoW operates a redeployment

scheme, whereby colleagues can be considered for potentially suitable roles before other candidates. However, due to the highly specialized nature of academic research, redeployment opportunities for postdocs are limited. Our main strategy for securing their continued high-quality employment is to help them develop transferrable skills and build their publication record, so that they become highly sought-after candidates for roles across the sector (see **Section 5.3.(iv)**).

Often, the transition to an open-ended contract (OEC) is a critical step in establishing an academic career. In DCS, R&T-focused OECs are offered mainly at FA7. We believe that several factors make it harder to secure these posts:

- Advertisements for permanent positions attract many outstanding applications internationally;
- UK postdocs/Teaching Fellows (at FA6, with less opportunity to demonstrate independence) may not be competitive in this context;
- Competitive female candidates from other countries may be less likely to apply because they may rely more heavily on local support networks.

UoW is developing R&T roles at FA6 which could provide a new pipeline for permanent careers within DCS. This may be especially valuable for women seeking to combine an academic career with the job security desirable when starting a family. We are sensitive to the risk that such arrangements may exacerbate the gender pay gap and slow down women’s career progression. Our proactive promotions process (**Section 5.1.(iii)**) will mitigate those risks by giving junior academics targeted support and encouraging them to apply for promotion as soon as they meet the criteria. We believe that creating R&T opportunities at FA6 (**Action 4.2.2**) and offering proleptic positions (**Action 5.1.5**) may improve retention of women at this critical point in the pipeline where both DCS and the sector struggle.

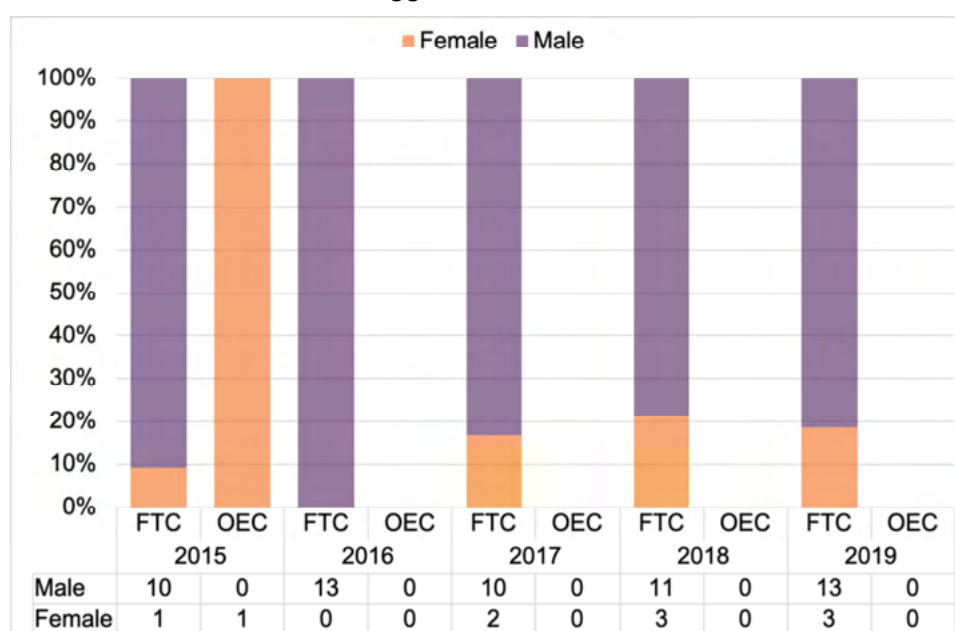


Figure 30: Academic staff at FA5 and FA6 (headcount)

Most academics at FA7 are employed on an OEC on the R&T-focused or T-focused pathway. We also have a small number of Senior Research Fellows on FTCs (see Figure 31).

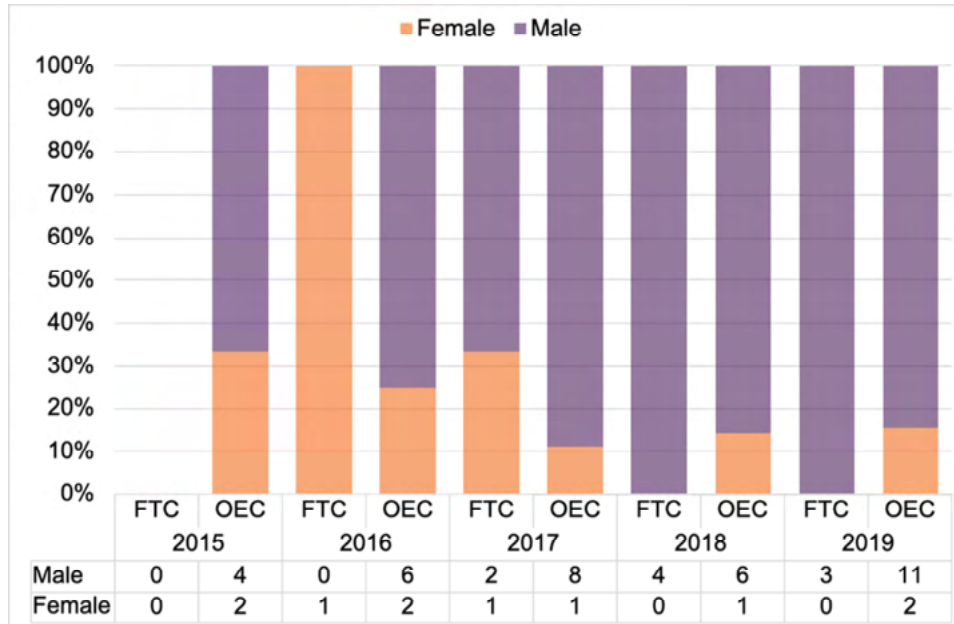


Figure 31: Academic staff at FA7 (headcount)

All staff at FA8 are employed on OECs. This represents the largest group of academics in DCS, currently around 20 mid-career colleagues, ca. 25%-30% female (Figure 32).

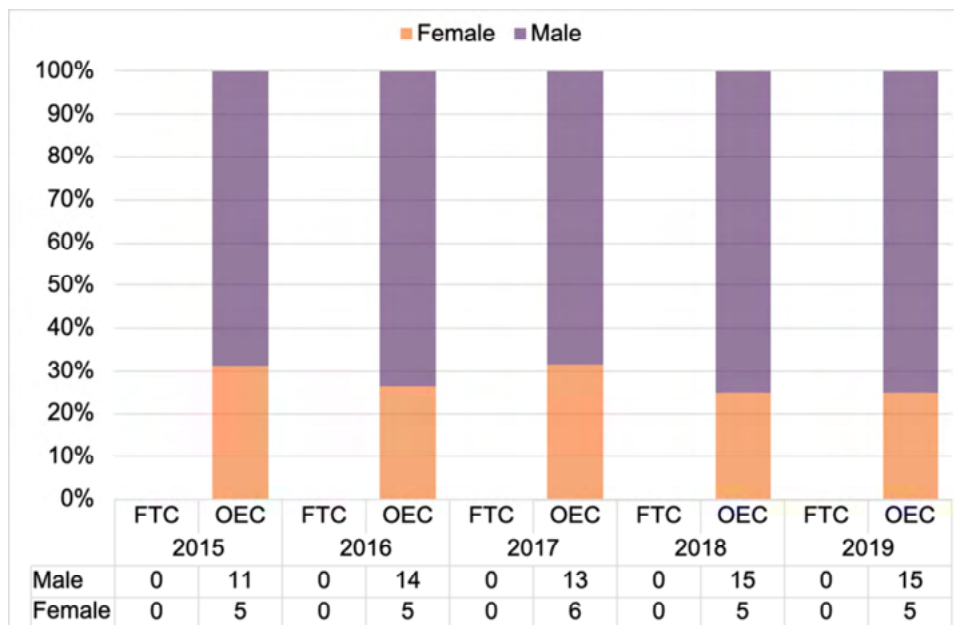


Figure 32: Academic staff at FA8 (headcount)

Most colleagues at FA9 hold OECs. Exceptionally, part-time FTCs have been used to maintain a relationship after a colleague has moved away (**Figure 33**).

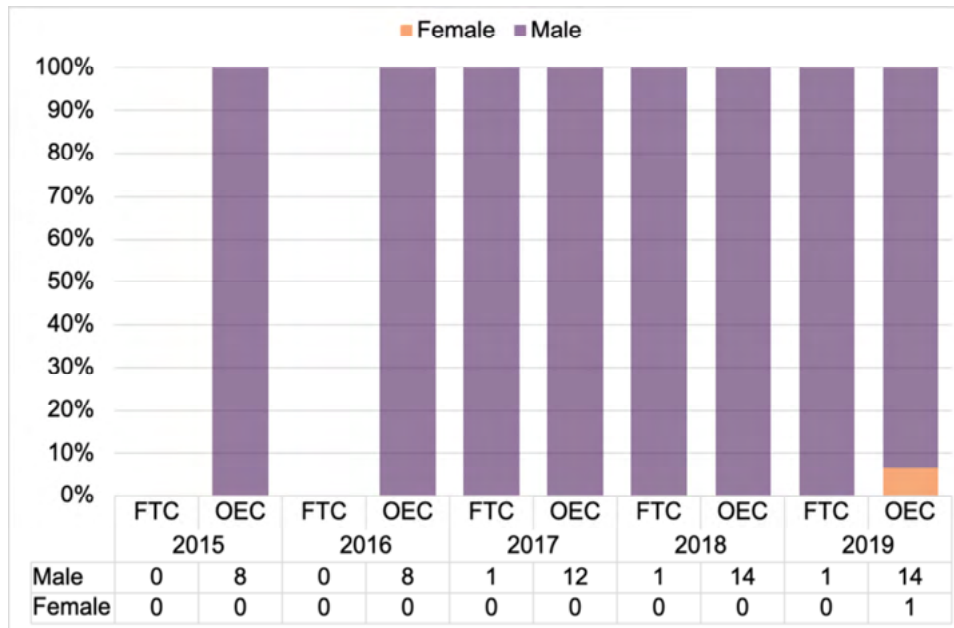


Figure 33: Academic staff at FA9 (headcount)

Most PSS are employed on OECs, however we usually have a few colleagues on FTCs. These are either administrators directly employed on grants or short-term appointments to cover leave. All such posts have been held by women, whereas all male PSS have been employed on OECs (**Figure 34**). PSS are covered by the redeployment policy described above, and PSS on FTCs typically move on to other posts within the University.

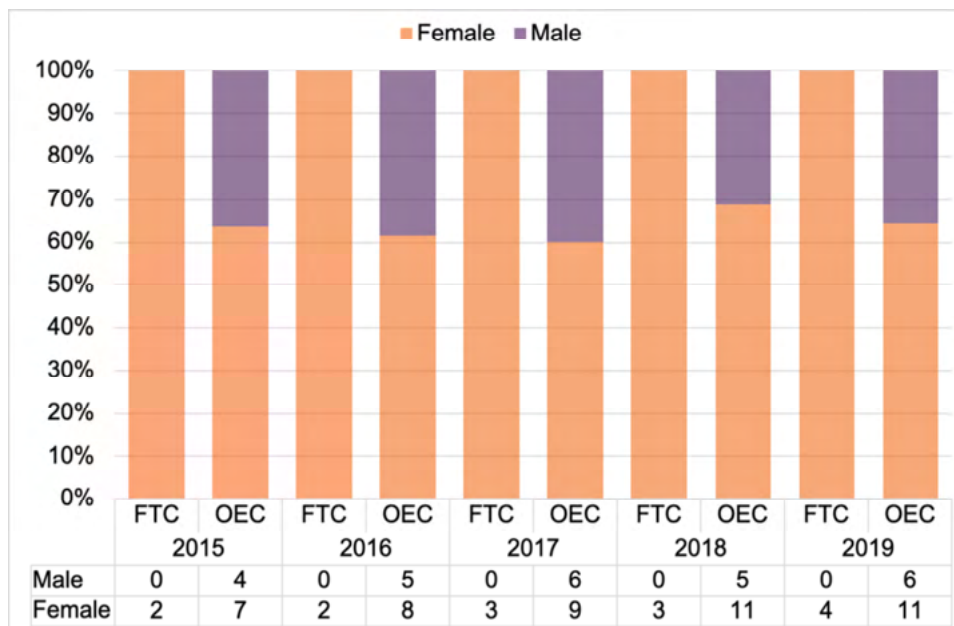


Figure 34: PSS – all levels (headcount)

**Action 4.2.2** Participate in the ongoing development of FA6 R&T-focussed role description and evaluate how such posts would fit within DCS.



(iii) Academic leavers by grade and gender and full/part-time status

*Comment on the reasons academic staff leave the department, any differences by gender and the mechanisms for collecting this data.*

Data on reasons for leaving is collected routinely as part of the UoW HR exit process (**Figure 36** and **Figure 37**). The number of leavers is generally low: an increase in 2018-19 is driven by a higher number of (mostly male) postdocs reaching the end of FTCs, a trailing indicator for more research grants in previous years. Indeed, the most common reason for leaving is completion of a FTC, followed by “career advancement to a new role”. There does not appear to be a significant difference by gender (see **Figure 35**). We have not been informed of adverse reasons for leaving DCS, but we will seek more nuanced information by routinely offering exit interviews (**Action 4.2.3**).

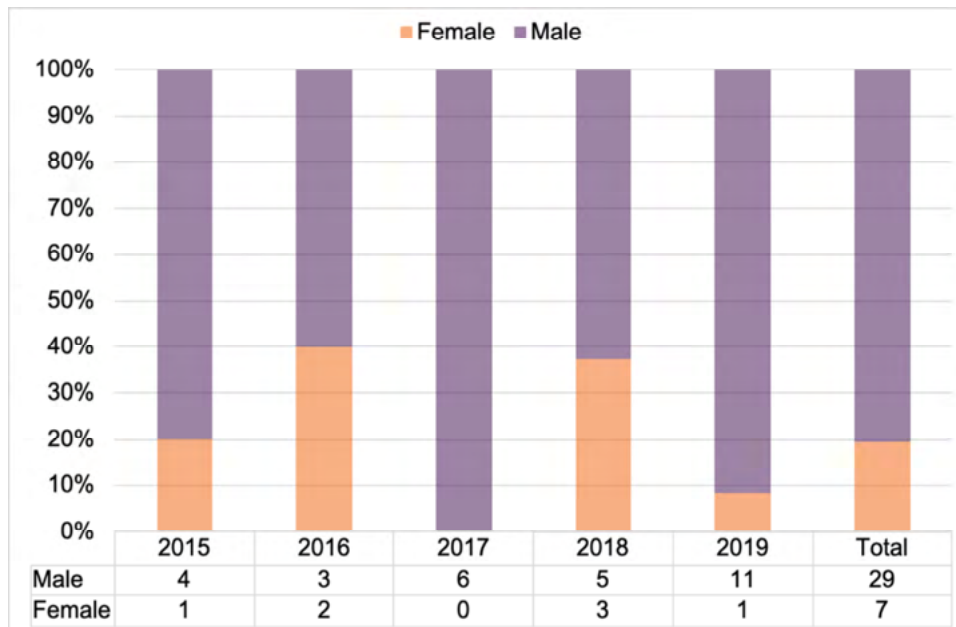


Figure 35: Numbers of academic staff leaving DCS by gender, 2015-2019

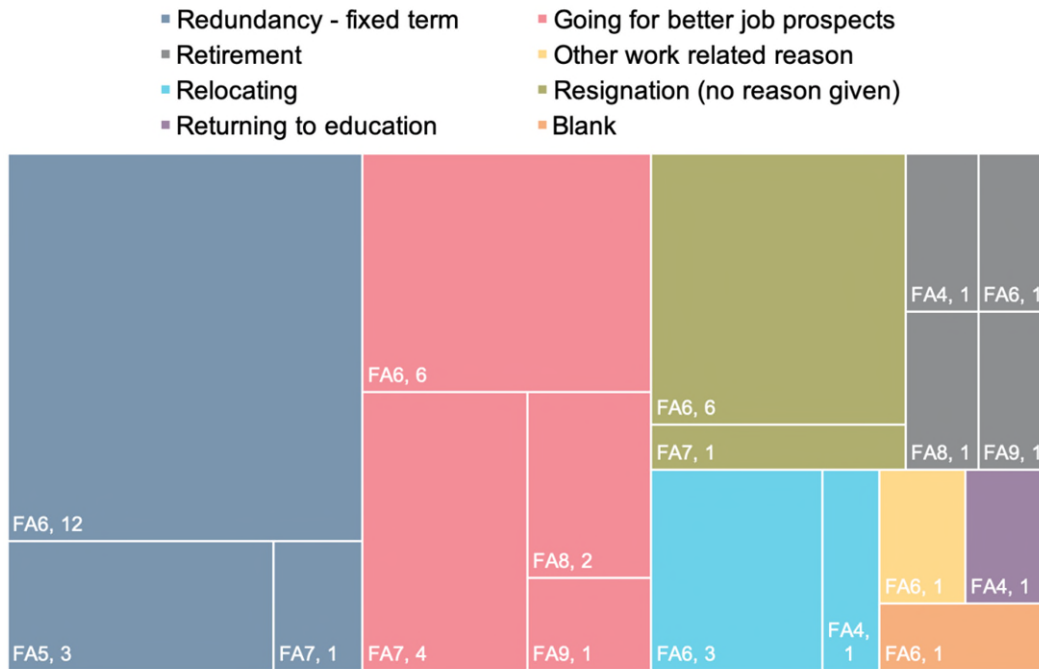


Figure 36: Reasons for academic staff leaving DCS by grade 2015-2019

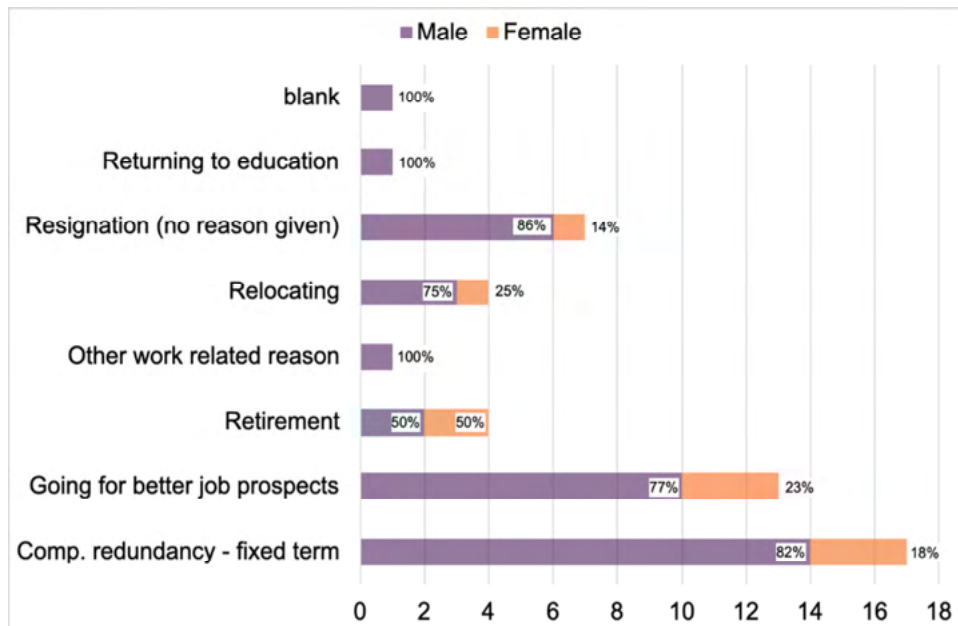


Figure 37: Reasons for academic staff leaving DCS by gender 2015-2019

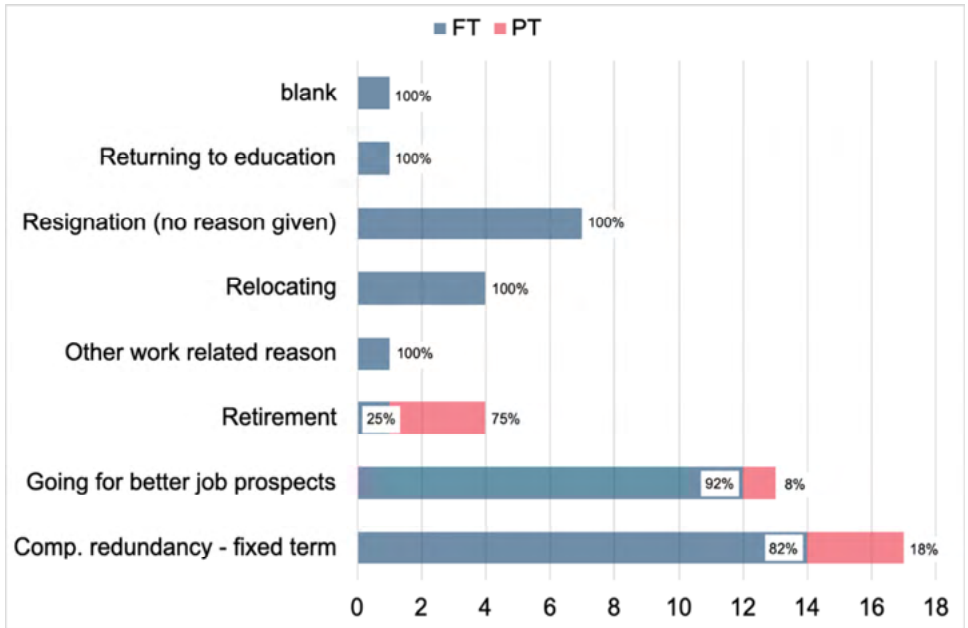


Figure 38: Reasons for academic staff leaving DCS by full/part-time status 2015-2019

**Action 4.2.3** Routinely offer and encourage the take-up of exit interviews when staff leave, in order to address any retention issues and identify opportunities to improve the environment for all our staff, including for intersectional groups of colleagues.

2216 words

## 5. SUPPORTING AND ADVANCING WOMEN'S CAREERS

Recommended word count: Bronze: 6000 words | Silver: 6500 words

### 5.1. Key career transition points: academic staff

#### (i) Recruitment

*Break down data by gender and grade for applications to academic posts including shortlisted candidates, offer and acceptance rates. Comment on how the department's recruitment processes ensure that women (and men where there is an underrepresentation in numbers) are encouraged to apply.*

Inclusive recruitment is a priority for DCS. We state explicitly in advertisements that applications from women and other under-represented groups are welcomed, and that flexible and part-time working is possible.

Training on fair recruitment, unconscious bias and data protection is required of interview panel members. However, take-up has been patchy, and men, especially, are unlikely to undertake unconscious bias training (**Table 11**). We will ensure that, going forward, no colleague sits on a panel without having completed the required training (**Action 5.1.1**).

Training	Completion 2016-2019 (all available data)
Recruitment and Selection	23 members of DCS staff (17M, 6F)
Unconscious Bias	7 members of DCS staff (2M, 5F)
Data Protection (GDPR)	44 members of DCS staff (27M, 17F)

*Table 11: Uptake of recruitment-related training 2016-19*

Diversity, including gender balance, is taken into account when convening interview panels. In the last five years, DCS has not had any all-male panels. Both the Faculty Chair and the Provost are currently female, so panels for R&T-focussed posts from FA7 upwards are always chaired by a woman.

However, the gender profile of our recruitment funnel remains disappointingly skewed. The proportion of women who apply for academic posts (16.6% over the period 2014-19) is lower than the proportion employed in the sector overall (22.3%). The proportion of women who are shortlisted is similar to the proportion who apply, however the proportion who receive an offer is usually lower (2017/18 was a happy exception) (**Figure 39**).

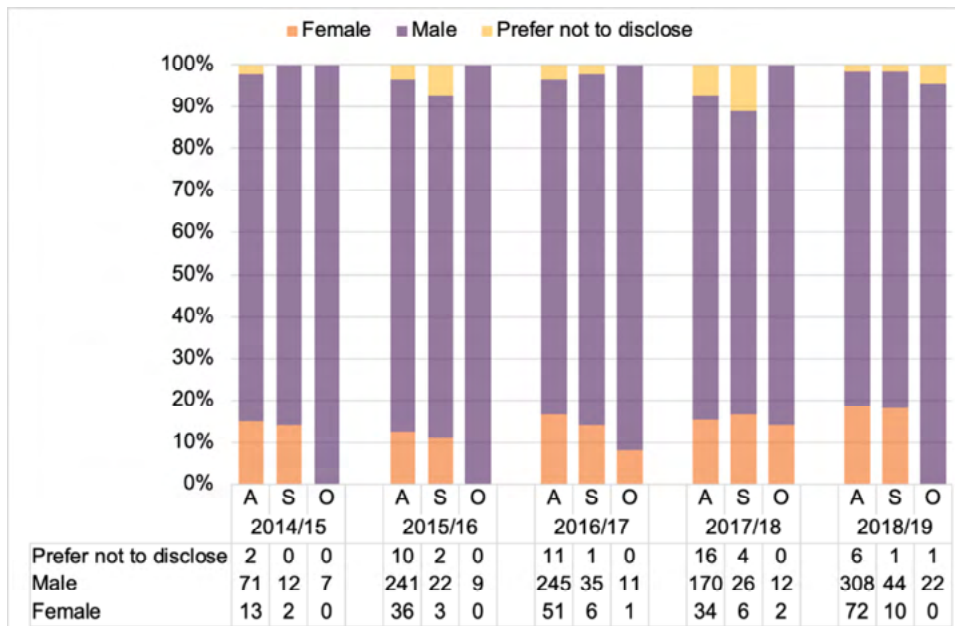


Figure 39: Academic post applications, shortlisting and offers by count/gender. A(Applied), S(Shortlisted), O(Offered)

The following comment from a male academic (2019 AS staff survey) expressed a sense of frustration:

“ We make very little progress and only modest effort to encourage and recruit non-male candidates for new academic positions in the department... [H]iring only one female Assistant Professor... in the last few years is very poor. ”

While certain factors may make it harder to recruit women to permanent academic positions in DCS (see **Section 4.2**), we know that more needs to be done to attract women to apply (**Action 5.1.3**), ensure that their applications are considered fairly (**Action 5.1.2**), and encourage them to accept an offer of employment (**Action 5.1.4**).

We will explore advertising proleptic positions to follow an externally-funded personal Research Fellowship. This may be particularly valuable in providing stability for women, in the context of a highly competitive international recruitment environment (**Action 5.1.5**).

**Action 5.1.1** HoD/HoA to ensure that all members of shortlisting panels and interview panels complete the required training, in particular, on Unconscious Bias, and to strongly encourage completion by other colleagues.

**Action 5.1.2** Wherever possible, for example when advertising for multiple academic positions, where larger numbers of candidates are likely to apply and be shortlisted, interview at least two women at a time.

**Action 5.1.3** Identify further venues for advertisement that may be more successful in reaching female candidates for academic vacancies. Actively identify suitable female candidates and encourage them to apply, using DCS/UoW resources and possibly an external agency.

**Action 5.1.4** Ensure that groups of academic colleagues who engage with applicants during recruitment process (one-to-one meetings and dinners) contain at least one woman.

**Action 5.1.5** Advertise proleptic positions to attract talented individuals at earlier stages of their academic careers.

(ii) Induction

*Describe the induction and support provided to all new academic staff at all levels. Comment on the uptake of this and how its effectiveness is reviewed.*

**IMPACT DELIVERED SINCE 2014**

A DCS induction programme was introduced in October 2016, and was revised in October 2019 in response to staff feedback.

The AS Staff Survey in May 2019 revealed mixed views about the DCS induction, in terms of its content, timeliness and value. For example, one male academic commented:

“ As part time lecturer last year, my induction was offered after term began. This was much too late, and I had already done a lot of chasing to get answers to my questions. ”

52.0% of those who expressed a view said they had “no concerns” about induction, but this may reflect low awareness, since 28.6% of respondents did not answer this question (**Figure 40**).

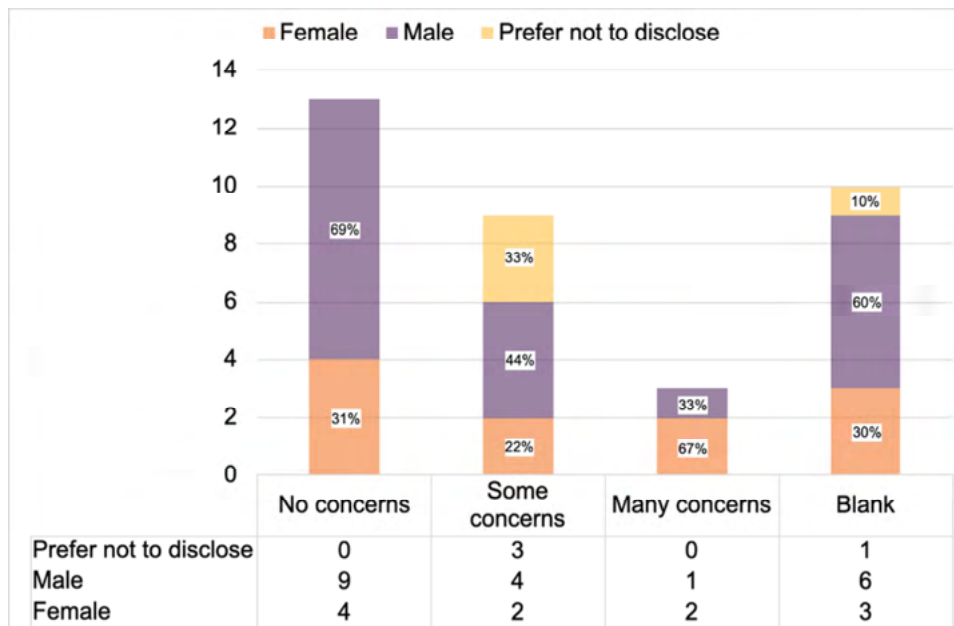


Figure 40: Response to staff survey question about induction

Induction was refreshed in 2018/19 and realigned with University-level induction, which covers key aspects of working at Warwick such as financial regulations, Health and Safety, appraisal and probation, ED&I, and Dignity at Warwick. It includes:

- Meeting with HoD and HoA

- Allocation of departmental mentor(s)
- Tour of Department and campus
- Introduction to colleagues
- Introduction to IT resources and regulations
- Informal session on teaching in the Department
- Personal Tutor training
- Information session on finance

We will monitor uptake and enhance its effectiveness based on feedback obtained (**Action 5.1.8**).

Currently, there is no standard induction for R-focussed staff and their supervisors are expected to provide the necessary support and information. We will fill this gap and provide more consistent provision (**Action 5.1.6**), highlighting availability of intercultural training to address intersectional challenges (**Action 5.1.7**).

**Action 5.1.6** Develop DCS induction for R-focussed colleagues.

**Action 5.1.7** Given the international and multi-ethnic make up of our community, we will signpost intercultural training provided by the Centre for Applied Linguistics, in order to address the intersectional challenges faced by new colleagues.

**Action 5.1.8** Implement mechanisms for monitoring the uptake and effectiveness of the revised staff induction process, initially via a feedback form. After a year, a focus group will be held of new staff, to recommend further enhancements to the process.



(iii) Promotion

Provide data on staff applying for promotion and comment on applications and success rates by gender, grade and full- and part-time status. Comment on how staff are encouraged and supported through the process.

**IMPACT DELIVERED SINCE 2014**

We have established a DCS Promotions Committee. Members are tasked with fostering supportive environments and advising on potential cases for promotion. In 2019/20, 66.7% of promotion applications were from women (up from 16.7% over the period 2014-19).

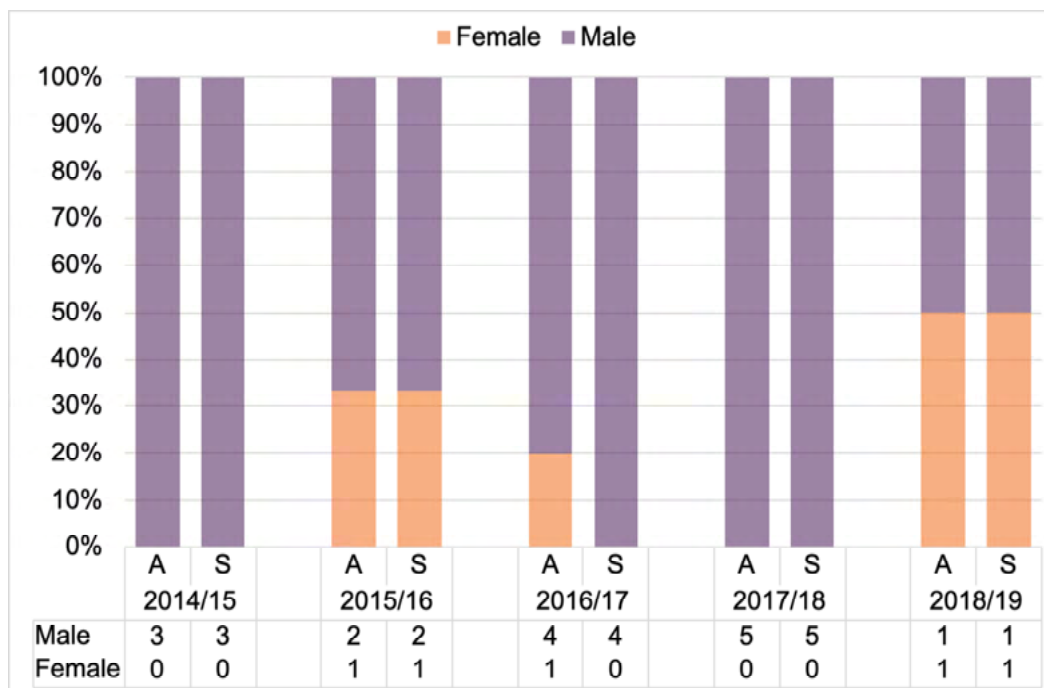


Figure 41: Applications for promotion by headcount/gender. A(Applied), S(Successful)

Year	Level applied for	Applied		Successful	
		Male	Female	Male	Female
2014/15	Reader	2	0	2	0
	Professorial Teaching Fellow	1	0	1	0
2015/16	Professor	1	0	1	0
	Reader	1	0	1	0
	Senior Teaching Fellow	0	1	0	1
2016/17	Professor	3	1	3	0

	Professorial Teaching Fellow	1	0	1	0
<b>2017/18</b>	Professor	1	0	1	0
	Reader	3	0	3	0
	Principal Teaching Fellow	1	0	1	0
<b>2018/19</b>	Reader	1	1	1	1

*Table 12: Applications for promotion by gender/grade. A(Applied), S(Successful)*

Recently, 3-5 promotion cases have been made annually, 16.7% from women. Two of the three women were successful in their applications; the third has taken up a professorial appointment elsewhere, but is still attached as a Visiting Professor. Our priority is to increase the number of applications from women, as success rates are generally high. A breakdown by full-time (FT)/part-time (PT) status is not available.

In 2018/19 the University introduced explicit criteria for promotion, using evidence-based scores (taking into account part-time working and periods of leave), replacing more subjective requirements. This has encouraged women to apply, as it helps clarify chances of success and how to strengthen applications.

Additionally, the HoD now sends annual invitations to apply for promotion to the whole Department, and offers one-to-one meetings for potential candidates (**Section 5.3**).

The DCS Promotions Committee is formed of research theme heads and the most senior T-focussed academics (8M, 1F). Its gender balance should become more even as we implement rotation of research theme heads (**Action 5.3.10**). This Committee will be tasked with being more pro-active in its approach, including providing constructive feedback to those who do not yet meet some of the promotions criteria (**Action 5.1.9**).

In 2019/20, the proportion of promotion applications from women increased significantly, to 66.7% (2M, 4F) in part thanks to a pro-active approach from HoD, which will be continued (**Action 5.1.10**).

In the 2019 AS staff survey, colleagues cautiously welcomed progress, with one female academic reporting that the “new point-based system seems quite good”, while acknowledging that there is still some way to go. A female colleague who did not disclose her staff group commented:

“ We now have one female professor. It seems difficult for female members of staff to reach their full potential. ”

This ambivalence is reflected in the proportion of staff, particularly women, who said they had concerns but could also see things to celebrate.

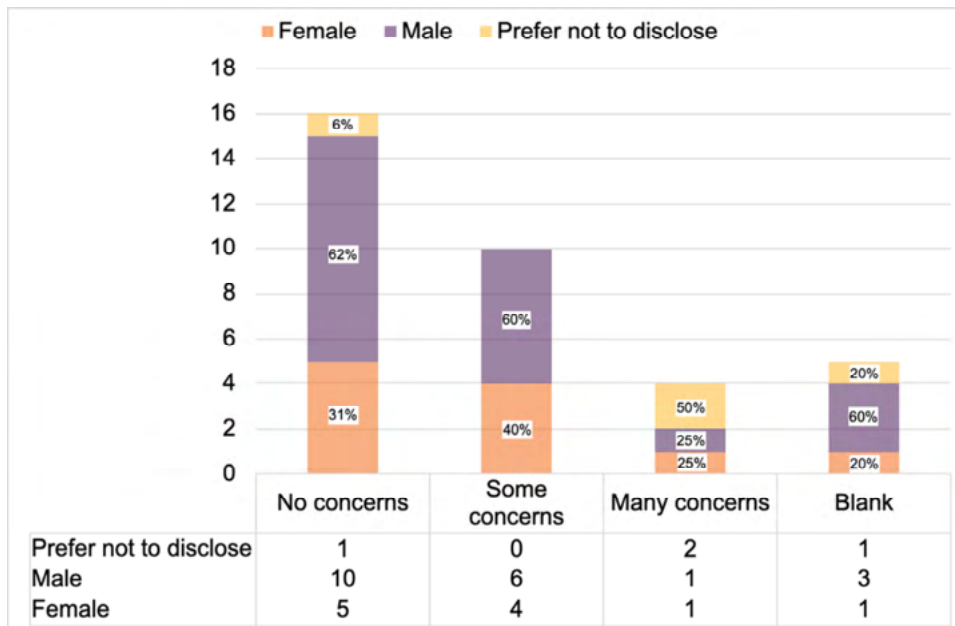


Figure 42: Response to staff survey question about promotion (concerns)

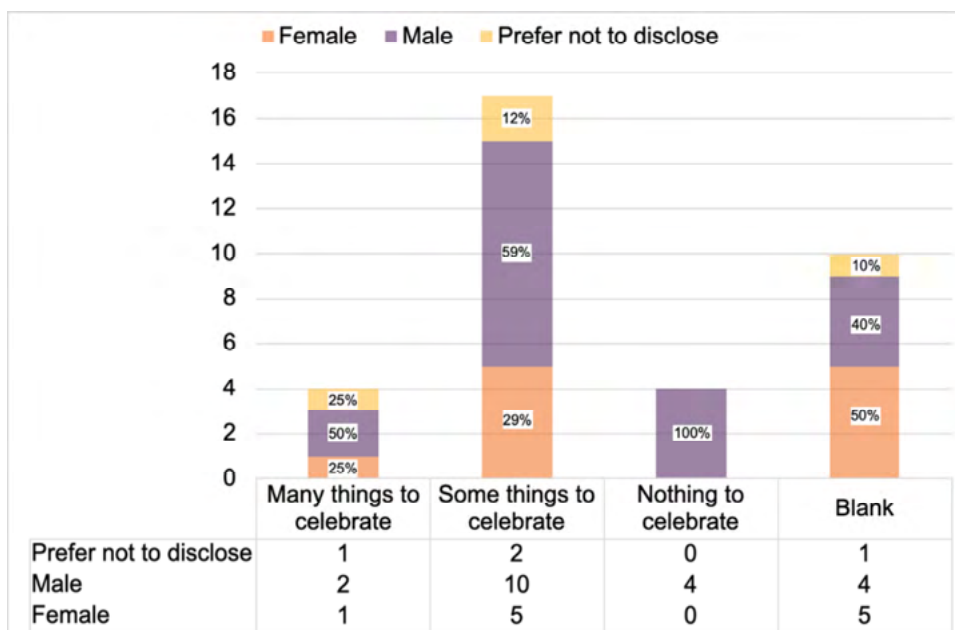


Figure 43: Response to staff survey question about promotion (things to celebrate)

An axis of structural inequality at Warwick is staff group. Assistant Professors are promoted to Associate Professor after completing a 5-year probation. T-focused, R-focused and PSS staff have 20-week probations. For T-focused and R-focused colleagues, promotion is not automatic but on application by merit. T-focused academic staff on OEC would benefit from enhanced probation arrangements analogous to those enjoyed by R&T-focused colleagues (**Action 5.1.11**). Merit-based promotion is not available to PSS, and their main opportunity for advancement is through changing roles. This indirectly discriminates against women, who are over-represented in PSS (**Section 2**).

The HoA and the Technical Manager work actively with PSS to develop their careers within DCS, or within UoW more broadly. This includes providing support for training (including financial support), secondments, and finding mentors outside DCS. Recently, one PSS colleague has been supported to undertake the Warwick Administrative Management Programme every year (our informal quota). The approach works well within the limitations of the system. One female PSS colleague commented:

“ Development is highly encouraged for each individual. I feel the department is a safe environment to discuss goals and plans, and for opportunities to be looked into ”

**Action 5.1.9** The Promotions Committee will proactively seek out candidates for promotion by (1) requesting CVs annually, (2) encouraging suitable candidates to put themselves forward, and (3) providing constructive feedback to people who do not yet meet the criteria.

**Action 5.1.10** The HoD will work with female colleagues whose promotions have recently been successful to make their applications available in the Department to motivate and assist more junior colleagues in preparing theirs in the future.

**Action 5.1.11** Participate in the ongoing review at University level of probation arrangements for T-focussed academic staff.

(iv) Department submissions to the Research Excellence Framework (REF)

*Provide data on the staff, by gender, submitted to REF versus those that were eligible. Compare this to the data for the Research Assessment Exercise 2008. Comment on any gender imbalances identified.*

DCS submitted all eligible staff to RAE 2008. The Department's REF 2014 submission strategy was different, underpinned by: (i) output metrics and the views of external reviewers, and, (ii) the number of impact case studies required (which was dependent on the total FTE of submitted staff). At institutional level, 83% of eligible staff were submitted to REF 2014. From internal DCS records it appears that our submission rate was slightly lower than the UoW average, and that both male and female staff were excluded.

## SILVER APPLICATIONS ONLY

### 5.2. Key career transition points: professional and support staff

(i) Induction

Describe the induction and support provided to all new professional and support staff, at all levels. Comment on the uptake of this and how its effectiveness is reviewed.

(ii) Promotion

Provide data on staff applying for promotion, and comment on applications and success rates by gender, grade and full- and part-time status. Comment on how staff are encouraged and supported through the process.

### 5.3. Career development: academic staff

#### (i) Training

*Describe the training available to staff at all levels in the department. Provide details of uptake by gender and how existing staff are kept up to date with training. How is its effectiveness monitored and developed in response to levels of uptake and evaluation?*

DCS strongly supports training and development for all staff. The University's training and development unit, Organisational Development (OD), provides job-specific training in a number of themes (**Table 13**).

Theme	Examples
Professional training	Academic and Professional Pathway for Teaching Excellence (APP:TE); successful completion confers Fellowship of the Higher Education Academy Academic writing skills
Self-development training	Assertiveness Time Management
ED&I training	Unconscious Bias Recruitment and Selection
Management and leadership training	Warwick Administrative Management Programme (WAMP) Warwick Leadership Programme (WLP)
Compliance training	GDPR Health and Safety

*Table 13: Examples of training provided by OD*

All staff have a training and development plan, updated annually as part of their Personal Development Review (PDR) and supported by their Warwick Learning Account (**Table 14**). Opportunities are promoted to staff via regular OD bulletins and personalized communications from line managers. 84.6% of female and 56.9% of male colleagues engaged with training in the last three years (the period for which data is available). In order to increase take-up, we will learn what training colleagues find most useful (**Action 5.3.2**) and what discourages others from engaging (**Action 5.3.3**).

DCS proactively approaches women to undertake internal and external leadership training. Both DCS colleagues undertaking WLP in 2019/20 are women. A highly selective UoW shadowing and development scheme, aimed at academic staff who aspire to institutional leadership roles, has been promoted to senior female colleagues. DCS is also funding our female Senior Tutor to undertake Advance HE's Aurora Programme in 2019/20.

Percentage Contract	Standard Allowance	Part-time Degree Allowance (For staff who do not already hold a first degree)	Part-time Degree Allowance (For staff who already hold a first degree)
Up to 30% FTE	2 vouchers (up to £140)	Funding up to 30 CATS of study to a maximum of £1,540	Funding up to 15 CATS of study to a maximum of £770
31% to 60% FTE	4 vouchers (up to £280)	Funding up to 60 CATS of study to a maximum of £3,080	Funding up to 30 CATS of study to a maximum of £1,540
61% to 100% FTE	6 vouchers (up to £420)		

*Table 14: Warwick Learning Account allowances*

DCS supplements University-based training to meet areas of identified need. For example, the 2019 AS staff survey revealed a requirement for training regarding the mental health needs of our students:

“ I think there needs to be more training in this area, many of our students have difficulties and we need more training in how to deal with this to provide a consistent approach to caring for our students. ”

In response, DCS engaged an external training organisation, and by December 2019 we will have trained 12 Mental Health First Aiders (5F, 7M) (**Action 5.3.1**). DCS has also paid entirely or contributed significantly towards fees for qualifications. A female academic was supported to undertake an MA in Computational Arts at Goldsmiths, from 2017-2019, and a male PSS colleague to undertake an HNC/HND in Electrical and Electronic Engineering, from 2016-2019. We anticipate funding at least one further PSS colleague to start an accountancy qualification in 2019/20.

**Action 5.3.1** Offer Mental Health First Aid training to student-facing staff members at DCS.

**Action 5.3.2** Hold externally facilitated focus groups with female academic staff to identify the training they have found useful for career development, to learn from their experience and promote this, and similar, training further.

**Action 5.3.3** As part of PDRs, but also through other channels, consult with staff about their reasons for engaging or not engaging with training; identify any trends by gender and job role/staff group; and develop further actions to address any inequalities if necessary.

(ii) Appraisal/development review

*Describe current appraisal/development review schemes for staff at all levels, including postdoctoral researchers and provide data on uptake by gender. Provide details of any appraisal/review training offered and the uptake of this, as well as staff feedback about the process.*

DCS works within the UoW PDR framework, which enables all staff to have an annual conversation with an experienced senior colleague about their achievements, development and career aspirations. For PSS and postdocs, the reviewer is typically their line manager. For other staff, the reviewer is usually the head of their research theme or another senior colleague. Staff are explicitly asked to reflect on how they have furthered the ED&I agenda in their work.

Uptake has been stable over the last three years, and averages 74.6% for women and 56.1% for men. The gender split is similar across staff groups.

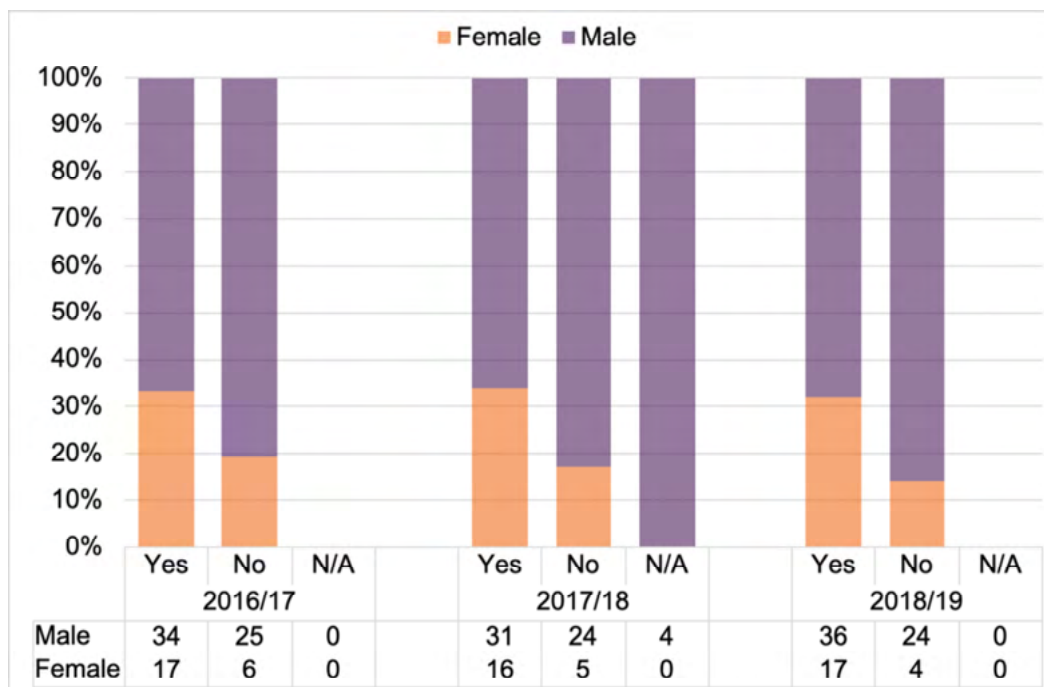


Figure 44: Uptake of PDR by count/gender

All reviewers are expected to complete formal training. New reviewers are encouraged to read a “How-to” guide and complete a Moodle course. Experienced reviewers are provided with a variety of resources, including workshops and online videos, to introduce them to developments in the PDR process and provide useful refresher information. PDR training is also available for reviewees.

Data is not available on take-up of the full range of training on offer. However, the uptake of Moodle training is low (see **Table 15**) and the HoD will work to significantly increase it (**Action 5.3.4**).



Training	Completion 2016-2019 (all available data)
PDR training for reviewers	3 members of DCS staff (2M, 1F)
PDR training for reviewees	7 members of DCS staff (5M, 2F)

*Table 15: Completion of PDR training*

In the 2018 Pulse survey, the statement “I believe that my PDR assists me with my longer-term career development” received the third-lowest proportion of positive responses in DCS, at 47% (although 22% higher than the previous survey, and higher than benchmarks). Consequently, the HoD now solicits preferences from academic colleagues and attempts to match them with suitable reviewers.

In the 2019 AS staff survey, only four comments were made about PDR, and the following (from a male academic) summarises the sentiment:

“ Value very dependent on reviewer, so mixed usefulness. ”

**Action 5.3.4** Communication from HoD to encourage uptake of PDR-related training, in order to help colleagues enhance their ability to give and receive meaningful feedback.

(iii) Support given to academic staff for career progression

*Comment and reflect on support given to academic staff, especially postdoctoral researchers, to assist in their career progression.*

Postdocs are encouraged to acquire transferable skills to support a successful future career, whether at Warwick or elsewhere. For example, they:

- Engage in development and networking opportunities;
- Contribute to teaching, where this is compatible with their funding and appropriate for enhancing their career prospects.
- Take OD courses in academic writing, presentations, and making successful grant applications
- Attend the teaching and research presentations for FA7 selection events, so that they can gain an insight into recruitment to a permanent academic position.

Although the careers of our former postdocs are not systematically tracked, reports are positive, with many postdocs acquiring permanent academic positions at other institutions.

Assistant Professors are allocated mentors within DCS, and they can select additional mentors from elsewhere in UoW. Teaching load is reduced during probation. Regular meetings are arranged with the mentor and HoD to ensure that suitable progress is being made, and to offer support and advice where needed. The HoD proactively encourages colleagues to consider whether they are ready to be put forward for early completion of probation.

Similar opportunities are available, although not compulsory, for more senior colleagues (FA8/FA9).

An important locus of support for academic career progression are the research themes, which arrange regular seminars, workshops, visitors and trips to international conferences, thereby helping postdocs develop global professional networks. In addition, FSEM runs an annual Postdoctoral Research Prize competition, encouraging excellence and boosting achievement records.

All major academic administrative roles in DCS now have deputies, providing development opportunities for junior academics. Further to this, we will promote the practice of including observers in interview panels, where UoW policy requires that formal members are at more senior grades (**Action 5.3.5**).

**Action 5.3.5** The HoD will promote the practice of allowing observers on interview panels, in order to help junior colleagues develop skills that will enable them to progress, and to give them an insight into the requirements for appointment to more senior grades.

(iv) Support given to students (at any level) for academic career progression

*Comment and reflect on support given to students at any level to enable them to make informed decisions about their career (including the transition to a sustainable academic career).*

All UG students take the following modules:

- First year *Professional Skills* course, introducing legal and ethical issues, research methods and dissemination.
- Third year individual research project on a topic of their choosing, under an academic supervisor.

UGs at Warwick can participate in the *Undergraduate Research Support Scheme* (URSS) which funds students to undertake a summer research project. Since 2014/15, 23.1% of DCS participants have been female (higher than the proportion of female UGs in DCS - 13.5% - although numbers are low):

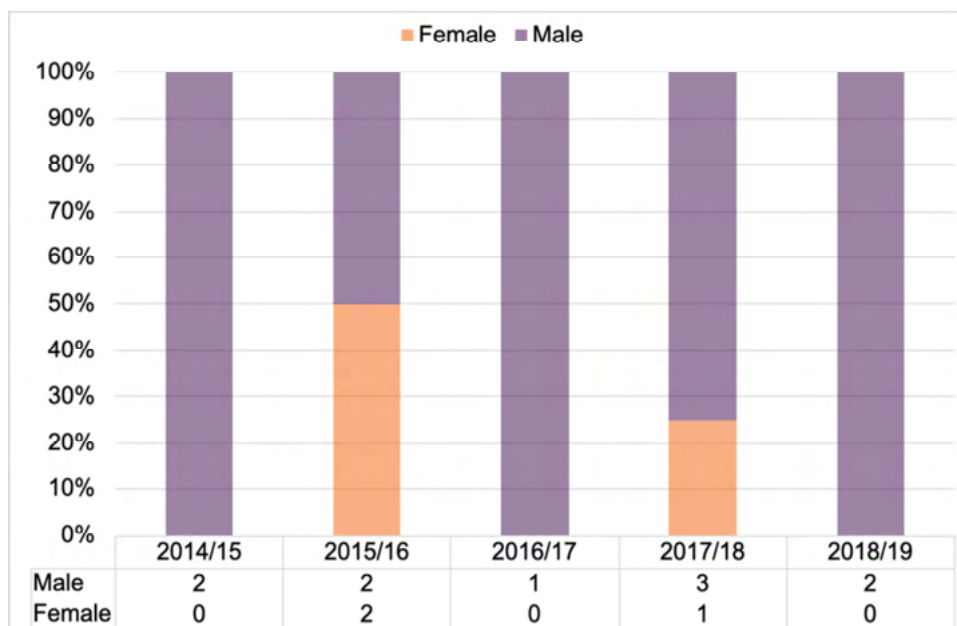


Figure 45: Uptake of URSS by count/gender

This scheme provides UGs with valuable experience of research that can encourage to them to embark on an academic career. At least three URSS students have co-authored research publications with their academic supervisor recently (2M, 1F), and one female participant started a PhD in DCS in 2018/19.

PGT students take the following modules:

- *Research Methods*, giving an overview of the research process, from developing a proposal to reviewing and critically analysing the literature.
- A dissertation accounting for one third of their overall mark.

Students who express an interest in an academic career are signposted towards PhD opportunities, and an annual briefing session outlining the PhD experience, involving current PGR students.

PGR students benefit from one-to-one support and discussion about careers, either with their academic supervisor or with their advisor with whom they can discuss their work and career progression generally.

PhD students funded by DCS have an annual allowance of £2,000 for equipment and travel. They are encouraged to participate in workshops and conferences to develop networks that will assist them in establishing an academic career, if this is their goal.

We explicitly encourage our PhD students to publish, and we expect, informally, that every PhD student will produce at least three internationally recognised publications. PhD students may be employed as part-time Research Assistants, and they may take up full-time employment as postdocs after they finish. PhD students can gain experience of teaching, and two of our former PhD students obtained Teaching Fellow/Senior Teaching Fellow positions in DCS in 2018/19 (2M). Similar opportunities are open to final-year MEng students, who gain experience as laboratory demonstrators.

PhD students are encouraged to engage with careers support offered by UoW, via courses organised by the Doctoral College, or the more formal three-year Postgraduate Certificate in Transferable Skills. This covers:

- Academic writing
- Publication strategy
- Project management
- Presentation skills
- Imposter syndrome and self-sabotage (disproportionately affecting underrepresented students considering academic careers).

Further career guidance is presented in the Research Degree Handbook and at DCS and UoW induction meetings.



*Figure 46: DCS PGR induction September 2019, Heythrop Park*

PG students are invited to attend the Computer Science Colloquium, featuring frequent talks by prominent international researchers. We will seek ways to further enhance their collaborative research environment (**Action 5.3.7**).

The PG-led Warwick Women in Science promotes all aspects of Women in Science, through a university-wide network and events.

We will drive improvements in culture for early career academics, at DCS and nationally, by participating in the Reimagining Recruitment project at Bath University funded by EPSRC Inclusion Matters.

**Action 5.3.6** Actively promote the URSS scheme to female UG students.

**Action 5.3.7** Solicit annual feedback from PhD students on the research environment in the department with a view to customising the support offered.

**Action 5.3.8** Organise Collaborative Incubator workshops where Early Career Researchers and established academics can interact on current research.

(v) Support offered to those applying for research grant applications

*Comment and reflect on support given to staff who apply for funding and what support is offered to those who are unsuccessful.*

IMPACT DELIVERED SINCE 2014

The success rate for grant applications submitted by female Principal Investigators has increased from 18.2% to 43.8% over the period 2014-19.

Support for staff applying for research funding is located largely in the research themes. Research theme heads help their members:

- Develop a funding strategy and submit applications;
- Provide constructive feedback and support for revision and resubmission when applications are unsuccessful;
- Facilitate peer feedback within the theme.

Until recently, most research grants in DCS, both in terms of number (**Figure 47**) and value (**Figure 48**), were held by men.

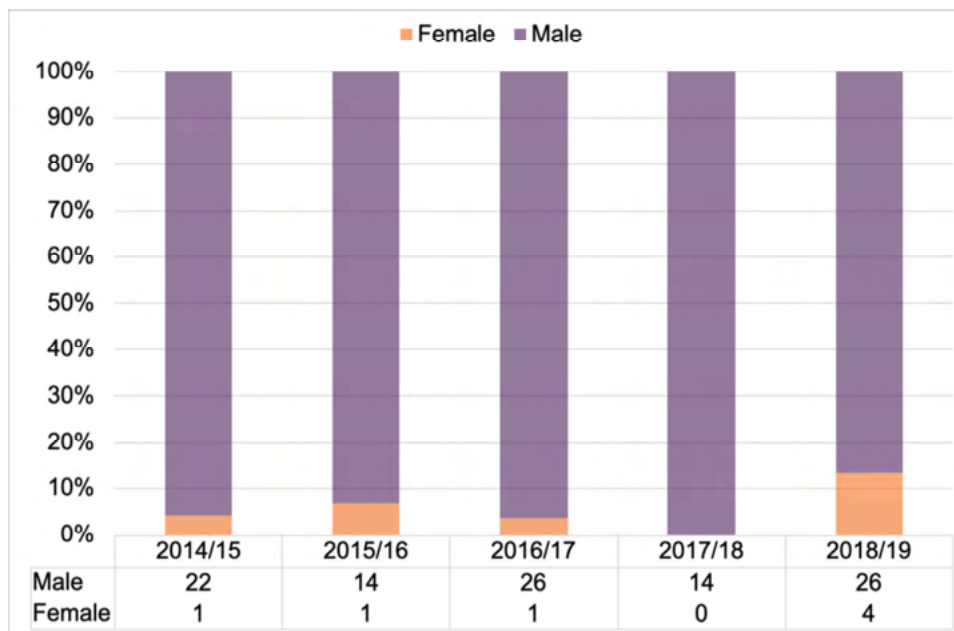


Figure 47: Awards by count/gender

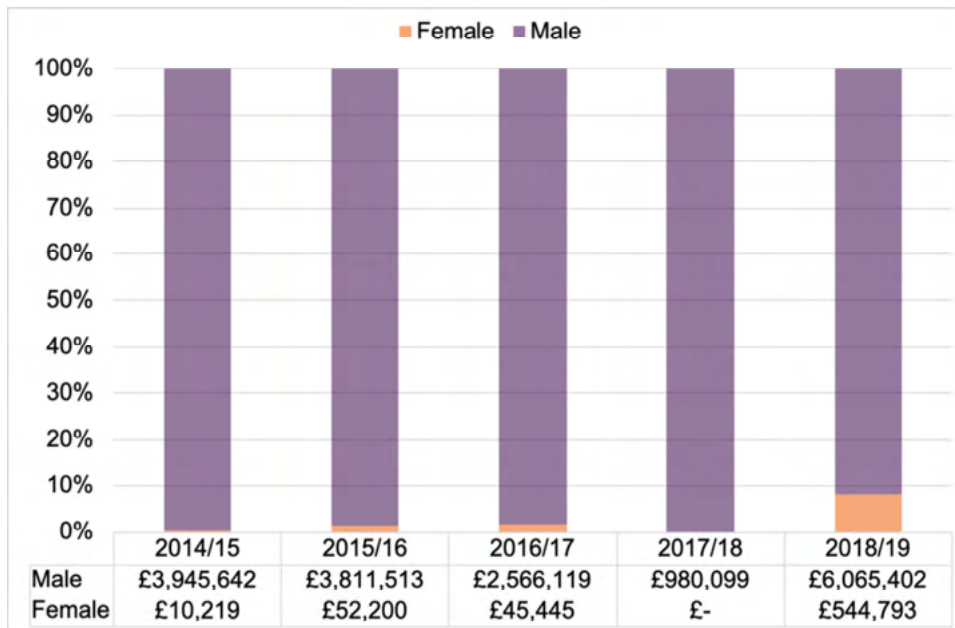


Figure 48: Awards by value/gender

This partly reflects the gender balance in senior academic positions. Furthermore, senior women have historically held leadership positions related to teaching rather than research, which may have made it more difficult for them to win grants.

Women have been submitting grant applications (**Figure 49** and **Figure 50**), however the success rate has been lower than that of male applicants (**Figure 51**).

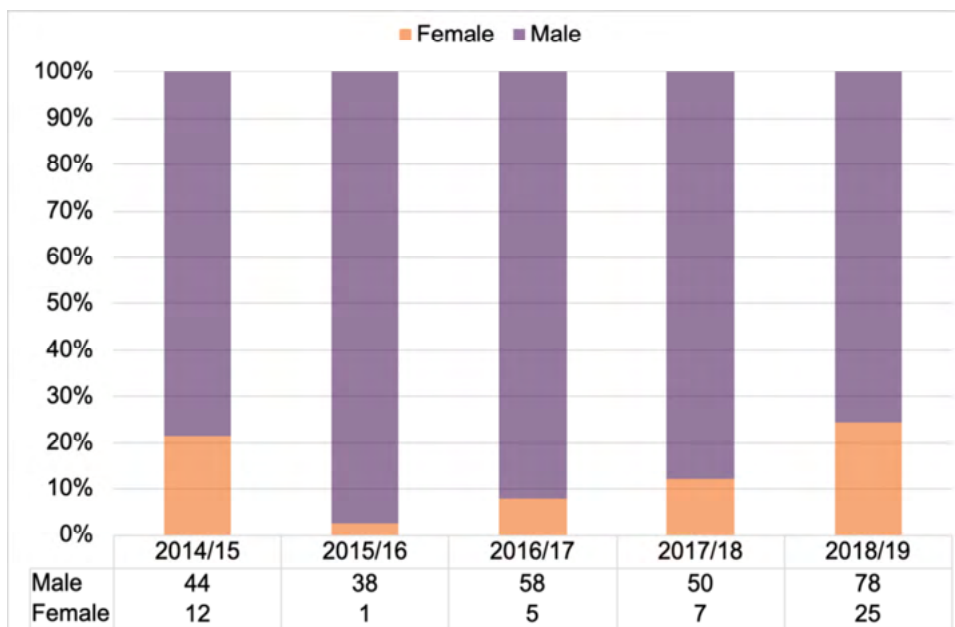


Figure 49: Applications by count/gender

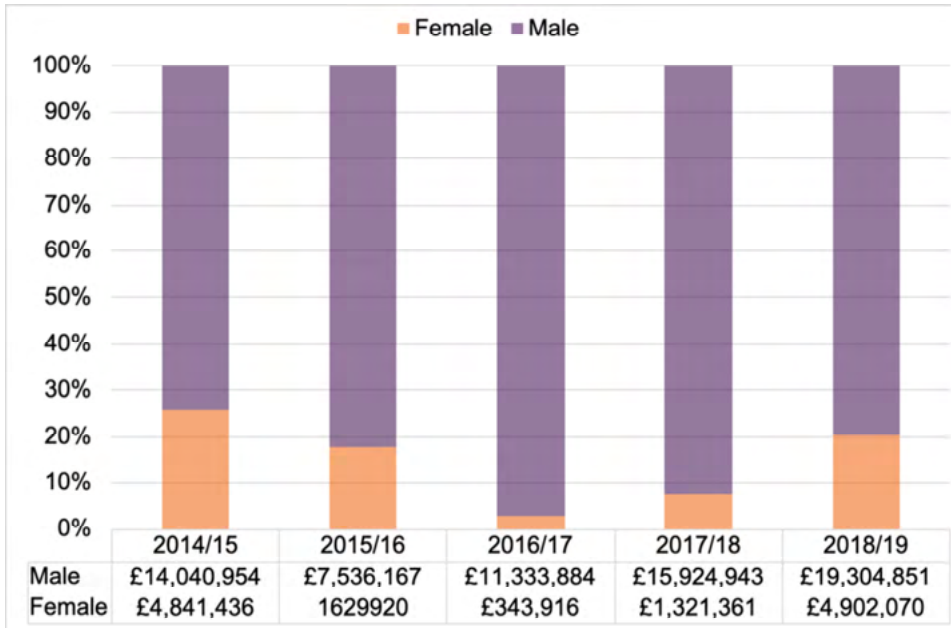


Figure 50: Applications by value/gender

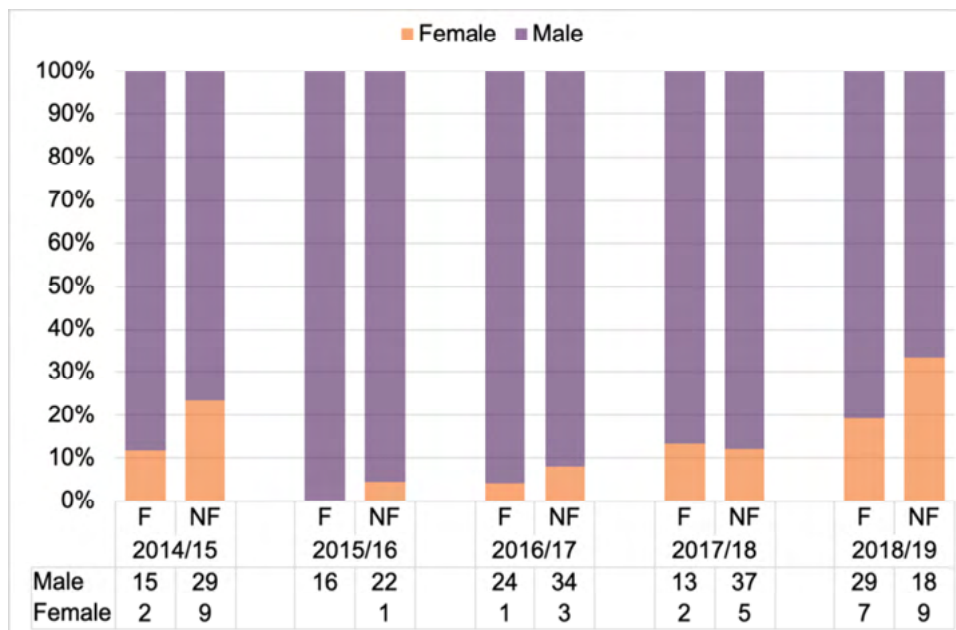


Figure 51: Success rates by gender. F(Funded), NF(Not Funded)



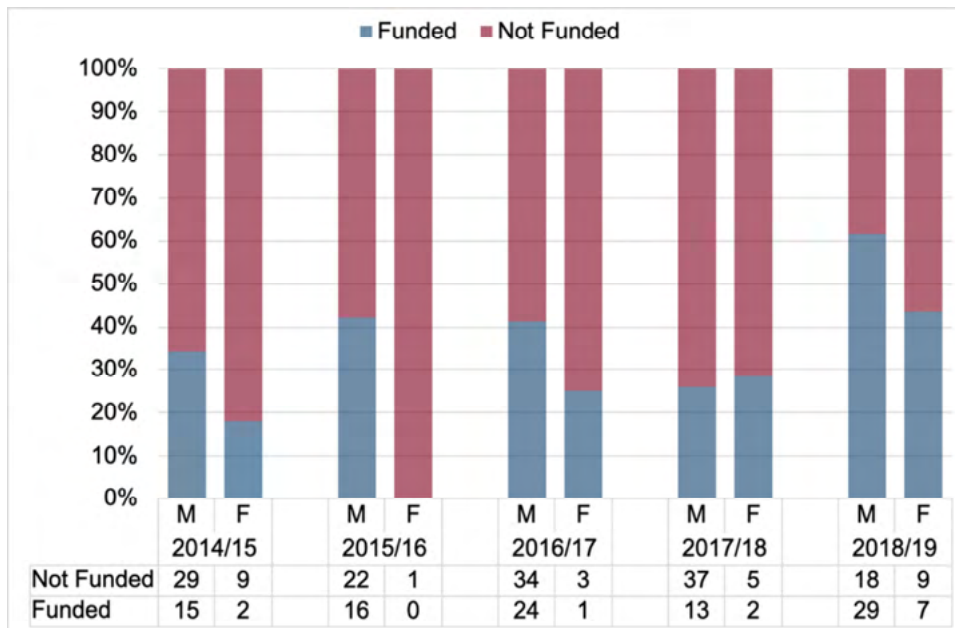


Figure 52 Success rates by count

This situation is changing. Some recent high-profile awards in the Department are to female Principal Investigators, including a five-year Turing-AI Fellowship to Dr Maria Liakata (£1.33M), and a three-year MRC-funded grant to Dr Yulia Timofeeva (£357k). Professor Yulan He also holds grants from Innovate UK and the European Commission.

Feedback from the AS staff survey in May 2019 indicates that the theme-led approach to fostering excellent research is working well in places, as expressed in this comment from a female academic:

“ Research-wise it is a very inspiring department, very dynamic, and I love to see people in corridors solving problems on white boards and discussing. ”

However the gender differential in grant funding leads us to question whether this experience is universal. Some respondents in the staff survey were less happy, as summarised by a male academic:

“ In my opinion, an even more important question ... is whether there is a sufficient team spirit in developing and appreciating each other's research in the department. ... People just don't seem to even find time to talk research to each other, not to mention appreciating each other's work or collaborating in good faith. ”

We will address these issues by reviewing the governance and operations of the research themes (**Action 5.3.9, Action 5.3.10**) and by tasking Research Strategy Committee with sharing and further developing best practice across DCS (**Action 5.3.11**).

**Action 5.3.9** Hold externally facilitated focus group to obtain feedback from academics, especially junior and/or female academics on how happy they have been with support in their research themes.

**Action 5.3.10** Review the structure and governance of research themes to include Terms of Reference, rotating leadership, and the introduction of deputy Heads of Theme.

**Action 5.3.11** Develop Research Strategy Committee as a forum for sharing good practice among different research themes.

#### SILVER APPLICATIONS ONLY

#### 5.4. Career development: professional and support staff

(i) Training

Describe the training available to staff at all levels in the department. Provide details of uptake by gender and how existing staff are kept up to date with training. How is its effectiveness monitored and developed in response to levels of uptake and evaluation?

(ii) Appraisal/development review

Describe current appraisal/development review schemes for professional and support staff at all levels and provide data on uptake by gender. Provide details of any appraisal/review training offered and the uptake of this, as well as staff feedback about the process.

(iii) Support given to professional and support staff for career progression

Comment and reflect on support given to professional and support staff to assist in their career progression.

## 5.5. Flexible working and managing career breaks

Note: Present professional and support staff and academic staff data separately

### (i) Cover and support for maternity and adoption leave: before leave

*Explain what support the department offers to staff before they go on maternity and adoption leave.*

Staff complete a “Maternity and Adoption Leave Plan” and discuss plans for their leave, any relevant risk assessments, and University entitlements with their line manager and the HoA. This includes discussing how to communicate while the individual is away.

Arrangements are made for covering workload during the period of leave, with appropriate hand-overs, as follows:

Professional activity	Cover arrangements
Teaching	Reallocation of modules, personal tutees and project students
Research (postdocs)	An FTC may be offered, or the project may be suspended while the individual is on leave
PSS	An FTC is offered to cover the period of leave

Where a project needs to be suspended when a postdoc takes leave, that individual may be disadvantaged as they lose time to produce research outputs. If the source of funding does not permit suspending the project for the duration of the leave, the resulting career disruption may be very severe. DCS will explore ways of mitigating this using internal resources (**Action 5.5.1**).

**Action 5.5.1** Explore how to mitigate the impact of maternity and adoption leave on postdocs, for example by extending their contract beyond the end of the project, if the project is not suspended.

### (ii) Cover and support for maternity and adoption leave: during leave

*Explain what support the department offers to staff during maternity and adoption leave.*

During parental-type leave, DCS communicates with the individual as agreed. Departmental involvement is flexible, and may include, for example:

- Keeping in Touch (KIT)/Shared Parental Leave In Touch (SPLIT) days
- Continued presence on email distribution lists
- Meeting colleagues for coffee.

Both KIT and SPLIT days were taken up by members of staff in the past five years, in some cases at sites of collaborators away from campus. DCS worked with the other institutions to facilitate this.

In the 2019 AS staff survey, 83.3% of respondents (including 100% of women) reported that they had “no concerns” about arrangements for ML and the management of cover, although some respondents reported concerns about the transparency of cover arrangements and managing the expectations of colleagues and students.

We will address this issue as part of a broader question about communication around flexible working arrangements (see **Section 5.5(vi)**).

(iii) **Cover and support for maternity and adoption leave: returning to work**

*Explain what support the department offers to staff on return from maternity or adoption leave. Comment on any funding provided to support returning staff.*

All academic staff meet with the HoD when they return to work. PSS meet with the HoA or the Technical Manager. DCS supports returning staff formally and informally, via, for example:

- Flexible working patterns
- Teaching slots to suit specific needs
- Making UoW Central Timetabling aware of returners to ensure that returning staff are not timetabled to teach after 5pm
- Using accrued Annual Leave to ease transition
- Teaching is scheduled and administrative duties are allocated to accommodate reasonable constraints arising from having a young child.

UoW introduced the Warwick Academic Returner’s Fellowship in 2015 in order to mitigate the disruption caused to a research career by parental-type leave. The Fellowship buys out the individual’s normal teaching and administrative tasks, enabling a full focus on research for a period equivalent to the duration of the leave. The Fellowship is available to staff of any gender in R&T-focussed roles. DCS has a 100% take-up rate since 2015.

No such scheme exists for T-focussed colleagues and DCS will work with UoW to harmonise the pathways. Until a UoW-wide framework is developed, DCS will use workload relief to mitigate the career disruption caused by parental leave (**Action 5.5.2**).

DCS signposts staff to a £150 bursary provided by the University to assist with the additional costs of childcare when attending conferences, and we will match this from local funds in order to signal our commitment to returning staff (**Action 5.5.3**).

**Action 5.5.2** Work with the University to harmonise the pathways and develop a Returner’s Fellowship for T-focussed academics. In the meantime, use DCS workload allocation relief to reduce the teaching and administrative duties of T-focussed academics returning from parental leave, in order to give them time for development activities.

**Action 5.5.3** Enhance UoW conference childcare bursary by a further £150, subject to financial regulations.

(iv) Maternity return rate

*Provide data and comment on the maternity return rate in the department. Data of staff whose contracts are not renewed while on maternity leave should be included in the section along with commentary.*

In the past five years, four academic colleagues have taken maternity leave (ML), with 100% return rate (**Table 16**). No adoption leave has been requested. No-one has not had a contract renewed while on ML.

Contract function	Year	No. of employees	Left within 18 months of ML end
Academic	14/15	0	0
	15/16	2	0
	16/17	0	0
	17/18	1	0
	18/19	1	0

*Table 16: Maternity Leave*

DCS signposts staff to UoW family-related benefits, such as:

- “OFSTED Outstanding” nursery for the children of staff and students
- School holiday play scheme
- Graduation crèche (free of charge)
- Arts Centre which has an active programme of family events
- Working Parents’ Staff Network which provides informal peer support and advice to parents.

We believe our commitment to being a family-friendly working environment is reflected in our return rate, although limitations were observed by a male academic in the staff survey:

“ No baby change facilities in numerous key buildings in campus. No access to breast feeding / pumping rooms for many offices. ”

We will remedy this, and explore the possibility of providing a child-friendly safe workspace for short-term working/meetings (**Action 5.5.4**).

#### SILVER APPLICATIONS ONLY

Provide data and comment on the proportion of staff remaining in post six, 12 and 18 months after return from maternity leave.

(v) **Paternity, shared parental, adoption, and parental leave uptake**

*Provide data and comment on the uptake of these types of leave by gender and grade. Comment on what the department does to promote and encourage take-up of paternity leave and shared parental leave.*

Eight members of staff took Paternity Leave (PL) during 2014-2019 (see **Table 17**). One colleague took Shared Parental Leave (SPL) in 2016/17. All were academics.

Contract function	Year	No. of employees	
		PL	SPL
Academic	14/15	0	0
	15/16	2	0
	16/17	3	1
	17/18	2	0
	18/19	1	0

*Table 17: Paternity Leave and Shared Parental Leave*

Staff requesting PL meet with their line manager or the HoA to discuss University policies and options, including PL, SPL, pay, and time off to attend antenatal appointments.

DCS encourages full uptake of parental-type leave and benefits. Nevertheless, the 2019 AS staff survey revealed varying beliefs about the Department’s level of support for such benefits. Several people identified parental leave as “a very positive aspect of working for the department”, and made comments such as:

“ I think we have been very supportive of parenting. Many young colleagues, many people (male and female) having children!. ”

However, a smaller number of respondents expressed a lack of confidence in the University’s and Department’s underlying attitudes, for example:

“ I wonder how many male staff members have taken any SPL, and whether they felt that this would be welcome. Were there (m)any who thought this would be a good idea for them and their family? I have my doubts. ”

A view was also expressed that the standard two-week PL is quite short.

DCS will highlight its commitment to PL and SPL by providing workload relief in addition to formal PL (**Action 5.5.6**) and encourage higher uptake of SPL by making PL applicants better aware of the recent UoW policy to offer Returner's Fellowships to colleagues returning from SPL (**Action 5.5.5**).

**Action 5.5.4** Work with other Mathematical Sciences departments to provide a baby-changing station, a milk-expression room with milk-storage facilities, and explore a possibility of arranging a child-friendly workspace for short-term working/meetings.

**Action 5.5.5** Promote Returner's Fellowships to all colleagues who apply for ML, PL, or SPL, and highlight the availability of the fellowships both after ML and SPL.

**Action 5.5.6** Enhance the UoW two-week PL on full pay by offering further two weeks of workload relief at DCS.

(vi) Flexible working

*Provide information on the flexible working arrangements available.*

DCS fully supports UoW's flexible working policy that allows PT working, compressed hours or school hours working patterns, working from home, and flexitime.

Colleagues are actively signposted to these possibilities in response to individual circumstances, and staff in all job roles and at all levels make use of them, either by making a formal request to the HoD, or informally by working around their commitments. This reflects our informal culture and the nature of many of the job roles in DCS.

Where a formal request for flexible working is made, this is always agreed, subject to business need. DCS supports flexible retirement, therefore we have role models at Professor/Reader level who are working part time.

Women are much more likely to work part time than men across all job roles, however PT working has become increasingly normalised for male academics since 2017. PT contracts are still less common in DCS than the sector average.

Year	Contract type		Female			Male		
			Acad-emic	PSS level 1a-5	PSS level 6-9	Acad-emic	PSS level 1a-5	PSS level 6-9
2015	FT		7	3	2	31	0	4
	PT		1	3	1	1	0	0
		%	12.5%	50.0%	33.3%	3.1%	0.0%	0.0%
2016	FT		6	3	2	38	1	4
	PT		1	3	2	2	0	0
		%	14.3%	50.0%	50.0%	5.0%	0.0%	0.0%
2017	FT		6	4	2	39	1	4
	PT		3	4	2	6	1	0
		%	33.3%	50.0%	50.0%	13.3%	50.0%	0.0%
2018	FT		6	3	3	44	1	3
	PT		2	6	2	6	1	0
		%	25.0%	66.7%	40.0%	12.0%	50.0%	0.0%
2019	FT		8	7	2	51	2	4
	PT		2	4	2	6	0	0
		%	20.0%	26.4%	50.0%	10.5%	0.0%	0.0%
<b>Sec-tor</b>	PT	%	33.1%	40.0%		28.0%	19.6%	

*Table 18: Part time working rates for DCS over the last five years*

In the 2019 AS staff survey, 81% of respondents said they had “no concerns” about flexible working within DCS (**Figure 53**), but we will ensure that when flexible working is arranged, it is communicated to colleagues and students in a sensitive way that ensures appropriate confidentiality (**Action 5.5.7**).



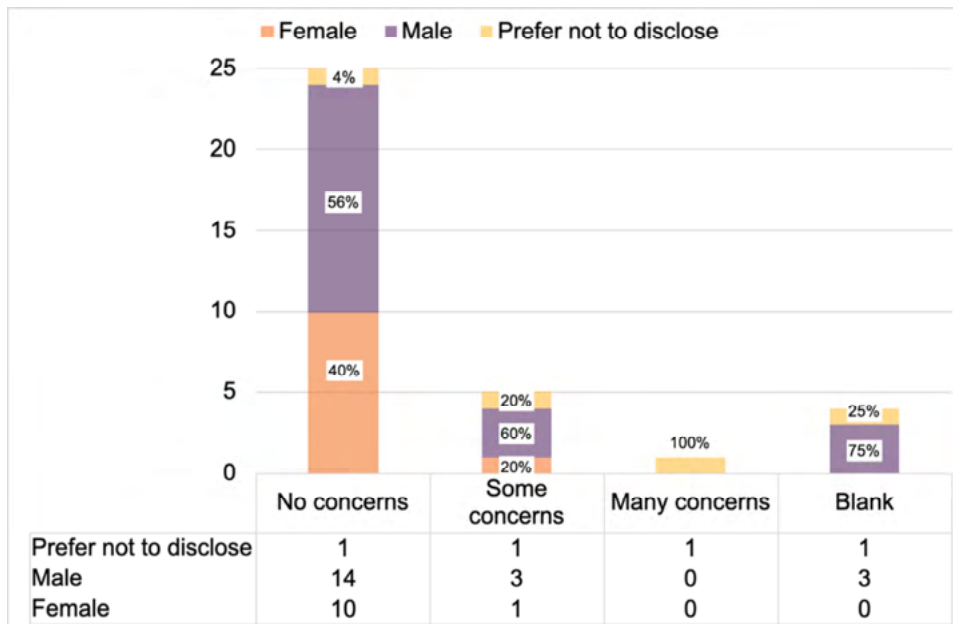


Figure 53: Response to staff survey question about flexible working within DCS

Several positive comments were made about DCS being “an excellent flexible working environment”. One female academic explicitly identified our approach as having a significant impact on her career progression:

“ I appreciate the flexible working culture very much, it is extremely helpful and probably I would have not been able to carry out my work the way I do or even accept an appointment here, without this flexible approach ”

However, DCS was also criticised for not having a transparent way to manage flexible working. One male academic commented that although DCS was flexible, he felt he needed to work significant amounts of overtime in order to meet the expectations of students and the Department.

**Action 5.5.7** Ask the colleague who is arranging to work flexibly how they want it to be communicated to colleagues and students, in order to ensure that individual circumstances can be managed sensitively and appropriate confidentiality can be preserved.

(vii) Transition from part-time back to full-time work after career breaks

*Outline what policy and practice exists to support and enable staff who work part-time after a career break to transition back to full-time roles.*

Although DCS has not received any requests recently to transition from PT to FT working, colleagues have increased their PT hours, and transitioning back to FT would be facilitated in the same way. The HoD indicates at the time of a request for PT working that future requests to revert to FT will be treated sympathetically.

## 5.6. Organisation and culture

### (i) Culture

*Demonstrate how the department actively considers gender equality and inclusivity. Provide details of how the Athena SWAN Charter principles have been, and will continue to be, embedded into the culture and workings of the department.*

Gender equality and inclusivity are considered explicitly by DCS. ED&I is a standing item for Staff Meetings and will become a standing item for other key committees (**Action 5.6.1**). We will encourage students to take a similar approach in SSLCs.

Although our gender profile is a matter of high concern, staff surveys indicate that the AS Charter principles are more embedded into the informal culture of DCS than the quantitative data would suggest.

Individually, most colleagues feel valued and respected, including for the diversity they embody. In the 2019 AS staff survey, a female PSS colleague commented:

“ Most members of the department get along well with all colleagues despite [or] because of all the differences we have! ”

while a female academic reported:

“ Overall I have wonderful colleagues and the feel of the department is very positive and welcoming. The informal culture is very friendly, open, quite curious, and sensitive! ”

and a second female PSS colleague remarked:

“ Suggestions for change are listened to and I have never been told that 'this is the way things are done' ”

In the 2018 Pulse Survey, 88% of colleagues responded positively to the statement “I would recommend the University as a great place to work” (11% higher than the previous survey, and higher than benchmarks).

However, 15.2% of respondents to the AS staff survey reported having “many concerns” about the informal culture of DCS. Comments referred to the recent rate of change within the Department, which had led to a “colder” atmosphere and had left some colleagues feeling undervalued (particularly PSS); and questioned whether the commitment to addressing our gender imbalance is universally shared. We will establish further mechanisms for staff to provide feedback and raise concerns so that they can be better understood and addressed (**Action 5.6.4**).

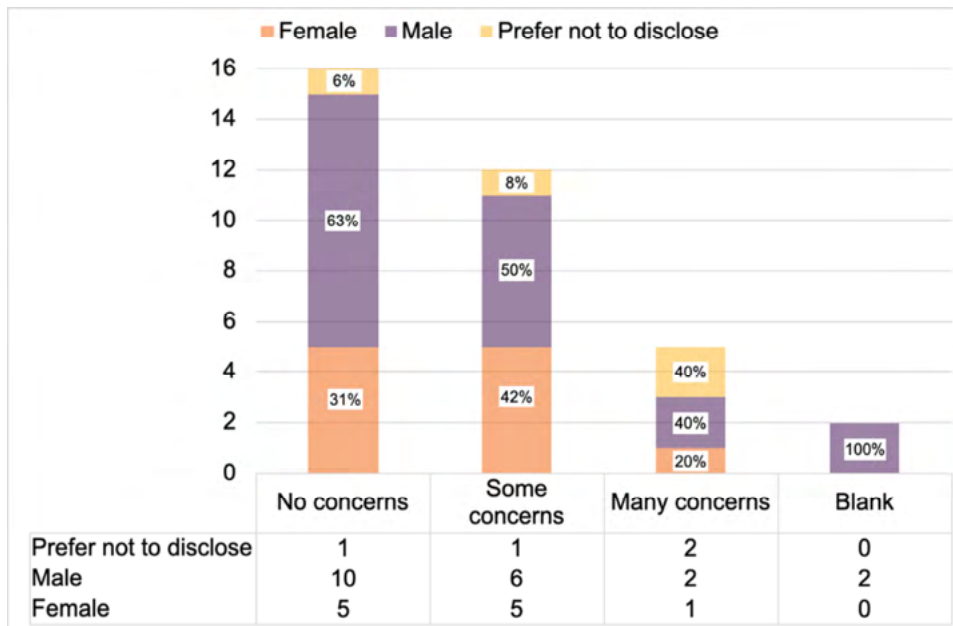


Figure 54: Response to staff survey question about the informal culture of DCS

Our challenge is to build on the sense of openness and inclusivity experienced by most colleagues, and to foster a sense of shared values across DCS.

Three colleagues (1F PSS, 2M academics) serve as ED&I Champions within DCS, acting as a channel of information between UoW and the Department, and as a first point of contact for accessibility queries. This information is included in induction.

Currently our bi-weekly coffee mornings are attended mostly by PSS. We have recently started encouraging PGR students to attend, and we will explore how to make these, and other social events, more inclusive (**Action 5.6.2**), and offer more for women (**Action 5.6.3**).

**Action 5.6.1** ED&I to become a standing item for Academic Studies Committee, Postgraduate Research Committee, and Research Strategy Committee. Steering is an agile committee, the agenda of which varies according to current need, and it will consider ED&I issues as they arise.

**Action 5.6.2** Review existing social activities and participation; and introduce new social activities aiming at balanced participation of both academic staff and PSS. Consult all staff groups, with the aim of achieving a diverse and widespread participation.

**Action 5.6.3** Introduce regular women-only social events, for both staff and students, as a forum for informal mentoring and mutual support.

**Action 5.6.4** Hold externally facilitated focus groups to develop further mechanisms for staff to provide feedback and raise issues with the management of the Department.

(ii) HR policies

*Describe how the department monitors the consistency in application of HR policies for equality, dignity at work, bullying, harassment, grievance and disciplinary processes. Describe actions taken to address any identified differences between policy and practice. Comment on how the department ensures staff with management responsibilities are kept informed and updated on HR policies.*

The HoD and the HoA work with the Department's HR Business Partner to ensure HR policies are followed consistently. Any matters of concern are discussed at fortnightly meetings, with the aim of addressing them immediately, and informally wherever possible. The HoD records all concerns at the time they arise, and actively monitors them for trends. Only two cases have reached a formal stage over the last ten years.

DCS briefs new staff during induction, and updates existing staff, including those with management responsibilities, by email with links to central University webpages. Staff can report dignity issues anonymously and can meet with an impartial Dignity Contact from outside DCS, who provides information and support for resolving an issue. A poster outlining these possibilities is displayed prominently in the DCS staff common room and the information is included in induction.

This approach appears to be working: in the 2018 Pulse survey, 79% of DCS staff responded positively to the statement "I am treated with fairness and respect at the University" (a 12% increase since the previous survey and higher than benchmarks), with only 2% of respondents disagreeing with the statement.

Between 2016 and 2018, the number of people who felt bullied, harassed or subject to discrimination decreased by 3%, better than the FSEM and University average.

The 2019 staff survey asked about a positive environment of dignity and respect. 51.6% of respondents who expressed a view reported having no concerns (**Figure 55**), and 86.4% said that we have at least some things to celebrate (**Figure 56**). Women tended to answer more positively than men.

Some comments referred to having witnessed disrespectful or bullying behaviour which, they believed, may not have been perceived as such by the perpetrator. Given the relatively low take-up of ED&I training within DCS, we believe that such problems may be caused by lack of awareness. We will address this through communications from the HoD (**Action 5.6.5**).

Training	Completion 2016-2019 (all available data)
Diversity in the Workplace	32 members of DCS staff (20M, 12F)
Unconscious Bias	7 members of DCS staff (2M, 5F)

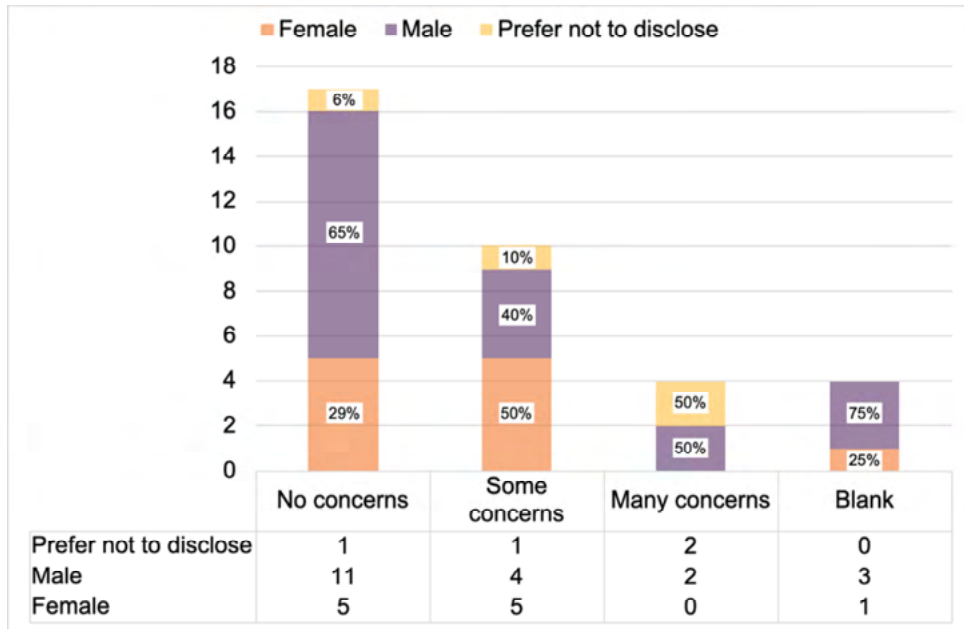


Figure 55: Response to staff survey question about the environment of dignity and respect within DCS (concerns)

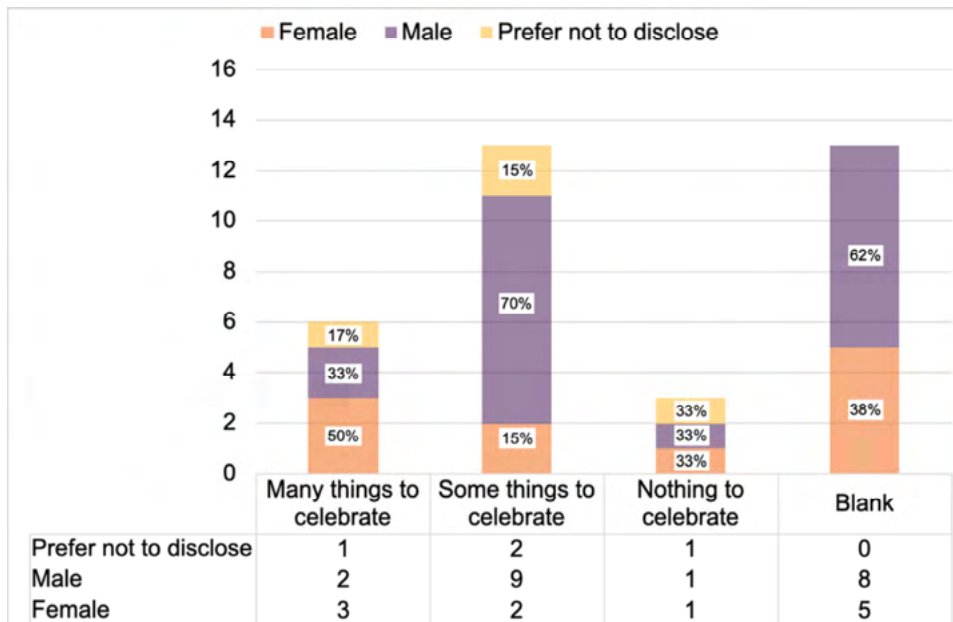


Figure 56: Response to staff survey question about the environment of dignity and respect within DCS (things to celebrate)

**Action 5.6.5** Communication by the HoD to encourage further take-up of Diversity in the Workplace training, in order to raise awareness of dignity issues.

(iii) Representation of men and women on committees

*Provide data for all department committees broken down by gender and staff type. Identify the most influential committees. Explain how potential committee members are identified and comment on any consideration given to gender equality in the selection of representatives and what the department is doing to address any gender imbalances. Comment on how the issue of 'committee overload' is addressed where there are small numbers of women or men.*

Potential committee members are selected based on the following criteria:

1. Departmental role
2. Specific expertise
3. Fair workload allocation and the need to avoid overburdening women.

Most committees include both academics and PSS.

The proportion of women on committees ranges from 12.5% to 66.7%. This is generally higher than the proportion of women employed at relevant levels in DCS. Any disproportionate burden on women is mitigated via the workload model, which itself will be systematically monitored for gender bias (**Action 5.6.8**). Research Strategy Committee is an outlier: its members include heads of the six research themes, currently all men. We expect that the gender balance will change when **Action 5.3.10** is implemented. Committee membership is reviewed every summer with AS Charter principles in mind.

The most influential committees are indicated in the table below with an asterisk.

Committee	Types of staff	Number of men	Number of women	% women
* Steering Committee	Academic	5	2	33.3%
	PSS	1	1	
* Academic Studies Committee	Academic	5	5	45.5%
	PSS	1	0	
* Research Strategy Committee	Academic	7	1	12.5%
	PSS	0	0	
PGR Committee	Academic	2	1	33.3%
	PSS	0	0	
REF Working Group	Academic	3	1	40.0%
	PSS	0	1	
Outreach Working Group	Academic	1	2	66.7%
	PSS	0	0	
Health and Safety Working Group (one standing member of this Group, with further members co-opted as necessary)	Academic	0	0	0.0%
	PSS	1	0	
Finance Working Group	Academic	5	0	28.6%
	PSS	0	2	

*Table 19: Membership of DSC Committees and Working Groups*

The major academic administrative roles in DCS are divided evenly between men and women. These roles require in-depth engagement with stakeholders across DCS and UoW, allowing the post-holders to develop an academic leadership profile. In order to increase the involvement of junior staff and women, we will extend existing good practice within DCS to welcome non-members to attend meetings of all influential committees (**Action 5.6.6**).

Post	Gender
HoD	M
Deputy HoDs	2M
HoA	F
Director of UG Studies	F
Director of PGT Studies	F
Director of PGR	M
Director of Research Strategy	M
Director of Student Experience	F
Director of Outreach	F
Internships and Intercalated Year Tutor	F
Senior Tutors	1M, 1F
Admissions Tutor	M
Welfare and Communications Lead	M
SSLC Convenor	F

*Table 20: Major academic administrative post-holders in DCS 2019/20*

Staff are rotated through the more time-intensive but low-leadership roles such as examinations co-ordination.

**Action 5.6.6** Communication from the HoD and Committee Chairs to ensure that non-members know they are always welcome to attend the meetings of the influential committees such as Academic Studies Committee, the Postgraduate Studies Committee, and of the Research Strategy Committee.

(iv) Participation on influential external committees

*How are staff encouraged to participate in other influential external committees and what procedures are in place to encourage women (or men if they are underrepresented) to participate in these committees?*

DCS women are actively involved in influential external committees, for example as:

- Members of Research Council Colleges
- External examiners at other institutions (e.g. Edinburgh, Oxford Brookes, Oxford, Southampton)
- Cyber Security Challenge UK
- Computing at Schools
- National science festivals
- The National Centre for Computing Education.

The HoD proactively suggests the names of senior women when asked to make a nomination, ensuring that these are development opportunities. Membership of external committees is recorded through the PDR, and is considered when



nominations for merit pay are made. The data will be collated in a more systematic manner to better inform DCS policies (**Action 5.6.7**).

**Action 5.6.7** DCS will collate existing data about participation on influential external committees, monitor for trends, and develop further actions to enhance the participation of women and minority groups.

(v) Workload model

*Describe any workload allocation model in place and what it includes. Comment on ways in which the model is monitored for gender bias and whether it is taken into account at appraisal/development review and in promotion criteria. Comment on the rotation of responsibilities and if staff consider the model to be transparent and fair.*

IMPACT DELIVERED SINCE 2014

The finalised workload allocation is now distributed transparently to all colleagues.

The DCS workload model aims to be relatively simple, balancing transparency with flexibility. The standard load for R&T-focussed academics is two “large” modules and one “small” administrative duty, or equivalent. For T-focussed academics, the standard load is 2/3 greater. Personal tutees and project supervisees are shared evenly. Reductions are made for colleagues on probation, or based on substantial externally-funded research projects, PGR supervisions, and approved external activities.

The model is monitored for gender bias through staff satisfaction surveys and PDRs. The 2019 AS staff survey included questions about the distribution of administrative roles and people’s personal workloads. Men and women answered these questions in a similar way, providing some reassurance that the model is not gender-biased. Nevertheless, a more direct method of monitoring gender bias will be developed and the results reported to the Staff Meeting annually (**Action 5.6.8**).

A relatively high proportion of respondents (18.5%) stated that they had “many concerns” about the distribution of academic administrative roles, with comments mentioning a loss of experience when roles were rotated. We have addressed this concern by introducing deputies for the major roles, in order to support continuity and succession planning.

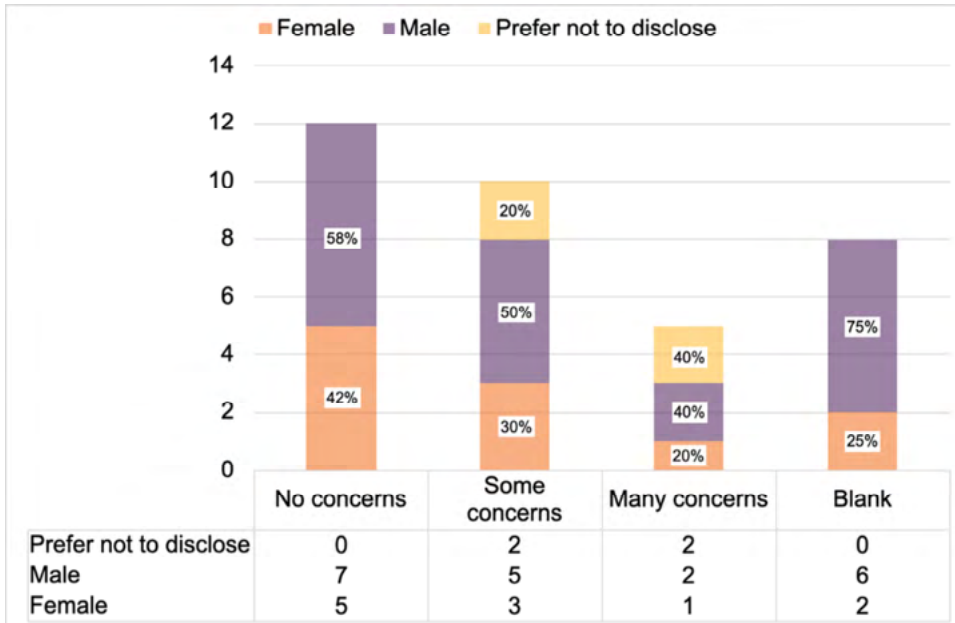


Figure 57: Response to staff survey question about the distribution of administrative roles

Although concerns were reported about high workloads, particularly at certain times of year, over half of respondents (54.8%) said that they had no concerns about their personal workload:

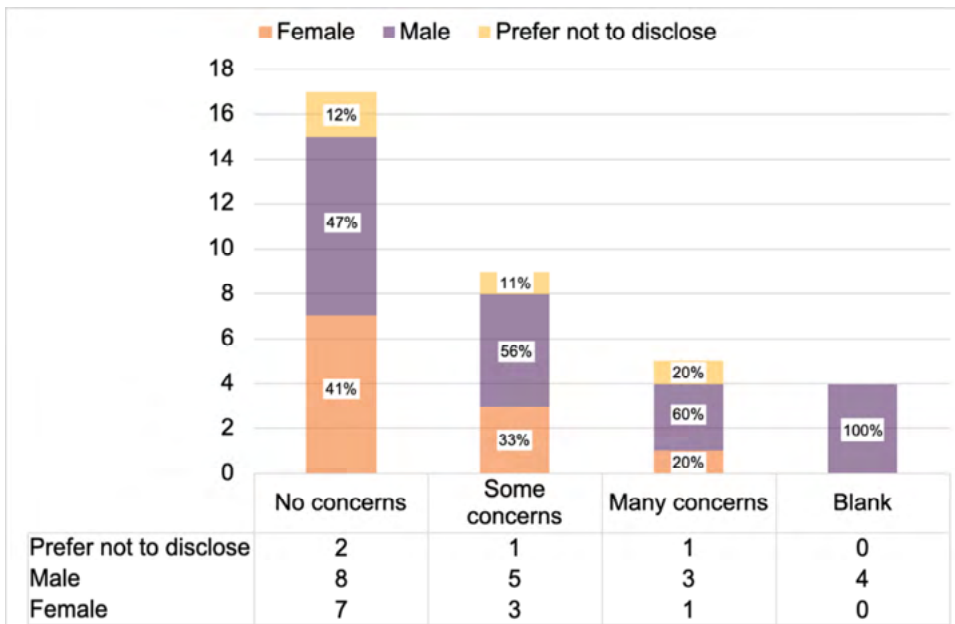


Figure 58: Response to staff survey question about personal workload

**Action 5.6.8** DCS will develop a method of monitoring gender bias in the design and operation of our workload model directly, and report annually to Staff Meeting.

(vi) Timing of departmental meetings and social gatherings

*Describe the consideration given to those with caring responsibilities and part-time staff around the timing of departmental meetings and social gatherings.*

DCS policy is that meetings should not occur outside 10am-4pm. Respondents in the 2019 AS staff survey acknowledged its positive impact, e.g.:

“ Some departmental seminars have been recently moved from 4pm to 2pm, which makes it feasible for local parents to still do a school run afterwards. ”

although they also commented that some commitments were inherently less flexible, e.g., Exam Boards and Open Days.

Monthly PSS team meetings alternate between Tuesdays and Thursdays, and SAT meetings alternate between Mondays and Thursdays, in order to ensure that PT staff can attend at least every other meeting.

58.6% of respondents who expressed an opinion said that they had “no concerns” about the timing of departmental meetings and social gatherings, and only one respondent said they had “many concerns”. Proportionally, women were less likely to express concerns than men.

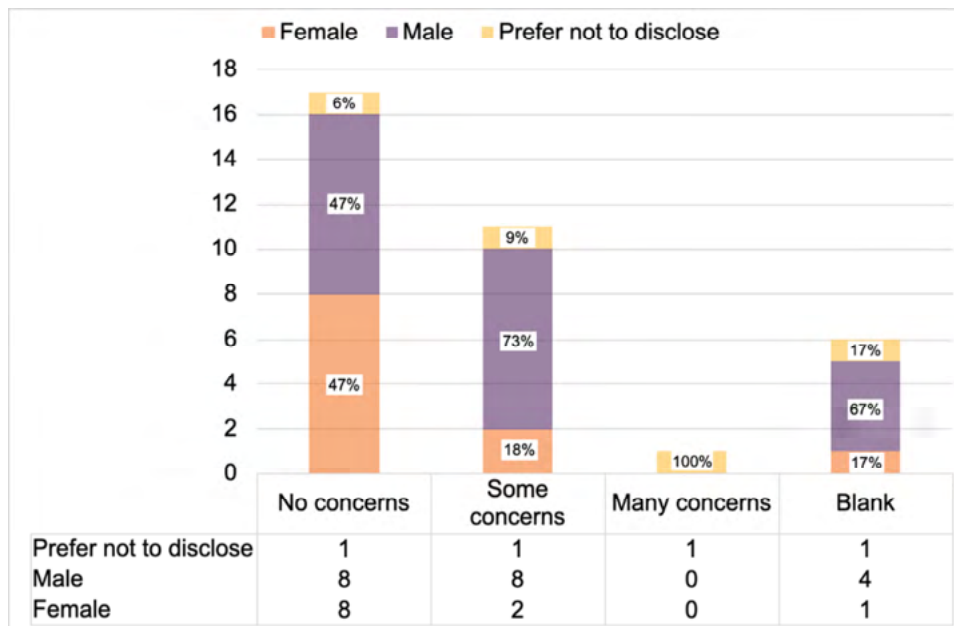


Figure 59: Response to staff survey question about the timing of departmental meetings and social gatherings

(vii) Visibility of role models

*Describe how the institution builds gender equality into organisation of events. Comment on the gender balance of speakers and chairpersons in seminars, workshops and other relevant activities. Comment on publicity materials, including the department's website and images used.*

**IMPACT DELIVERED SINCE 2014**

40% of our speakers at our Colloquium in 2018/19 were female. We expect a similar ratio for 2019/20.

When new students join DCS, their induction is led by the Directors of Studies and the Director of Student Experience, all currently women (**Table 20**). In Outreach activities, women appear as active researchers explaining advances in Computer Science. Women are therefore visible as leaders in DCS.

Respondents to the 2019 AS staff survey, especially women, reported a relatively high level of concern about the visibility of diverse role models:

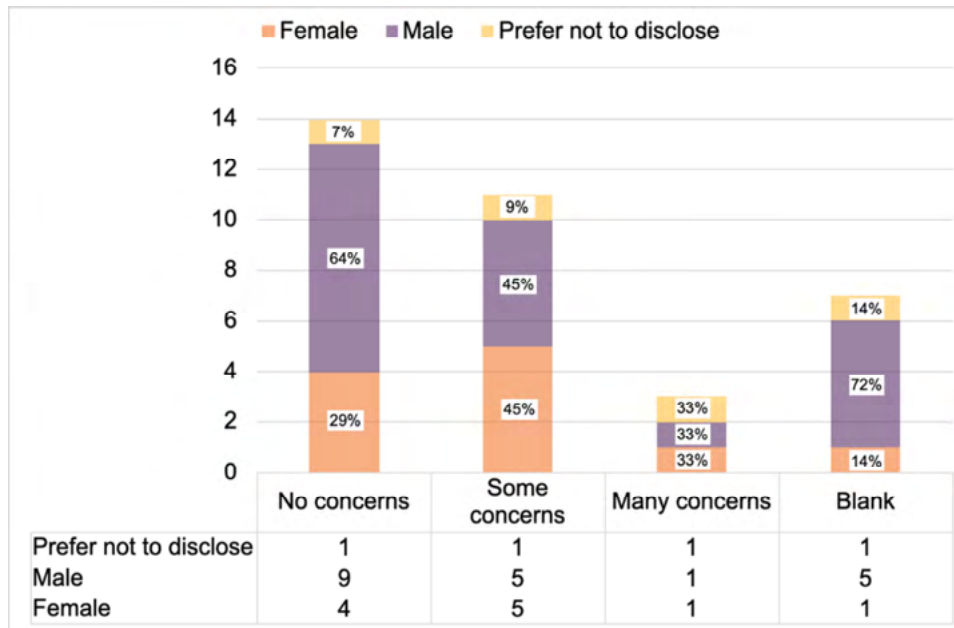


Figure 60: Response to staff survey question about the visibility of diverse role models (concerns)

When asked positively, 86.0% of respondents who expressed an opinion said we had at least some things to celebrate, although 34.3% of respondents did not answer this question.

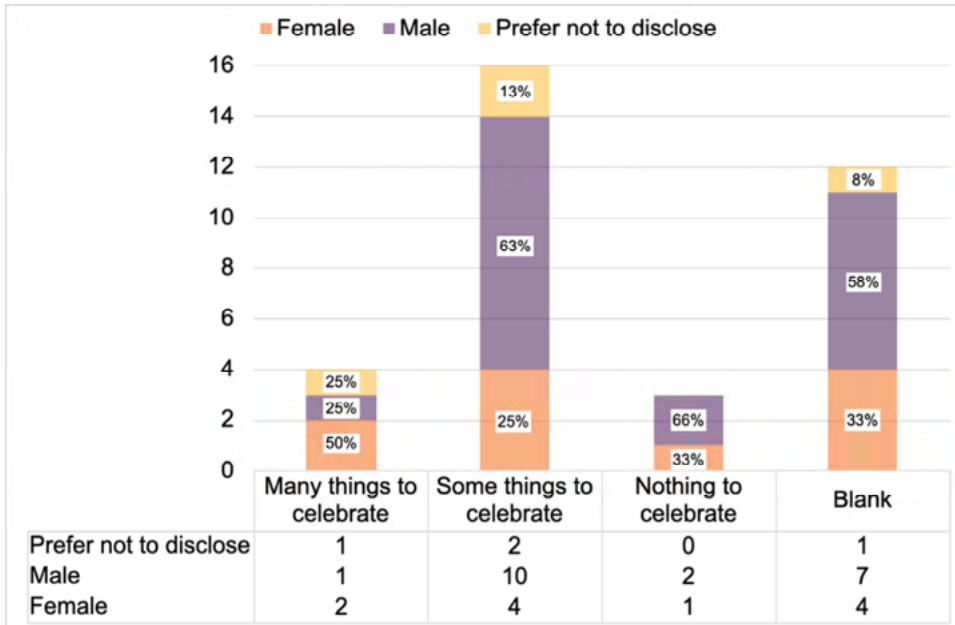


Figure 61: Response to staff survey question about the visibility of diverse role models (things to celebrate)

Of various aspects of diversity, gender was mentioned most commonly in the free text comments, however, several comments referred to other dimensions such as disability or and social background, e.g.:

“ Not a lot of diverse models in terms of gender and disability or even social background - I am sometime concerned about the lack of visibly working class people. ”

DCS publicity materials were reviewed during 2018/19 to make sure that diversity is reflected appropriately, including in our choice of images.

(viii) Outreach activities

*Provide data on the staff and students from the department involved in outreach and engagement activities by gender and grade. How is staff and student contribution to outreach and engagement activities formally recognised? Comment on the participant uptake of these activities by gender.*

IMPACT DELIVERED SINCE 2014

A Teaching Fellow (Outreach) (1F) was created in 2011. Since 2014 we have explicitly emphasised recruiting female students, and increased resource: the postholder is now supported by two further academics (1F, 1M) and an Outreach Working Group. We attribute our success in increasing our female applicants largely to our outreach programme.

DCS Outreach aims to increase participation of underrepresented groups in Computer Science, by supporting schoolteachers and organising events for secondary school pupils. This work is recognised in the workload model and counts towards promotion. Students who collaborate on outreach are paid.

Our programme is not a series of one-off activities. Rather, we develop sustained relationships with local schools. For example, *PlayCodeShare* enables primary and secondary schools to explore a new creative model of teaching computer programming. The project aims to improve diversity, including gender diversity.

Since 2012, DCS Outreach has engaged with >6000 individuals, via:

- Teacher Continuing Professional Development on behalf of the National Centre for Computing Education
- Two successful Sutton Trust Summer Schools in 2018 (15M, 7F) and 2019 (15M, 6F), and three successful Headstart summer schools (2014-2016)
- Festival of the Imagination (2015), the British Science Festival (2019) and Cheltenham Science Festival (2015).
- Cyber Horizon event to inspire young girls to consider careers in cybersecurity (159F, 8 schools).
- Hosting 32 participants in the world-record breaking Appathon, organised by BCSWomen.
- A keynote address at the Rosalind Franklin STEM Conference, attended by 90F Year 12 students.

A local secondary school teacher commented:

“ As a result of your last visit we now have 43 students studying Computer Science in Year 10 which is a big increase from the 17 [who are now] in Year 11. Thank you for your continued support.

”



Figure 62: Warwick Sutton Trust Summer School (Computer Science) 2018

**Action 5.6.9** Continue to work with colleagues within Widening Participation at the UoW to deliver a stream within the Warwick Sutton Trust Summer School and other activities as appropriate.

**Action 5.6.10** The Isaac CS project is a free online platform for students and teachers. They also provide free teacher Continuing Professional Development events and student workshops. Working as a HE partner, DCS will deliver a program of events over the next three years, to include one Discovery event (attracting young students to computer science), one Masterclass event (for extending existing knowledge), and one Continuing Professional Development event for teachers per year.

**Action 5.6.11** Formalise the existing recording process for outreach activity, including monitoring the proportion of male and female participants more systematically.

6066 words

## SILVER APPLICATIONS ONLY

### 6. CASE STUDIES: IMPACT ON INDIVIDUALS

Recommended word count: Silver 1000

Two individuals working in the department should describe how the department's activities have benefitted them.

The subject of one of these case studies should be a member of the self-assessment team.

The second case study should be related to someone else in the department. More information on case studies is available in the awards handbook.

### 7. FURTHER INFORMATION

Recommended word count: Bronze: 500 words | Silver: 500 words

Please comment here on any other elements that are relevant to the application.

Several members of the SAT have relevant experience of gender equality initiatives outside the Department, which has ensured that our AP is informed by international best practice.

**Tom Gur** serves as a Theory of Computation Safety Advocate, which is part of the SafeToC initiative for preventing and combating harassment in the Theory of Computation community, especially at conferences.

As a PhD student during the period 2011-2013, **Tanaya Guha** was actively involved in an IEEE Women in Engineering group, Vancouver Section. In 2013, she served as the elected Chair of the group (note that this was not a student group, but the local chapter of IEEE). She organised outreach events for Canadian high school students (including a trip to TRIMUF - Canada's particle accelerator centre), and networking events with local industries, and invited leaders from industry and academia to share their journey. She has since been involved in various events in IEEE Women In Engineering and IEEE Women in Signal Processing.

**Sara Kalvala** has served on the Programme Committee for Women in Logic, which provides support and community for women working in Theoretical Computer Science. Apart from a thriving social network, Women in Logic has organized workshops and skills training events co-located with prestigious conferences in the UK, USA, Canada and Iceland.

211 words



## **8. ACTION PLAN**

The action plan should present prioritised actions to address the issues identified in this application.

Please present the action plan in the form of a table. For each action define an appropriate success/outcome measure, identify the person/position(s) responsible for the action, and timescales for completion.

The plan should cover current initiatives and your aspirations for the next four years. Actions, and their measures of success, should be Specific, Measurable, Achievable, Relevant and Time-bound (SMART).

See the awards handbook for an example template for an action plan.

## I. Governance and communication

Action point reference	Planned action / objective	Rationale (i.e. what is the evidence that prompted this action / objective)	Timeframe	Person responsible (job title)	Success criteria and outcomes
<b>Action 3.1</b>	Redevelop the successful SharePoint site into an AS website accessible to all DCS staff/students in order to keep AS activities at the forefront of minds, and to enable staff/students to actively keep up to date with AS activities and give them opportunities for continued input into AS matters.	This is core communications infrastructure: people need to know where to look for ED&I-related information. The website will also be valuable in helping to recruit more female staff and students.	December 2019 for initial implementation  Ongoing maintenance and expansion	HoA ED&I Lead	The AS website is visible and accessible from other Departmental pages, in particular Recruitment and Admissions.

<b>Action 5.6.1</b>	ED&I to become a standing item for Academic Studies Committee, Postgraduate Research Committee, and Research Strategy Committee. Steering is an agile committee, the agenda of which varies according to current need, and it will consider ED&I issues as they arise.	ED&I issues as expressed in the AS Principles and through UoW policies need to become firmly embedded in the DCS culture and processes. ED&I and AS have already been a standing item at DCS Staff Meetings but this must be extended to other influential committees at DCS.	January 2020	HoA	ED&I is a standing item for the Academic Studies Committee, Postgraduate Research Committee, and Research Strategy Committee.
<b>Action 3.2</b>	The ED&IC (formerly the SAT) will meet at least once termly ahead of the Departmental Staff Meeting and will report progress to Steering Committee and Staff Meeting.	The Athena SWAN principles are driven by a group of committed individuals. This presents a risk of losing good practice if those people leave. The ED&I Committee will ensure that gender equality and inclusivity are sustained after AS submission, and monitor implementation of the AP.	January 2020: Terms of Reference and membership agreed February 2020: First meeting held By October 2022: ToR for other committees, policy and practice documents revised	HoD ED&I Lead	All relevant data is monitored and reported termly. Minutes of all department committees show evidence of consideration of ED&I aspirations. ED&I aspirations are explicitly referenced in all policy and practice documents, and all committee Terms of Reference.

<b>Action 3.3</b>	Establish principles for membership of the ED&IC, to include some permanent members (key posts, recognising that post-holders may also change, and some rotational to maximise opportunities for engagement and to bring in specialist expertise as needed).	The ED&IC will oversee the implementation of the AP and in order to do it effectively, it needs to balance broad engagement and well-focused responsibility.	January 2020	ED&I Lead HoA	All AP workstreams have clearly assigned and committed leadership whose roles are listed as permanent members of the ED&IC, and all staff are welcome to contribute as volunteers or when their specific expertise is in demand.
<b>Action 3.4</b>	Repeat the AS staff survey biennially, in those years when the UoW Pulse survey does not run.	The AS staff survey provided rich qualitative information about colleagues' experience of working in DCS. Continuing this will allow us to monitor the outcomes of implementing the AS principles and make any adjustments to our AP if necessary.	Biennially from spring 2021	HoA	The Athena SWAN staff survey runs biennially, with results reported to ED&I Committee for further dissemination, including communication to staff and students.

## II. Increasing the number of female students

Action point reference	Planned action / objective	Rationale (i.e. what is the evidence that prompted this action / objective)	Timeframe	Person responsible (include job title)	Success criteria and outcomes
<b>Action 4.1.4</b>	Monitor our admissions data continuously, to identify and mitigate any unintended consequences of recent changes to admissions criteria.	Internal DCS research shows that female applicants tend to have a slightly different profile of A-level achievement than males	Initial Equality Impact Analysis was carried out in September 2019.  Ongoing monitoring of admissions data in each cycle.	Admissions Tutor	DCS monitoring shows that any changes in admissions criteria are not resulting in a lower proportion of women receiving offers.
<b>Action 4.1.5</b>	Review DCS marketing materials to ensure that the benefits of gaining qualifications and becoming independent are given appropriate prominence.	Data from our central Marketing team shows that female applicants, more than male ones, are motivated to study Computer Science in order to gain qualifications and become independent.	January 2020	Communications and Events Administrator  Admissions Tutor	Positive feedback is received from women via surveys at open days and offer-holder open days.  The proportion of applications from women reaches or exceeds 20% by 2021/22.

<b>Action 4.1.7</b>	Support and promote the work of our student bloggers (currently both female).	Our bloggers write about issues such as the gender balance in DCS, for offer-holders, and provide a route to conversion activity. We will work with the bloggers to find the most effective way of supporting their work.	Ongoing from January 2020	Director of Student Experience Communications and Events Administrator	DCS student blogs are easily accessible from our web pages and feature prominently in our admissions communications and at open days.
<b>Action 5.6.9</b>	Continue to work with colleagues within Widening Participation at the UoW to deliver a stream within the Warwick Sutton Trust Summer School and other activities as appropriate.	As a result of diverse and sustained outreach activities, DCS has developed valuable resources for attracting more women and students from underprivileged backgrounds to Computer Science. Specialised teams at UoW will help use those resources strategically to target most under-represented groups of students.	July 2020	Director of Outreach	20 students attend our Warwick Sutton Trust Summer School in summer 2020 and in the following years. At least 8 of them are women.

<b>Action 4.1.1</b>	<p>Hold externally facilitated focus group to understand why women are more attracted to studying on some DCS programmes than others.</p>	<p>Some degrees at DCS attract fewer women than others. For example, our Admissions data show that women are less likely than men to enrol in MEng degrees, opting for BSc versions instead. Understanding this and other anomalies better will help us identify and remove barriers to recruiting female students to Computer Science programmes.</p>	<p>September 2021</p>	<p>Admissions Tutor</p>	<p>Focus groups have taken place, results have been analysed, and new actions have been proposed by September 2021.</p> <p>The proportions of women applying for each MEng course and the corresponding BSc course are the same, by 2022/23.</p>
<b>Action 4.1.3</b>	<p>Investigate reasons for the volatility in conversion rate and the loss of women at this point in the pipeline, and formulate further actions to maximise conversion.</p>	<p>The conversion rate of female applicants has been volatile and often lower than that of male applicants.</p>	<p>October 2020</p>	<p>Admissions Tutor</p>	<p>The gender balance at conversion, which has been volatile in recent years, stabilises..</p> <p>The proportion of female offer-holders firmly accepting our offers has increased to 20% by 2022/23.</p>

<b>Action 4.1.6</b>	Create at least 5 scholarships for female students per year.	There are cultural perceptions that view Computer Science degrees are being mainly for men. Scholarships attached to a package of academic and careers support and positive messaging would be a powerful way of countering this.	October 2020, for entry in 2021/22	ED&I Lead	Women's scholarships have been awarded. Recipients are benefiting from departmental mentoring and peer support, and they are contributing to DCS as role models and ambassadors for the Department.
<b>Action 4.1.13</b>	HoD will engage via the UoW SAT to improve the availability of ED&I-related data.	UoW has significantly improved its provision of ED&I data in the last five years, but some gaps remain and improvements are possible. Our active engagements will help the University improve its data collection practice.	September 2021	HoD	A full dataset to support ED&I work, including gender breakdown of PG students, by course, is available.
<b>Action 4.1.14</b>	Review lessons learned from Urban Science CDT in relation to gender equality, and how we can build on this experience to increase the diversity of our Computer Science PGR cohorts.	An interdisciplinary CDT in Urban Science has helped DCS to significantly increase the number of female PGR students. A better understanding of this success story could help the department develop strategies to maintain or further increase the share of female PGR students.	October 2020	Director of PG Research	The number and (above average) proportion of our female PGR students is sustained or further increased.



<b>Action 5.6.10</b>	<p>The Isaac CS project is a free online platform for students and teachers. They also provide free teacher Continuing Professional Development events and student workshops. Working as a HE partner, DCS will deliver a program of events over the next three years, to include one Discovery event (attracting young students to computer science), one Masterclass event (for extending existing knowledge), and one Continuing Professional Development event for teachers per year.</p>	<p>It is a challenge for secondary school Computing teachers to stay up to date with advances in the field in order to deliver the curriculum effectively. We will support them to do so using the Isaac CS platform.</p>	<p>July 2020</p>	<p>Director of Outreach</p>	<p>150 students attend the Discovery events. 50 students attend the Masterclass events. At least 40% of students attending are female. 20 teachers benefit from in-depth Continuing Professional Development events.</p>
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<b>Action 5.6.11</b>	Formalise the existing recording process for outreach activity, including monitoring the proportion of male and female participants more systematically.	The existing recording process is ad hoc and the participation data is not systematically considered by the wider DCS community and influential committees.	May 2020	Director of Outreach	Director of Outreach will present data on the range of outreach activities and the gender diversity of their participants to the ED&IC annually.
<b>Action 4.1.2</b>	Explore ways in which the inherent flexibility of the block-based and distance-learning delivery of Degree Apprenticeships can be utilised in order to increase accessibility, especially for part-time students.	Our existing UG programmes are not designed to be suitable for part-time study. This may represent a barrier to those with caring responsibilities. The Degree Apprenticeship and the associated new bespoke methods of delivery will provide alternative pathways to study.	January 2023	Director of UG Studies Director of Degree Apprenticeships	A DCS degree that facilitates part-time UG studies has received institutional approval.

<b>Action 4.1.8</b>	<p>Ensure that our curriculum review gives appropriate emphasis to a range of topics and learning styles, including those that female students are particularly attracted to.</p>	<p>International evidence shows that higher numbers of women are associated with topics having links to social purpose and applications, both as students and researchers. Recognising this in the curriculum has been associated with an increased recruitment and retention of a diverse range of students (e.g. at Carnegie Mellon University).</p>	<p>October 2022</p>	<p>Director of UG Studies</p>	<p>The proportion of women enrolling to UG courses at DCS has reached 20% by 2023/24.</p>
<b>Action 4.1.15</b>	<p>Establish a system for tracking and monitoring relevant data relating to our “pipeline” students, and formulate further actions to support diversity in the progression to PGR study on the basis of this.</p>	<p>A relatively small number of our UG or PGT students progress to PGR study at DCS and most of them are men.</p>	<p>October 2021</p>	<p>Director of Student Experience Director of PG Research</p>	<p>A well-motivated set of actions exists, justified by objective evidence, to increase the supply of female PGR students to the sector.</p>

### III. Improving student experience and attainment

Action point reference	Planned action / objective	Rationale (i.e. what is the evidence that prompted this action / objective)	Timeframe	Person responsible (include job title)	Success criteria and outcomes
<b>Action 4.1.9</b>	Systematically record the reasons for male and female students withdrawing and analyse the data for any trends. Consider the use of exit interviews with a Senior Tutor if appropriate.	Individual student files contain information about the reasons for withdrawal, but this is not recorded in an easily accessible format, with the student's gender.	Retrospectively, from academic year 2018/19	Programmes Administrator	Data is available in a convenient format.  Analysis of trends is reported annually to the Academic Studies Committee, who will make recommendations for remedial action.
<b>Action 5.3.6</b>	Actively promote the URSS scheme to female UG students.	URSS can be seen as the first step for UoW undergraduate students considering an academic career.	Ongoing from December 2019	Director of Student Experience	The number of participants in the URSS has doubled to 8 per year, with 2-3 being female, by 2022/23.
<b>Action 5.3.1</b>	Offer Mental Health First Aid training to student-facing staff members at DCS.	DCS AS staff survey in 2019 has revealed a need for training on the mental health needs of our students.	December 2019	HoA	At least 12 Mental Health First Aiders have been trained in DCS.

<b>Action 4.1.10</b>	Improve the academic experience of all students, by reviewing and enhancing our “fast track” coding classes and mathematics support.	Internal DCS research shows that female students tend to achieve lower marks in their first year exams than male students with the same A-level grades.	October 2020	Director of UG Studies	The achievement gap between male and female students in first year exams has been eliminated by 2022/23; improvements evident in 2019/20
<b>Action 4.1.11</b>	Provide financial and logistical support for the development of a wider range of social activities, led by students including women.	Social activities at DCS play an important role in creating a community, publicizing development opportunities, and providing informal peer support and mentorship. We want to make sure that despite an existing gender imbalance, women and other minority students are an integral part of the DCS community and benefit fully from the available activities.	October 2020	Director of Student Experience	A wider range of social activities exist, which address the needs expressed by students. Positive feedback is received from the relevant SSLCs and other student engagement fora.
<b>Action 5.3.7</b>	Solicit annual feedback from PhD students on the research environment in the department with a view to customising the support offered.	The biennial PRES survey in 2017/18 about research culture in the Department revealed some dissatisfaction with opportunities to attend relevant seminars and discuss work with colleagues in a meaningful way.	Annually, from April 2020	Director of PG Research	Positive feedback received from PhD students via the Postgraduate Research Experience Survey.

<b>Action 5.3.8</b>	Organise Collaborative Incubator workshops where Early Career Researchers and established academics can interact on current research.	We have been successful in winning £15k under the EPSRC Inclusion Matters scheme, which aims to improve ED&I within the Engineering and Physical Sciences. We will use this award to contribute to the development of best practice at DCS and nationally/	April 2020	ED&I Lead	Academic workshop is organised with high-quality outputs, attended by 15-20 PGR students, 5-10 postdocs, 5-10 established academics at different seniorities, and a range of genders. DCS will have contributed to guidelines on how to support career progression for junior academics through such events.
<b>Action 4.1.12</b>	Encourage and support students to establish a student society of Women in Computer Science. Support them (if they wish) to become a chapter of IEEE Women in Engineering / BCS or similar	Feedback from other institutions, and the experience of a member of the SAT, suggests that these groups can act as an important forum for peer support.  Applying to become a chapter of a professional society gives access to external funding and broader institutional recognition.	March 2021	Director of Student Experience	A student society of women in Computer Science exists, actively supported by DCS

#### IV. Increasing the number of female academics

Action point reference	Planned action / objective	Rationale (i.e. what is the evidence that prompted this action / objective)	Timeframe	Person responsible (include job title)	Success criteria and outcomes
<b>Action 5.3.1</b>	Identify further venues for advertisement that may be more successful in reaching female candidates for academic vacancies. Actively identify suitable female candidates and encourage them to apply, using DCS/UoW resources and possibly an external agency.	The gender balance in our applications is lower than the benchmark, and we have been advertising our academic vacancies mainly through standard channels such as jobs.ac.uk.	March 2020	Resources Manager	The gender balance in applications for academic posts in the next recruitment round (early 2020) has improved to 20% female.
<b>Action 5.1.4</b>	Ensure that groups of academic colleagues who engage with applicants during recruitment process (one-to-one meetings and dinners) contain at least one woman.	While interview panels are gender-balanced, this has not always been the case for other parts of the recruitment process. This could deter successful female candidates from accepting an offer of employment	January 2020	Resources Manager	Every dinner / set of one-to-one meetings with interview candidates includes at least one woman.

<b>Action 5.1.1</b>	HoD/HoA to ensure that all members of shortlisting panels and interview panels complete the required training, in particular, on Unconscious Bias, and to strongly encourage completion by other colleagues.	Take-up of Unconscious Bias training has been low at DCS, in particular among men.	April 2020	HoD	100% of members of shortlisting and interview panels have completed the recommended training by April 2020.  50% of all DCS staff have undertaken the training by June 2021.
<b>Action 5.1.2</b>	Wherever possible, for example when advertising for multiple academic positions, where larger numbers of candidates are likely to apply and be shortlisted, interview at least two women at a time.	Evidence from the Gender Pay Gap Service on GOV.UK suggests that shortlists with only one woman do not increase the chance of a woman being selected (see <a href="https://gender-pay-gap.service.gov.uk/actions-to-close-the-gap/effective-actions">https://gender-pay-gap.service.gov.uk/actions-to-close-the-gap/effective-actions</a> )	Ongoing from January 2020	HoD	More than half of shortlists for academic posts will have at least 2 women.  Whenever less than 2 women are shortlisted, the shortlisting panel will propose actions to increase the number shortlisted women next time, to be discussed by the ED&IC and the Research Strategy Committee.



<b>Action 5.1.5</b>	Advertise proleptic positions to attract talented individuals at earlier stages of their academic careers.	Evidence (for example at University College London) suggests that the stability and security provided by proleptic positions is particularly important for women in establishing sustainable academic careers.	Work on identifying suitable candidates and encouraging them to apply from January 2020	Heads of Research Themes HoD	At least 1 woman academic in an R&T role has been hired using this mechanism by October 2022.
<b>Action 4.2.2</b>	Participate in the ongoing development of FA6 R&T-focussed role description and evaluate how such posts would fit within DCS.	So far these jobs have only existed on a very limited scale at UoW, however they could provide a new pipeline which could lead to more women becoming academic staff in DCS.	October 2023	HoD HoA	The number of women in junior (FA6 or FA7) R&T roles has increased from 1 to at least 3 by October 2023.

## V. Improving staff experience and career progression

Action point reference	Planned action / objective	Rationale (i.e. what is the evidence that prompted this action / objective)	Timeframe	Person responsible (include job title)	Success criteria and outcomes
<b>Action 4.2.3</b>	Routinely offer and encourage the take-up of exit interviews when staff leave, in order to address any retention issues and identify opportunities to improve the environment for all our staff, including for intersectional groups of colleagues	Top-level information about the reason for staff leaving is captured as part of the leaving paperwork, but more nuanced information, where staff are willing to share it, may help improve the environment for all colleagues.	January 2020	Resources Manager	An exit interview has been added to the leavers' process.
<b>Action 5.1.6</b>	Develop DCS induction for R-focussed colleagues.	Departmental induction exists for T&R and T-focussed staff and administrative staff, but not for research-focussed staff	January 2020	Resources Manager	A suitable induction programme has been introduced.

<b>Action 5.1.7</b>	<p>Given the international and multi-ethnic make up of our community, we will signpost intercultural training provided by the Centre for Applied Linguistics, in order to address the intersectional challenges faced by new colleagues.</p>	<p>Many of our academic staff are recruited from overseas and may face additional intersectional challenges as a result</p>	<p>January 2020</p>	<p>DCS Secretary</p>	<p>Intercultural training is signposted as part of induction programme.</p>
<b>Action 5.1.10</b>	<p>The HoD will work with female colleagues whose promotions have recently been successful to make their applications available in the Department to motivate and assist more junior colleagues in preparing theirs in the future.</p>	<p>Reviewing successful examples will help potential candidates for promotion gain a realistic view of the requirements.</p>	<p>June 2020</p>	<p>HoD</p>	<p>Examples are available to support conversations with candidates for promotion.</p>

<b>Action 5.3.4</b>	<p>Communication from HoD to encourage uptake of PDR-related training, in order to help colleagues enhance their ability to give and receive meaningful feedback.</p>	<p>Feedback in the AS staff survey from May 2019 revealed concerns about how consistently reviewers are able to fulfil this role satisfactorily.</p>	<p>April 2020</p>	<p>HoD</p>	<p>At least 75% of new colleagues undertake PDR-related training as they take up their posts.</p> <p>At least 75% of colleagues who are promoted into roles where they are eligible to become reviewers undertake the relevant training.</p>
<b>Action 5.5.5</b>	<p>Promote Returner's Fellowships to all colleagues who apply for ML, PL, or SPL, and highlight the availability of the fellowships both after ML and SPL.</p>	<p>The uptake of SPL at DCS has been low (as is true nationally). While female colleagues applying for ML are routinely informed about the availability of Returner's Fellowships, male applicants for PL may not have been aware that if they also apply for SPL, they will likewise become eligible for a Returner's Fellowship. This knowledge may act as an incentive to apply for SPL.</p>	<p>Ongoing from December 2019</p>	<p>HoA</p>	<p>At least 2 further Returner's Fellowships have been awarded at DCS by 2022/23.</p>

<b>Action 5.5.7</b>	<p>Ask the colleague who is arranging to work flexibly how they want it to be communicated to colleagues and students, in order to ensure that individual circumstances can be managed sensitively and appropriate confidentiality can be preserved.</p>	<p>Feedback received through the staff survey indicates that the benefits of flexible working, while welcome, can be undermined if the expectations of colleagues and students are not adjusted.</p>	<p>Ongoing from December 2019</p>	<p>HoD HoA</p>	<p>A communication plan is agreed with every member of staff who is working on new pattern.</p>
<b>Action 5.6.5</b>	<p>Communication by the HoD to encourage further take-up of Diversity in the Workplace training, in order to raise awareness of dignity issues.</p>	<p>In the AS staff survey, some people indicated that they had witnessed incidences of bullying which the perpetrator may not have perceived as such, implying that a lack of awareness may be an issue.</p>	<p>December 2019, followed up by PDR conversations in June 2020</p>	<p>HoD Line managers</p>	<p>50% of DCS staff have undertaken Diversity in the Workplace training by June 2022.</p> <p>The proportion of people reporting at least some concerns about dignity issues in the AS staff survey is halved from 40% to 20% April/May 2021, reducing to &lt;10% by April/May 2023.</p>

<b>Action 5.1.8</b>	Implement mechanisms for monitoring the uptake and effectiveness of the revised staff induction process, initially via a feedback form. After a year, a focus group will be held of new staff, to recommend further enhancements to the process.	The staff induction process has recently been overhauled and suitable monitoring and feedback processes are not yet in operation.	January 2020	DCS Secretary	100% uptake of induction is achieved during 2019/20
<b>Action 5.1.9</b>	The Promotions Committee will proactively seek out candidates for promotion by (1) requesting CVs annually, (2) encouraging suitable candidates to put themselves forward, and (3) providing constructive feedback to people who do not yet meet the criteria.	Women may be less likely than men to put themselves forward for promotion if they are not completely sure they can meet all the criteria (ref).	February 2020	Promotions Committee	Increased satisfaction of non-professorial staff members with the departmental promotions process is reported.  At least three women have been promoted by 2020/21 (results will be known by February 2020).  At least one woman has been promoted internally to Professor by 2023.

<b>Action 5.1.11</b>	Participate in the ongoing review at University level of probation arrangements for T-focussed academic staff.	At present T-focussed staff have a much shorter probation than T&R-focussed staff and successful completion does not lead to automatic promotion, as for the T&R route.	October 2022	HoD	T-focussed staff enjoy equivalent probation arrangements to R&T-focussed staff.
<b>Action 5.3.2</b>	Hold externally facilitated focus groups with female academic staff to identify the training they have found useful for career development, to learn from their experience and promote this, and similar, training further.	There is limited evidence about what training is most helpful in supporting career development, and limited insight into any differences by gender. Therefore, opportunities to support the career development of all staff may be missed.	May 2021	ED&I Lead	Increased uptake, especially by women, of training that was found to be useful for female academics in their career development; specific targets to be determined following the focus groups.

<b>Action 5.3.3</b>	<p>As part of PDRs, but also through other channels, consult with staff about their reasons for engaging or not engaging with training; identify any trends by gender and job role/staff group; and develop further actions to address any inequalities if necessary.</p>	<p>The uptake of training opportunities is patchy, and the reasons for this are not well understood. As a result, unidentified barriers to access may exist.</p>	<p>June 2020</p>	<p>ED&amp;I Lead</p>	<p>The reasons for inequalities in the uptake of training by gender and job role/staff group are better understood, by June 2020.</p> <p>Inequalities have reduced (precise targets and timescales to be determined following consultation).</p> <p>The uptake of PDRs (from an average of 61.1% over the last three years to at least 75.0%, by 2021).</p>
<b>Action 5.3.5</b>	<p>The HoD will promote the practice of allowing observers on interview panels, in order to help junior colleagues develop skills that will enable them to progress, and to give them an insight into the requirements for appointment to more senior grades.</p>	<p>Shortage/lack of women in senior positions makes it difficult to ensure gender representation on interview panels.</p> <p>Participation in/observation of interview panels may help develop an understanding of what skills and competences are needed to advance to a higher level.</p>	<p>January 2021</p>	<p>HoD</p>	<p>Observers appointed to at least 30% of interview panels.</p>



<b>Action 5.3.9</b>	Hold externally facilitated focus group to obtain feedback from academics, especially junior and/or female academics on how happy they have been with support in their research themes.	Research themes are an important part of the research support infrastructure, and a major source of support for developing competitive funding applications and for re-working any that are unsuccessful.	September 2020	Director of Research Strategy Deputy Director of Research Strategy	Feedback is available and can be taken into account when reviewing the structure and governance of themes (next action)
<b>Action 5.5.2</b>	Work with the University to harmonise the pathways and develop a Returner's Fellowship for T-focussed academics. In the meantime, use DCS workload allocation relief to reduce the teaching and administrative duties of T-focussed academics returning from parental leave, in order to give them time for development activities.	At present, R&T-focussed colleagues are eligible to apply for a UoW "Returner's Fellowship" equivalent to their period of maternity, shared parental or adoption leave (within certain limits) which buys them out of teaching and administration and provides space for them to get their research career back on track. DCS will introduce a similar scheme that will buy T-focussed colleagues out of administration and allow them to undertake pedagogical projects.	March 2021	HoD HoA	Harmonised Returners Fellowships form part of the DCS People Plan from March 2021.

<b>Action 5.5.3</b>	Enhance UoW conference childcare bursary by a further £150, subject to financial regulations.	The research publication culture in Computer Science is often centred on peer-reviewed conferences. Participation in conferences is critical for maintaining an international research profile and offering a more generous childcare bursary will help colleagues take full advantage of development opportunities.	October 2020	Resources Manager	All successful UoW conference childcare bursary applications are suitably enhanced by DCS.
<b>Action 5.5.4</b>	Work with other Mathematical Sciences departments to provide a baby-changing station, a milk-expression room with milk-storage facilities, and explore a possibility of arranging a child-friendly workspace for short-term working/meetings.	The lack of baby-changing facilities at DCS has been mentioned by several colleagues. A room that can be used for breast-feeding and milk-expression has been provided in the UoW Social Sciences building, but no such room is available within a convenient distance from DCS.	December 2020	ED&I Lead	A baby-changing station has been installed in the Mathematical Sciences Building and a room for breast-feeding and milk-expression has been made available, including a refrigerator for storing milk.  Additional refrigerators have been made available in offices, where requested.
<b>Action 5.5.6</b>	Enhance the UoW two-week PL on full pay by offering further two weeks of workload relief at DCS.	Feedback received through the staff survey indicate that the short duration of PL is a problem for new parents.	April 2020	HoD	If possible, workload relief for enhanced PL will form part of the DCS People Plan from Term 1 2022.

<b>Action 5.6.2</b>	Review existing social activities and participation; and introduce new social activities aiming at balanced participation of both academic staff and PSS. Consult all staff groups, with the aim of achieving a diverse and widespread participation.	55% of the AS staff survey participants have at least some concerns regarding the informal culture of the Department, centred round gender polarisation and clustering of staff groups.	Review: May 2020 New activities: from December 2020 onwards	HoA	A programme of social activities exists that attracts a more balanced mix of participants (precise targets to be determined via consultation). Good feedback is received from participants via informal polling. The proportion of positive answers to the question about informal culture increases from 86% to 95% in the AS staff survey April/May 2021.
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<b>Action 5.6.3</b>	Introduce regular women-only social events, for both staff and students, as a forum for informal mentoring and mutual support.	Feedback from other institutions suggests that some women appreciate and benefit from women-only social spaces, more than formal mentoring schemes	December 2020	ED&I Lead Director of Student Experience	Women-only social activities exist that attract staff and students.  Good feedback is received from participants via informal polling.  The proportion of positive answers to the question about the informal culture of the Department increases from 86% to 95% in the AS staff survey April/May 2021.
<b>Action 5.6.4</b>	Hold externally facilitated focus groups to develop further mechanisms for staff to provide feedback and raise issues with the management of the Department.	Both our Pulse and AS staff survey results indicate that the ability of staff to speak up and have their voice heard is an area that DCS needs to improve, relative to other areas.	Pulse survey: January 2020  Focus groups: November 2020  Implementation: January 2021	HoD HoA	The proportion of negative answers to the relevant question in the Pulse survey reduces from 26% in 2018 to 15% in 2020 and 10% in 2022.

<b>Action 5.6.6</b>	<p>Communication from the HoD and Committee Chairs to ensure that non-members know they are always welcome to attend the meetings of the influential committees such as Academic Studies Committee, the Postgraduate Studies Committee, and of the Research Strategy Committee.</p>	<p>Attending the meetings of influential committees may help junior colleagues develop the expertise and the skills that will allow them to take up more senior academic administrative roles in the future.</p>	<p>May 2020</p>	<p>HoD</p>	<p>Meetings of the Academic Studies Committee, Postgraduate Research Committee, and the Research Strategy Committee are advertised to all colleagues.</p>
<b>Action 5.6.7</b>	<p>DCS will collate existing data about participation on influential external committees, monitor for trends, and develop further actions to enhance the participation of women and minority groups.</p>	<p>Currently, data on participation on influential external committees is collected through PDR forms and hence is fragmented and hard to access.</p>	<p>October 2021</p>	<p>ED&amp;I Lead HoD</p>	<p>A record of participation of colleagues on influential external committees is updated annually and is used by the DCS leadership to inform and influence departmental strategy and policies, and individual cases for merit pay and promotion.</p>

<b>Action 5.6.8</b>	DCS will develop a method of monitoring gender bias in the design and operation of our workload model directly, and report annually to Staff Meeting.	The DCS workload model is currently monitored for gender bias indirectly through staff surveys and PDR. A more direct method and annual reports to Staff Meeting will add transparency to the process and speed up the feedback.	October 2020	HoD	HoD reports annually to Staff Meeting on steps taken to monitor and eliminate gender bias in the workload model.
<b>Action 4.2.1</b>	Engage with the UoW Pay Action Group in order to identify ways of reducing the gender pay gap at DCS.	The gender pay gap at DCS is substantial and it is structural to a significant degree. We are committed to addressing the structural factors underlying the pay gap, and we wish to take advantage of institutional expertise in doing so.	April 2022	HoA HoD	Suitable targets, constructive actions to achieve them, and a long-term DCS strategy for tackling the structural nature of the gender pay gap agreed by April 2022.
<b>Action 5.3.10</b>	Review the structure and governance of research themes to include Terms of Reference, rotating leadership, and the introduction of deputy Heads of Theme.	Ensure effective operation of research themes as a forum for supporting those applying for research grants, ensure a range of input, provide development opportunities for more junior staff (e.g. Associate Professors). All research themes are currently led by men. Bringing in rotating leadership and deputies would be a way of increasing diversity.	December 2021	Director of Research Strategy Deputy Director of Research Strategy	Revised structure and governance are agreed and working effectively.  Increase in applications and awards to female academics, in terms of number, value, and/or prestige.

<b>Action 5.3.11</b>	Develop Research Strategy Committee as a forum for sharing good practice among different research themes.	Some themes are much more successful at bringing in external funding than others. Sharing good practice between themes may be one way of “levelling up” success rates	April 2021	Director of Research Strategy Deputy Director of Research Strategy	Increase in funding particularly in research themes which have historically been less successful, taking into account the availability of funding for different topics.
<b>Action 5.5.1</b>	Explore how to mitigate the impact of maternity and adoption leave on postdocs, for example by extending their contract beyond the end of the project, if the project is not suspended.	If a Research Fellow takes ML, typically either the grant can be extended, or an appointment can be made to cover the period of the leave. If the latter, the Fellow may be eligible for maternity pay, but they will have lost out on the opportunity to produce research outputs during this time.	December 2020	HoA	Mitigation strategy to form part of the DCS People Plan from December 2020