



Department Application Bronze and Silver Award



Name of institution	King's College London	
Department	Department of Informatics	
Focus of department	STEMM	
Date of application	30 November 2017	
Award Level	Bronze	
Institution Athena SWAN award	Date: 30 November 2016	Level: Bronze
Contact for application Must be based in the department	Elizabeth Black	
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Departmental website	https://www.kcl.ac.uk/nms/depts/informatics	5/

Word counts	
Section 1	722 (Letter from Head of Department)
	197 (Letter from previous Head of Department)
Section 2	745
Section 3	938
Section 4	2,251
Section 5	5,326
Section 6	344
Total	10,523
Total allowed	10,700 (10,500 + 200 extra allowed for letter from previous Head of Department)

Glossary

AS	Athena SWAN
CS	Computer science
DepHoD	Deputy Head of Department
DepHoDEd	Deputy Head of Department (Education)
DepHoDRes	Deputy Head of Department (Research)
DTP	Doctoral Training Partnership
E&D	Equality and diversity
ENG	Engineering
EPSRC	Engineering and Physical Sciences Research Council
FTE	Full-time equivalent
GTS	Graduate Teaching Scholarship
HoD	Head of Department
HoG	Head of Research Group
ІСТ	Information and Communication Technologies
NMS	Natural and Mathematical Sciences
PDR	Performance Development Review
PGR	Post graduate research
PGT	Post graduate taught
Ы	Principal Investigator
SAT	Self-assessment team
UG	Undergraduate

1. LETTER OF ENDORSEMENT FROM HEAD OF DEPARTMENT

Word count: 722



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One of my priorities has been to reshape the governance of the Department to support its growth, seizing the opportunity to embed diversity principles in its structure. I involved the SAT and the Department in specifying terms of reference for deputy heads of department, and solicited expressions of interest for the role. I created a Strategy Committee that includes the SAT Chair, who is taking on the new role of Diversity Lead; vice-versa, the Senior management team will be *ex officio* members of the new department Diversity Committee. For the 2017 round of promotions, for the first time, I convened a departmental promotion panel earlier this month, with diverse representation, aiming to provide advisory feedback to applicants and to identify and encourage people who might be ready to apply. Building on the good work of my predecessor Professor Viganò, I am using a workload allocation model to ensure transparent allocation of duties. I am committees in the department, and make them our new routine. This is reflected in our action plan.

I hereby confirm that the information presented in the application (including qualitative and quantitative data) is an honest, accurate and true representation of the Department.

Aut

Professor Luc Moreau Head of Department of Informatics

King's College London, a body incorporated by Royal Charter in England and Wales with registered number RC000297 whose principle place of business is at Strand, London, WC2R 2LS

1.1 Short statement from previous Head of Department (extra 200 words allowed)

Word count: 197

Faculty of Natural and King's College London, Strand Campus **Mathematical Sciences** Bush House, 30 Aldwych London WC2B 4BG Department of Informatics ONDON Telephone 020 7848 2145 Equality Charters Manager Equality Challenge Unit 7th Floor, Queens House 55/56 Lincoln's Inn Fields London WC2A 3LJ Date: 20 November 2017 To the Equality Charters Manager and Athena SWAN panel I am very happy to endorse this application for an Athena SWAN Bronze Award. I was Acting Head of Informatics from February to July, 2017. In that time, I made Equality & Diversity one of my highest priorities. I wish to highlight two specific activities that I carried out to that end. First, I devised a new and detailed Workload Allocation Model for academic staff that covers the different teaching and administrative duties. This explicitly takes into account equality principles and allowed me to transparently remodulate workload to reduce load imbalance. Second, our department moved to a new building and I was responsible for the allocation of academic staff to new offices, the majority of which are double-occupancy, meaning many academic staff now share offices for the first time. I carried out extensive consultation with the Department to identify a long-term office-allocation strategy taking into explicit account equality and diversity issues (e.g., prioritizing seniority or asking for volunteers to share would likely have penalized junior and female staff) and then allocated single-occupancy offices first to individuals whose personal circumstances make it difficult to share and then based solely on a ranked list of duties that require a more private space. Sincerely Professor Luca Viganò Department of Informatics King's College London Bush House, 30 Aldwych London WC2B 4BG

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2. DESCRIPTION OF THE DEPARTMENT

Word count: 745



Figure 1: Governance structure of Informatics and reporting lines to Faculty

The Department was formed in 2010, combining: the former Department of Computer Science, the Robotics and Telecommunications groups from the former Division of Engineering, and the Centre for Bioinformatics. The Department has been through a period of rapid growth of student numbers, which more than doubled since 2012/13 (Fig.3) and it is planned to grow academic staff numbers to \approx 120 by 2021, eventually becoming two distinct departments (of Computer Science and Engineering). This growth is part of King's Strategic Vision for 2029. In support of this growth and vision, the Department



Figure 2: Pictures of Bush House, the new home of the Department of Informatics

	Academic staff		Teaching f	ellows	Profession support st		Students	
	Oct. 2017	2012/13	Oct. 2017	2012/13	Oct. 2017	2012/13	Oct. 2017	2012/13
Men	41	39	5	0	3	1	1123	551
Women	14	11	1	0	8	6	336	162
Total	55	50	6	0	11	7	1459	713

Figure 3: Current and historic staff and student numbers

recently moved to Bush House, an iconic building that extends the College's Strand Campus in Central London (Fig.2).

We currently have six research groups, two are headed by a woman. We offer numerous UG and PGT programmes; some computer science (CS) focused and some engineering (ENG) focused (Fig.4). A new MSc in Computational Finance started in 2017/18 and a new BEng/MEng in General Engineering is planned for 2020/21. Wherever appropriate, we both collectively consider all Informatics programmes, as well as looking separately at our ENG and CS programmes, in order to benchmark appropriately and identify discipline-specific issues.

We are in the Faculty of Natural & Mathematical Sciences (NMS), which comprises Chemistry, Informatics, Physics and Mathematics. The Faculty operates through numerous committees (Fig.1) with

Current UG programmes	Current PGT programmes					
BSc Computer Science (CS)	MSc Advanced Computing (CS)					
BSc Computer Science with Management (CS)	MSc Advanced Computing with Management (CS)					
BSc Computer Science with Management and a Year Abroad (CS)	MSc Advanced Software Engineering (CS)					
BSc Computer Science with Management and a Year in Industry (CS)	MSc Advanced Software Engineering with Management (CS)					
BSc Computer Science with a Year Abroad (CS)	MSc Computing & Internet Systems (CS)					
BSc Computer Science with a Year in Industry (CS)	MSc Computing & Security (CS)					
MSci Computer Science (CS)	MSc Computer Systems Engineering with Management (CS)					
BSc Computer Science with Robotics (CS)	MSc Data Science (CS)					
BSc Computer Science with Intelligent Systems (CS)	MSc Electronic Engineering with Management (ENG)					
BEng Electronic Engineering (ENG)	MSc Engineering with Management (ENG)					
MEng Electronic Engineering (ENG)	MSc Intelligent Systems (CS)					
BEng Electronic and Information Engineering (ENG)	MSc Mobile & Personal Communications (ENG)					
MEng Electronic and Information Engineering (ENG)	MSc Robotics (ENG)					
BEng Electronic Engineering with Management (ENG)	MSc Telecommunications & Internet Technology (ENG)					
MEng Electronic Engineering with Management (ENG)	MSc Web Intelligence (CS)					
Current PGR p	rogrammes					
PhD Bioinformatics (CS)	PhD Computer Science (CS)					
PhD Robotics (ENG)	PhD Telecommunications (ENG)					

Figure 4: Current Informatics programmes. (CS) indicates a computer science focussed programme. (ENG) indicates an engineering focussed programme

representation from each academic department, providing governance, policy-making and a means of sharing best practice. The Department committees (Fig.1) develop departmental policies and strategy. The Head of Department (HoD) has responsibility for management of academic and teaching staff, with support from four new Deputy Heads of Department (introduced October 2017) – for Education (DepHoDEd) and for Research (DepHoDRes), both of whom are women, and for Engineering and for Resources (both men).

The Faculty gained Athena SWAN (AS) Bronze in 2014 (now expiring) and the Faculty Equality & Diversity (E&D) Committee was previously responsible for overseeing our AS action plan. Notable achievements include:

- a series of inclusive social events;
- piloting university's Carer's Career Development fund, which supports caring costs incurred through attendance at career development events;

- mandating unconscious bias training for people involved in recruitment;
- annual Women in Science week, with a range of events celebrating the achievements of women in science.

While the E&D work we have undertaken as a Faculty has created much better awareness and understanding of our challenges, we are yet to ensure that Athena principles are embedded within the Department's processes and practices. The Department actively contributes to the Faculty's E&D activities but we have been missing the departmental governance structures required to embed E&D throughout our working practices. We have decided to apply now *as a Department* to ensure that we (the Department) take ownership and accountability of the process.

Our new HoD joined King's in August 2017. E&D is fundamental to the HoD's strategy and he has met with our Self-Assessment Team (SAT) Chair to discuss this 6 times (including once before starting at King's). Crucially, the HoD and SAT Chair have worked closely together to ensure that our action plan is aligned with the HoD's strategy for the Department and that he is committed to its implementation.

On joining, the HoD initiated a review of the Department's governance structures and has consulted closely with the SAT to ensure that E&D principles are embedded throughout. Outcomes include:

- new Department academic administrative role of Diversity Lead;
- plans for new Department E&D Committee (Action 0.1), whose *ex officio* membership includes the Senior Management Team (HoD and DepHoDs) and other key roles;
- Terms of Reference for new DepHoD roles include explicit reference to E&D principles and aspirations;
- Diversity Lead is *ex officio* member of new Department Strategy Group, whose remit is to determine overall department policy and strategy.

The arrival of a new HoD naturally prompted a review of Department strategy, and we have now articulated three explicit **equality and diversity aspirations**:

- no staff or student should be disadvantaged because of any protected characteristics;
- to provide an inclusive working and learning environment for all staff and students;
- the diversity of the Department should reflect our society's diversity.

Our planned growth brings exciting opportunities to shape the Department and our E&D aspirations are central to this. In October 2017, we held a brainstorming session with key members of staff to discuss how we can embed E&D into the Department's growth (Fig.5), results of which are guiding Department planning activities. Further workshops and events are being planned, involving staff and students, to develop a set of core values for the Department.

→ Action 6.6. Definition of the Department's values and associated expected behaviours.



STUDENT TCEU EXPERIENCE CLEA. (ROAL)



Figure 5: Brainstorming session to embed E&D in the growth of the Department

3. THE SELF-ASSESSMENT PROCESS

Word count: 938

Name	Role	Relevant professional experience
Dr Asad Ali (male, m)	Teaching Fellow	King's PhD, 2016. Research staff at King's 2014 to 2016. Appointed as Teaching Fellow in 2016.
Dr Elizabeth Black (female, f)	Senior Lecturer Chair of SAT	Faculty E&D Champion, 2012–2016. Athena SWAN assessment panel member. Led Faculty's successful 2014 Bronze Athena SWAN application. Promoted 2015.
Dr Rita Borgo (f)	Senior Lecturer	Appointed in 2016. Data science expertise. Member of Athena SWAN SAT for College of Science at Swansea University, 2010-13.
Sara Boutamina (f)	PGR student	Faculty representative on the King's Doctoral Students' Association Committee. Part of the Agents and Intelligent Systems research group.
Dr Amanda Coles (f)	Lecturer	Joined as EPSRC Fellow in 2011. Appointed as a Lecturer in 2013.
Clare Cudby (f)	Department Manager	Joined King's in 2006. Has worked across a range of areas. Joined Informatics in 2016. Leads Informatics professional services staff.
Professor Jian Dai (m)	Professor	Faculty representative on the university's Black Minority Ethnic Staff Network.
Dr Yansha Deng (f)	Lecturer	King's research staff from May 2015. Appointed as Lecturer in August 2017.
Sumayyah Dzulkifly (f)	PGR student	Part of the Centre for Telecommunications research group.
Jonathan Gabony (m)	UG Programme Administrator	Joined King's in 2012. Coordinates undergraduate activities including induction, communications, web content, staff-student liaison, feedback, assessment, and examination boards.
Professor Luc Moreau (m)	Professor	Joined King's as Head of Informatics in August 2017.
Dr Sarah Mount (f)	Research Staff	Joined King's in 2015 as research associate in the Software Development Team. Works on software tools and benchmarking.
Dr Isabel Sassoon (f)	Teaching Fellow, Research Staff	King's PhD, 2017. Data science expertise. Previously member of the Faculty SAT and the Faculty E&D Committee.
Dr Mohammad Shikh-Bahaei (m)	Reader	Faculty Head of Graduate Studies from 2014 to 2016.
Dr Elizabeth Sklar (f)	Reader	Head, Robotics Research Group. 10yrs in industry. Extensive outreach experience. Recruited 2015. Data science expertise.
Georgia Skupinski (f)	College Diversity & Inclusion Officer	Works on diversity and inclusion initiatives across the Arts and Sciences faculties with a focus on gender.
Professor Luca Viganò (m)	Professor	Former Acting Head of Department, February 2017 to July 2017.
Lucy Ward (f)	Faculty E&D Coordinator	Coordinates equality and diversity activities for the Faculty.
Previous members	1	N
Professor Peter McBurney (m)	Professor	Former Head of Department, 2013 to February 2017.
Shokryah Mohammadi (f)	UG student	Graduated in July 2017. Founding member of King's Women in STEM student society.

Figure 6: Current and previous members of our Self-Assessment Team

Our SAT (Fig.6) formed in September 2016. The team's cumulative personal experience includes:

- balancing caring responsibilities and work/studies, including as a single parent;
- flexible working arrangements;
- dual-career families;
- career breaks;
- transitioning from part-time to full-time after a career break;
- first in family to go to university;
- non-standard career paths.

The SAT Chair (a role Dr Black volunteered for) is formally recognised in our new workload allocation model with an associated teaching relief. SAT membership is recognised with a smaller time commitment. The Chair is supported by the Faculty E&D Coordinator and the College Diversity & Inclusion Officer (Arts & Sciences), with whom she meets regularly.

The SAT has met formally 7 times. It split into working groups to consider different datasets between meetings, and we had several lively breakout sessions during meetings where subgroups focussed on different aspects related to supporting and advancing women's careers. Discussion between meetings has been carried out over email and via commenting on documents. In addition, the HoD and SAT Chair have worked closely together on final iterations of our application and action plan.

The Department has been consulted in numerous ways.

- SAT Chair reports to the Department Board (all staff membership) four times a year.
- King's Doctoral Students' Association Committee and KCL Women in STEM student society are represented in the SAT, facilitating consultation with these student bodies.
- Faculty staff survey, March 2014. There were 69 Informatics responses, giving a response rate of ≈96%. 55 respondents identified as a man, the remaining 14 identified as a woman.
- Faculty E&D student opinion survey, January 2015.
- King's Early Career Researchers Committee consulted our research staff, January 2015.
- University staff survey, November 2015.¹ There were 62 Informatics responses, giving a response rate of ≈65%. 38 respondents identified as male, the remaining 24 either identified as female or other.
- Faculty focus group with female academic staff, March 2016.
- Faculty focus group with female research staff, November 2016.
- Focus groups on department culture with Informatics UG/PGT/PGR students who identify as a woman or have a non-binary gender identity, February 2017.
- Consultation of staff with particularly relevant roles, summer 2017.
- Staff who started within 3 years surveyed on induction experience, September 2017.

¹ Note, this was performed by an external company who were unable to separate out Informatics responses from "Female" and "Other" staff because of concerns about preserving anonymity, hence we report them together here as "staff who do not identify as male".

- Department Strategy Group (includes HoD, DepHoDs and Heads of Research Groups (HoGs)) reviewed our application and action plan, October 2017.
- All staff and PGR students invited to comment on draft of the application and action plan, circulated 1 November 2017.

The Chair of the SAT reports 6 times a year to the Faculty E&D Committee. Our application has been reviewed by the: Provost & Senior Vice President for Arts & Sciences; Executive Dean of Faculty; Faculty Director of Administration; Department Strategy Group; AS lead for Mathematics. The Chair has also met with the AS lead for the School of Security Studies to share best practice and discuss self-assessment.

Through our self-assessment, we identified six main challenge areas for improvement, which are key for achieving the Department's E&D aspirations.

Student focussed.

Challenge 1. Proportion of students who are women.

Especially a challenge at UG level, where % of students who are women has dropped from 22% (2012/13, headcount: 87) to 14% (2015/16, headcount: 98) (Section 4.1.(ii)).

Challenge 2. Attainment of female UG students.

2012/13-2015/16: female undergraduates less likely than male undergraduates to get a First (p-value 0.0036) (Section 4.1.(ii)).

Staff focussed.

Challenge 3. Proportion of staff who are women.

Especially a challenge at senior levels: % of professors who are women has dropped from 13% (FTE: 2) to 11% (FTE: 1.2) (Section 4.2.(i)) and since September 2012 we have recruited for 7 professor posts, which were all appointed to men (Section 5.1.(i)).

Challenge 4. Promotion and progression of women.

2012/13-2015/16: 21% (headcount: 14) of eligible men applied for promotion but only 17% (headcount: 4) of eligible women applied to promotion; 86% of men who applied (12/14) were successful, while only 50% of women who applied (2/4) were (Section 5.1.(iii)).

Culture and environment focussed.

Challenge 5. Managing career breaks and caring responsibilities.

2015 university staff survey: 89% of Informatics staff who do not identify as male agree that King's treats people on their merits regardless of pregnancy/maternity/paternity (vs. 95% of Informatics staff who identify as male). 2014 NMS staff survey: 50% of women think Informatics is extremely/very supportive of staff facing/planning a career break (vs. 65% of men). (Section 5.3.(i-iii).)

Challenge 6. Attitudes, behaviour and inclusivity.

Female student focus groups (2017) raised issues including: microagressions; lack of female role models; uncomfortable participating when in the minority; sexist online behaviour. 2015 university staff survey: 79% of Informatics staff who do not identify as male agree they feel valued by their colleagues (vs. 97% of male Informatics staff). (Section 5.4.(i).)

Post-submission, we will replace the SAT with a Department E&D Committee, which will have responsibility for overseeing implementation of our action plan, which is organised around the 6 strategic challenge areas identified above. The Senior Management Team (HoD, DepHoDs) and other key roles will be ex officio members of the committee. The E&D Committee will be chaired by a new academic role of Diversity Lead, who will have monthly 1-1 meetings with the HoD and be an ex officio member of the Department's Strategy Group. It will convene six times a year and report to the Department Board and Department Strategy Group, and to the Faculty E&D Committee. Committee membership will include research staff, PGR and taught student representation.

→ Action 0.1. Department E&D Committee.

4. A PICTURE OF THE DEPARTMENT

Word count: 2,251

DEPARTMENT OF INFORMATICS

ABOUT US Computer Science Robotics Telecommunications PEOPLE STUDY RESEARCH INNOVATION & ENTERPRISE - Intormation WOMEN IN SCIENCE **NEWS & EVENTS DEPARTMENT OF INFORMATICS** CONTACT US DND Department of Informatics 👩 Best 3 years! Great Staff, great people, great Department & 1 King's College London Informatics @kclinformatics

Home

Figure 7: Images from our webpages and social media

4.1 Student data

We benchmark CS programmes against *HESA 8 Computer science* and ENG programmes against *HESA 9 Engineering & technology*.

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

n/a

(ii) Numbers of undergraduate (UG) students by gender

Our UG programmes are all full-time.



Figure 8: UG students. Columns show the proportional gender representation of our students, labels show headcounts. ALL denotes all Informatics UG programmes, CS denotes only computer science programmes, ENG denotes only engineering programmes (note these were established in 2015/16).



Figure 9: UG students. Columns show the proportional gender representation of our students, labels show headcounts. CS – with/no management: computer science programmes with/without management in the title.

		2012 entry		20	013 ent	ry	2	014 en	try	ry 2015 ei		try	
		Fen	nale	Male	Female		Male	Female		Male	Female		Male
		#	%	#	#	%	#	#	%	#	#	%	#
	Applications	129	15%	716	188	16%	965	275	16%	1410	319	16%	1644
	Offers	82	17%	407	130	17%	631	193	18%	885	218	17%	1062
	Acceptances	24	17%	119	21	11%	162	70	17%	332	72	16%	373
ALL	Enrolments	21	17%	104	21	13%	139	30	14%	185	50	16%	267
	Applications to Offers	64%	>	57%	69%	>	65%	70%	>	63%	68%	>	65%
	Offers to Accepts	29%	=	29%	16%	<	26%	36%	<	38%	33%	<	35%
	Accepts to Enrolments	88%	>	87%	100%	>	86%	43%	<	56%	69%	<	72%
	Applications	129	15%	716	188	16%	965	275	16%	1410	293	16%	1534
	Offers	82	17%	407	130	17%	631	193	18%	885	200	17%	986
	Acceptances	24	17%	119	21	11%	162	70	17%	332	66	16%	357
S	Enrolments	21	17%	104	21	13%	139	30	14%	185	47	16%	253
	Applications to Offers	64%	>	57%	69%	>	65%	70%	>	63%	68%	>	64%
	Offers to Accepts	29%	=	29%	16%	<	26%	36%	<	38%	33%	<	36%
	Accepts to Enrolments	88%	>	87%	100%	>	86%	43%	<	56%	71%	=	71%
					•			•			•		
	Applications										26	19%	110
	Offers										18	19%	76
	Acceptances										6	27%	16
ENG	Enrolments										3	18%	14
	Applications to Offers										69%	=	69%
	Offers to Accepts										33%	>	21%
	Accepts to Enrolments										50%	<	88%

Figure 10: UG students. Applications data by gender, considering all Informatics programmes (ALL), only computer science programmes (CS), and only engineering programmes (ENG) (note these were established in 2015/16)

In CS programmes, Figs.8 and 10 show:

- percentage of students who are women dropped from 22% to 14%, just below national benchmark of 15%;
- number of women applying increased at a similar rate to men;
- women consistently more likely than men to be made offers;
- women less likely than men to accept offers (significantly so in 2013);
- no obvious trend in the conversion of accepts to enrolments.

Proportion of students taking "with management" programmes who are women is significantly higher than on programmes without management (Fig.9).

→ Action 1.1. Investigate why women are more likely to choose "with management" programmes.

Offers are made if students are predicted to meet or exceed our entry requirements. The only exception is for certain underprivileged students (care leavers and students from our widening participation

initiatives) who may be made an offer if their predicted grades fall slightly short of our entry requirements. All offers are made at the programme's entry requirements. *We do not know why women are less likely than men to accept offers.*

→ Action 1.2. Investigate why women are more likely than men to decline offers.

We aim to ensure diverse representation of staff and students on our webpages (Fig.7) and recruitment material, and at recruitment events, but could do more to highlight the friendly, supportive and inclusive nature of the Department, as well as initiatives that target women such as:

- extremely active KCL Women in STEM student society;
- Amazon Women in Innovation Bursary scheme;
- NMS Women in Science Scholarships;
- NMS Women in Science week.

We do not currently do anything to specifically target female offer holders, nor do we have any outreach activities that particularly target girls.

→ Action 1.3. Student recruitment material specifically aimed at women.

→ Action 1.4. Online question and answer session for female offer holders with current female students.

→ Action 1.5. "Why study at KCL Informatics?" webpages.

→ Action 1.6. Coordinated outreach scheme targeted at girls.

Our current UG engineering programmes started in 2015 and it is too early to identify any trends (Figs.8 and 10). We have new UG General Engineering programmes starting in September 2020. These have been designed around project-based learning, a radical change from our existing programmes, motivated in no small part by our aim to appeal to and nurture a diverse cohort. Evidence suggests that female engineering students especially thrive with project-based learning ² and in the long-term we hope to improve all our programmes based on best-practice learnt on our new engineering programmes.

→ Action 1.7. Marketing campaign for new engineering programmes to highlight project-based learning approach and its benefits.

→ Action 1.8. Monitor impact of new engineering programmes on recruitment of women.

While performance of our male UGs is fairly consistent, the performance of female UGs is more varied (Fig.11). While this is to be expected to some extent, given the small numbers of women, if we aggregate the data across 2012/13-2015/16 then we see a statistical difference in performance of UGs. Specifically:

- women are less likely than men to get a first (p-value 0.0036);
- women are less likely than men to get either a first or an upper second class (p-value 0.0003).

A large-scale 12-year period analysis of student performance on computer science degrees across 129 UK universities also showed that female students were awarded a significantly lower proportion of first class degrees than male students.³ In addition to actions to better understand our attainment gap, we have actions planned to build our female students' confidence, to explore more project-based learning

² https://www.insidehighered.com/news/2013/11/20/project-based-learning-could-help-attract-and-retain-women-stem-study-suggests

³ I. Wagner. Gender and performance in computer science. *ACM Transactions on Computing Education*, 16(3), Article 11. 2016.



Figure 11: Award classification data by gender for UG students on computer science programmes

approaches (through our new engineering programmes), to provide better access to female role models and mentors (see also Section 5.2.(iv)), and to provide female students with opportunities to learn from and work in groups with their peers – approaches that have been shown in the literature to help reduce gender attainment gaps.⁴

→ Action 2.1. Thorough investigation of gender attainment gap.

→ Action 2.2. Monitor impact of new engineering programmes on performance of women.

- → Action 2.3. Peer support initiative.
- → Action 2.4. Funding for women students to attend the womENcourage conference.
- → Action 2.5. Encourage female students to attend hackathons and other extra-curricular events.

⁴ I. Wagner. Gender and performance in computer science. *ACM Transactions on Computing Education*, 16(3), Article 11. 2016.

We do not currently have classifications data for our UG engineering programmes, as the first cohort is yet to graduate.

(iii) Numbers of men and women on postgraduate taught (PGT) courses



Our PGT programmes are all full-time.

Figure 12: PGT students. Columns show the proportional gender representation of our students, labels show headcounts. ALL denotes all Informatics PGT programmes, CS denotes only computer science programmes, ENG denotes only engineering programmes.



Figure 13: PGT students. Columns show the proportional gender representation of our students, labels show headcounts. CS – with/no management: computer science programmes with/without management in the title. ENG – with/no management: engineering programmes with/ without management in the title.

		2012 entry		2	013 en	try	20)14 ent	ry	2015 entry		try	
		Fen	nale	Male	Fen	Female Male		Fem	Female M		Fen	nale	Male
		#	%	#	#	%	#	#	%	#	#	%	#
	Applications	462	28%	1209	488	30%	1114	410	30%	977	355	31%	783
	Offers	308	30%	711	318	34%	627	295	32%	634	252	34%	500
	Acceptances	154	29%	385	149	34%	283	59	29%	143	62	29%	153
ALL	Enrolments	34	24%	105	40	35%	75	58	31%	129	58	30%	133
	Applications to Offers	67%	>	59%	65%	>	56%	72%	>	65%	71%	>	64%
	Offers to Accepts	50%	<	54%	47%	>	45%	20%	<	23%	25%	<	31%
	Accepts to enrolments	22%	<	27%	27%	=	27%	98%	>	90%	94%	>	87%
									1				
	Applications	326	29%	799	259	30%	615	172	27%	474	159	29%	391
	Offers	213	33%	432	177	35%	322	127	31%	285	107	30%	255
	Acceptances	103	31%	225	78	36%	138	21	23%	71	26	26%	75
S	Enrolments	15	23%	50	24	36%	42	17	22%	62	25	25%	75
	Applications to Offers	65%	>	54%	68%	>	52%	74%	>	60%	67%	>	65%
	Offers to Accepts	48%	<	52%	44%	>	43%	17%	<	25%	24%	<	29%
	Accepts to enrolments	15%	<	22%	31%	>	30%	81%	<	87%	96%	<	100%
	Applications	136	25%	410	229	31%	499	238	32%	503	196	33%	392
	Offers	95	25%	279	141	32%	305	168	32%	349	145	37%	245
	Acceptances	51	24%	160	71	33%	145	38	35%	72	36	32%	78
ENG	Enrolments	19	26%	55	16	33%	33	41	38%	67	33	36%	58
	Applications to Offers	70%	>	68%	62%	>	61%	71%	>	69%	74%	>	63%
	Offers to Accepts	54%	<	57%	50%	>	48%	23%	>	21%	25%	<	32%
	Accepts to enrolments	37%	>	34%	23%	=	23%	108%	>	93%	92%	>	74%

Figure 14: PGT students. Applications data by gender, considering all Informatics programmes (ALL), only computer science programmes (CS), and only engineering programmes (ENG). See comment below explaining 108% conversion of accepts to enrolments, ENG female 2014.

Fig.12 shows:

- on CS and ENG programmes, percentage of students who are women is higher than national benchmark;
- except for 2012/13, percentage of ENG students who are women is significantly higher than on CS programmes.

Fig.13 shows:

- our "with management" programmes attract a higher percentage of female students than programmes without management;
- our ENG "with management" programmes are more popular than our CS "with management" programmes (explaining the difference in female representation between CS and ENG programmes).

→ Action 1.1. Investigate why women are more likely to choose "with management" programmes.

Our applications data (Fig.14) shows:

- number of women applying to CS programmes has increased at a similar rate to men;
- proportion of applications to ENG programmes from women increased from 25% to 33%;
- across CS and ENG programmes, women more likely to be made an offer than men;
- men typically more likely than women to accept offers, especially on CS programmes (some years significantly so);
- on CS programmes, men more likely to enrol than women.

→ Action 1.2. Investigate why women are more likely than men to decline offers.

Note that pre-2014, many PGT students who had accepted offers were not enrolling, and so we introduced a deposit scheme for students accepting offers, hence the increase in percentage of accepting students who actually enrol. We see a 108% conversion of accepts to enrolments for women on ENG programmes in 2014 because of students switching from a CS to an ENG programme shortly after enrolling.

For the majority of programmes, the same offer is made to all, and only, students who meet our entry requirements. The exceptions are our telecommunications focussed programmes, where students who come close to the threshold are also made offers if they have strong reference letters or if their marks in related topics are high. This decision is made by an academic, who has had unconscious bias training.

Our main priorities are to increase the proportion of our applications from women and increase the proportion of women who accept offers.

→ Action 1.3. Student recruitment material specifically aimed at women.

→ Action 1.4. Online question and answer session for female offer holders with current female students.

→ Action 1.5. "Why study at KCL Informatics?" webpages.

With the Department's strategic growth, a full review of our teaching portfolio is planned; this provides an opportunity to reconsider our programmes in light of the cohort they attract.

→ Action 1.9. Diversity to be explicit consideration in teaching portfolio review.

We see no statistically significant difference in the performance between students on ENG PGT programmes and students on CS PGT programmes, so present data for all programmes together (Fig.15). Having analysed this, we see no statistically significant difference in PGT performance of men and women.



Figure 15: Award classification data by gender for students on PGT programmes.



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

Figure 16: PGR full- and part-time students. Columns show proportional gender representation of our students, labels show headcounts. ALL: all PGR programmes. CS: only computer science programmes, ENG: only engineering programmes.



Figure 17: PGR full-time students. Columns show the proportional gender representation of our students, labels show headcounts. ALL: all PGR programmes. CS: only computer science programmes, ENG: only engineering programmes.



Figure 18: PGR part-time students. Columns show the proportional gender representation of our students, labels show headcounts. ALL: all PGR programmes. CS: only computer science programmes, ENG: only engineering programmes.

Figs.16-18 show:

- proportion of students on CS PGR programmes who are women has grown steadily, while for our ENG programmes this has fluctuated somewhat;
- across our full-time ENG and CS PGR programmes, we have a higher proportion of women than the national benchmark, quite significantly so across our CS programmes;
- far smaller proportion of our part-time PGR students are women than on our full-time programmes.

			2012			2013			2014			2015	
		Fen	nale	Male	Fen	nale	Male	Fen	nale	Male	Fem	ale	Male
		#	%	#	#	%	#	#	%	#	#	%	#
	Applications	55	24%	178	49	20%	191	41	27%	112	38	23%	124
	Offers	24	21%	90	32	26%	92	22	29%	55	21	25%	63
	Acceptances	17	24%	55	17	24%	54	16	31%	35	16	29%	39
ALL	Enrolments	7	19%	29	9	25%	27	9	31%	20	14	36%	25
	Applications to Offers	44%	<	51%	65%	>	48%	54%	>	49%	55%	>	51%
	Offers to Accepts	71%	>	61%	53%	<	59%	73%	>	64%	76%	>	62%
	Accepts to Enrolments	41%	<	53%	53%	>	50%	56%	<	57%	88%	>	64%
	-				-								
	Applications	36	35%	68	30	27%	83	24	32%	50	19	21%	71
	Offers	14	38%	23	18	40%	27	12	36%	21	7	21%	27
	Acceptances	10	38%	16	11	52%	10	8	42%	11	6	26%	17
S	Enrolments	4	22%	14	4	25%	12	4	36%	7	9	43%	12
	Applications to Offers	39%	>	34%	60%	>	33%	50%	>	42%	37%	<	38%
	Offers to Accepts	71%	>	70%	61%	>	37%	67%	>	52%	86%	>	63%
	Accepts to Enrolments	40%	<	88%	36%	<	120%	50%	<	64%	150%	>	71%
		•			•			•					
	Applications	19	15%	110	19	15%	108	17	22%	62	19	26%	53
	Offers	10	13%	67	14	18%	65	10	23%	34	14	28%	36
	Acceptances	7	15%	39	6	12%	44	8	25%	24	10	31%	22
ENG	Enrolments	3	17%	15	5	25%	15	5	28%	13	5	28%	13
	Applications to Offers	53%	<	61%	74%	>	60%	59%	>	55%	74%	>	68%
	Offers to Accepts	70%	>	58%	43%	<	68%	80%	>	71%	71%	>	61%
	Accepts to Enrolments	43%	>	38%	83%	>	34%	63%	>	54%	50%	<	59%

Figure 19: PGR students. Applications data by gender, considering all Informatics programmes (ALL), only computer science programmes (CS), and only engineering programmes (ENG). Note discussion below about enrolment data.

Fig.19 shows:

- proportion of applications to CS programmes from women has dropped from 35% to 21%, while for ENG programmes this has increased from 15% to 26%;
- women normally more likely than men to be made an offer, across CS and ENG programmes;
- except for ENG programmes in 2013, women more likely than men to accept an offer, across all our programmes, sometimes significantly so.

Note that, although we present data on enrolments (Fig.19), our application and enrolment datasets in fact span different time periods, meaning we cannot draw any conclusions from this. Applications, offer and accept data for 20XY refers to students applying within the previous academic year 20XY-1/20XY, who (as we have several entry points for PGR students) may enrol either in the academic year 20XY-1/20XY or in 20XY/20XY+1, while enrolment data for 20XY refers to students who enrol during the academic year 20XY/20XY+1. This is why we see some years where conversion of offers to accepts is

>100%. The admissions office are changing the way they collect data so that it corresponds to academic year of entry and will align with enrolment data.

While a lower priority than for our UG students, we aim to increase our proportion of applications coming from women for our PGR programmes.

→ Action 1.3. Student recruitment material specifically aimed at women.

→ Action 1.5. "Why study at KCL Informatics?" webpages.

PGR offers are made if the candidate meets our entry requirements and there is a member of academic staff willing to supervise them. We have some studentships available that the Department is responsible for allocating, in the form of EPSRC-funded Doctoral Training Partnership (DTP) grants and Graduate Teaching Scholarship (GTS) positions (funded by the university). Only home/EU students are eligible for DTPs, and all eligible students who have been made an offer by the deadline are considered. For GTS positions (which come with teaching commitments) eligible students with offers can apply, and there is an interview process. The process for recruiting DTP and GTS studentships is not formally defined (see also Section 5.2.(iii)) nor is data around this currently collected.

→ Action 1.10. Collect and monitor data relating to recruitment of DTP and GTS positions.

→ Action 1.11. Formalise process for DTP and GTS recruitment.

Having interrogated PGR completion data we were provided with centrally, we have concluded that it is inaccurate. We are in the process of extracting this data from our local records and this will be monitored going forward by our E&DCom.

→ Action 0.1. Department E&D Committee to monitor all relevant data, including on PGR completions.

(v) Progression pipeline between undergraduate and postgraduate student levels

Fig.20 shows:

- for CS programmes:
 - main challenge is with underrepresentation of women at UG level;
 - proportion of students who are women at PGR is higher than at UG, and this difference has grown (as both proportion of PGR students who are women has grown and proportion of UG students who are women has dropped);
 - proportion of students who are women at PGT level has fluctuated, but never dropped below the proportion of our UG students who are women.
- for ENG programmes:
 - proportion of both PGT and PGR students who are women has risen; this rise is more pronounced at PGT level;
 - proportion of students who are women drops from PGT to PGR level, but we note that at PGR level we are still above the national benchmark (Fig.15).

While we aim to increase the proportion of women at each level, our main priority is the UG level.



Figure 20: Student pipelines, for our computer science (CS) and engineering (ENG) programmes. Lines show the proportion of our students who are women at each stage. Note, our UG engineering programmes started in 2015/16.

4.2 Academic and research staff data

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

Staff data is benchmarked against *HESA Cost Centre 121 IT, systems sciences & computer software engineering* (which corresponds to the REF Unit of Assessment against which the Department was submitted in 2014).



Figure 21: Columns show the proportional gender representation of our staff, labels show annualised FTE (full-time equivalent). By contract function: teaching and research (Academic), research only (Research staff) and teaching only (separated into Teaching fellows, a new role in 2015/16, and Bought-in teachers, who are typically contracted to teach a particular module).

Fig.21 shows:

- proportion of academic staff who are women has remained reasonably steady at ≈22% (FTE: ≈10– 11), just over the national benchmark of 21%;
- proportion of research staff who are women has grown from 17% (FTE: 3.9) to 23% (FTE: 6.1), and is now above the national benchmark;
- teaching-only staff are all men, but numbers are too small to draw any conclusions.

We aim to increase the proportion of staff who are women, especially among academic staff, where our planned growth means we are in a position to potentially recruit more women. We detail actions towards this in Section 5.1.(i).



Figure 22: Columns show the proportional gender representation of our staff, labels show annualised FTE. Academic staff only, by grade.

Fig.22 shows:

- a steady increase in the proportion of lecturers who are women;
- proportion of senior lecturers who are women has fluctuated, while FTE of women at this level remained steady;
- proportion of readers who are women has remained fairly steady, while FTE has increased from 2.0 to 3.0, and this is the grade where we see the highest proportion of women;
- proportion of professors who are women dropped from 12.5% (FTE: 2) to 10.4% (FTE: 1.7), below the national benchmark of 13% and significantly lower than at the other grades.

Fig.23 also shows:

- proportion of research staff who are women is lower than at PGR level, but both have risen and difference is now less pronounced;
- proportion of lecturers who are women has risen and is higher than at research staff level;
- proportion of senior lecturers who are women has dropped and is now lower than at lecturer level;
- proportion of readers who are women has risen;
- proportion of professors who are women has dropped;
- professor level is where we see the lowest proportion of women.

We aim to recruit more women (see actions in Section 5.1.(i)) and promote more women (see Sections 5.1.(iii) and 5.2.(iii)).

2012/13-2014/15: all academic staff were full-time. In 2015/16, two professors (one man, one woman) switched to part-time (0.2 FTE) and work in industry for the remainder of their time.



Figure 23: Pipelines from PGR to Professor. Lines show proportion of students/staff who are women. PGR uses headcount. Research staff, Lecturer, Senior Lecturer, Reader and Professor use annualised FTE.

Numbers of part-time research staff are too small to draw any conclusions around the difference with full-time research staff (Figure 24).



Figure 24: Columns show proportion of our part-time research staff who are women and proportion of our full-time research staff who are women (by headcount). Labels show headcount.

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

2012/13-2015/16:

- three members of academic staff (all male) had fixed term contracts, all other academic staff had permanent contracts;
- all research staff had fixed-term contracts;
- all teaching staff had fixed-term contracts, except one who had a special leadership role.

The Department has been quite successful in redeploying our staff, as well as in employing our PGR students. Since women can find it harder than men to relocate for a new job, particularly when this is for a fixed-term, we are happy to note that we provide some staff and PGR students with continuity of employment in this way.

Since 2012-13:

- 21 PGR students (16 men, 5 women) have been subsequently employed in the Department as research staff;
- 5 research staff (4 men, 1 woman) have been redeployed in the Department as teaching fellows;
- 3 research staff (2 men, 1 woman) have been redeployed in the Department as lecturers.

We do not have any formal process in place beyond the university's policy around redeployment of fixedterm contract staff, but do sometimes circulate job adverts to staff and PhD students where they are eligible. To maintain our success in this area, we will ensure that all relevant job adverts are circulated to staff and PGR students in future.

→ Action 3.1. All relevant job adverts to be circulated to staff and PGR students.



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

Figure 25: Columns show percentage of academic and of research staff who left during period 2012-13 to 2015-16, using headcount, by gender. Labels show headcounts.



Figure 26: Of all academic staff who left during period 2012-13 to 2015-16, columns show what percentage left for which reason. Labels show headcounts.

Fig.25 shows that men are more likely to leave than women, both among academic staff and research staff. Reasons for leaving are recorded via an exit survey administered by HR.

Given the small numbers of academic staff who left, it is hard to draw any conclusions about any differences by gender in reasons for leaving (Fig.26).



Figure 27: Of all research staff who left during period 2012-13 to 2015-16, columns show what percentage left for which reason. Labels show headcounts.

Fig.27 shows that, of our research staff who leave, men are more likely to leave because their contract expires, while women are more likely to resign. But given the small numbers of women leaving, we do not see this as particularly significant.

5. SUPPORTING AND ADVANCING WOMEN'S CAREERS

Word count: 5,326 words

5.1 Key career transition points: academic staff

(i) Recruitment

		Aca	demic pos	sts	Research staff posts				
Application	Fen	nale	Male	Unknown	Fen	nale	Male	Unknown	
Stage	#	%	#	#	#	%	#	#	
Applications	15	18%	59	8	75	36%	131	4	
Shortlisted	3	20%	8	4	14	39%	20	2	
Appointed	1	25%	3	0	5	33%	10	0	
Applications to Shortlisted	20%	>	14%	50%	19%	>	15%	50%	
Shortlisted to Appointed	33%	<	38%	0%	36%	<	50%	0%	

Figure 28: Recruitment data by gender, only for the posts where we have been provided with complete data (see discussion below) across the period 2013-14 to 2015-16. Unknown denotes applicants who declined to provide their gender.

	Lecturer	Senior Lecturer	Reader	Professor
Female	4	2	1	0
Male	6	2	0	7

Figure 29: Academic appointments made since September 2012.

Since 2013/14, the university's HR Department is responsible for recording gender related recruitment data. Unfortunately, complete data (i.e., gender breakdown of applicants and of shortlist, and gender of person appointed) has been recorded for only a minority of the posts recruited over this period (<30% of our academic posts, <16% of our research posts). Where we do have complete data for a post, we

present this in Fig.28, but since this represents only a minority of the posts recruited in this period we cannot draw any firm conclusions from this.

The lack of complete recruitment data is a particular area of concern – without it we cannot be sure where to focus our efforts nor can we accurately measure the impact of our actions. This is not something we can record locally - we do not receive the equal opportunity forms that capture gender. King's has identified transformation of HR as a strategic priority for its Vision 2029; this will include a new electronic HR system (scheduled for 2019) which will provide robust and accurate recruitment data. In the interim, we are working closely with the Faculty, the university's central Diversity & Inclusion team, and the HR Department to improve HR's process for recording recruitment data.

→ Action 3.2. Ensure gender-related recruitment data is recorded.

The sparse recruitment data we have (Fig.28) indicates that our main challenge is around attracting female applicants, and this is more pronounced for academic posts. For both academic and research staff posts, female applicants seem more likely than male applicants to be shortlisted, but once shortlisted men are more likely to be appointed. From local records, we see that since September 2012, we have made 22 academic appointments and 32% of these were to women (Fig.29). However, of the 7 professors recruited, all have been men. We have been given complete recruitment data for only one professorial posts, for which we had:

- 18 applications: 15 male, 3 declined to provide their gender;
- 5 shortlisted: 2 male, 3 declined to provide their gender.

A key priority is to increase applications from women, particularly for senior academic posts. Given the planned strategic growth of the Department, the university has committed to providing recruitment agency support for our senior posts.

→ Action 3.3. Recruitment agency to prioritise diverse shortlists.

The Department has recently rewritten the information that appears in job advertisements, to highlight the Department's diversity, commitment to ensuring a friendly and inclusive culture, and family friendly policies. However, there is not much information on our webpages on this.

→ Action 3.4. Webpages highlight our Athena SWAN activities and family friendly policies.

→ Action 3.5. Department to offer to pay caring costs incurred by visiting interviewees.

For academic posts, the HoD seeks suggestions of suitably qualified women who can be encouraged to apply. In recent years, the Faculty has also revised its recruitment guidance to include the following:

- Staff are encouraged to consider the job description for gendered-language.⁵
- All interview panel members required to complete unconscious bias training.
- Wherever possible, interview panel should contain at least one woman.
- All academic and research posts required to be advertised on at least one mailing list that explicitly targets women; the Faculty provides suggestions of these.

However, consultation with staff who have been responsible for recruitment in the past year shows that the majority are unaware of the guidance to consider the language used and that jobs should be circulated to a mailing list that targets women.

⁵ <u>http://gender-decoder.katmatfield.com</u>

→ Action 3.6. All job descriptions to be reviewed for inclusive language.

→ Action 3.7. All jobs to be circulated to at least one mailing list that targets women.

Since June 2014, we have been recording data locally about interview panel composition. During this time period:

- of the 43 research staff posts recruited, 15 had interview panels with no woman;
- of the 9 academic posts recruited, all interview panels included men and women;

Having consulted with staff responsible for organising panels with no woman, common reasons include:

- they often have to be arranged at short notice, so finding a woman with availability is difficult;
- female colleagues decline on the grounds that they are overburdened by such requests;
- there is no information available on how many panels people have sat on, so it is unclear who to fairly direct requests to.

We analysed Informatics interview panel data for the previous 3 years, which shows that some women (and indeed men) are being asked to sit on more panels than their colleagues. In some cases, this is due to the lack of senior women, since previously the expectation has been that panel members are senior in grade to the post being interviewed. The Faculty E&D Committee recently lobbied the central university management team to allow staff at the same grade or one below the post being recruited to be part of the panel; this saw some success and now one member of the interview panel can be at the same level as the role being recruited.

→ Action 3.8. Maintain a list of how many interview panels staff have sat on.

→ Action 3.9. Staff at one grade below post being recruited to be allowed as member of interview panel.

(ii) Induction

The university runs regular "Welcome to King's" sessions for new staff which explain the structure and working of the university and provide an opportunity to meet senior members of the university. The "Getting started at King's" webpages lists key activities designed to help new staff members settle into their roles and see how their roles fit into the wider organisation. Within the Faculty, the standard induction process for academic staff includes:

- meeting with the HoD, the HoG and the Department Manager;
- allocation of a mentor;
- introduction to colleagues;
- informing of requirement to undertake unconscious bias training before being involved in any recruitment.

A checklist for managers helps ensure that the academic staff induction process is followed.

There is no standard induction process for research staff; their supervisor is expected to provide them with the support they need but with no guidance on what this should be.

→ Action 6.1. Standard induction process for research staff.

A review of academic induction and a survey of all staff who joined in the past three years showed:

• not all academic staff have been assigned a mentor;

- not everyone understands the mentor role (both mentees and mentors);
- no guidance provided to explain the purpose of the mentor/mentee relationship;
- often, the person assigned as someone's mentor is also responsible for their appraisal;
- research staff would also like a mentor;
- induction does not include informing the new member of staff about flexible working and other family friendly policies;
- induction experience of research staff is inconsistent;
- staff do not feel induction helps them get to know their colleagues.

→ Action 4.1. Formalise mentoring scheme, for all staff.

→ Action 6.2. Cake morning once a semester to welcome new staff to the Department.

→ Action 5.1. Induction process to cover flexible working and other family friendly policies.

(iii) Promotion

In the university's 2015 staff survey, staff were asked to indicate their agreement with the statement: "I feel King's acts fairly, regardless of ethnic background, gender, religion, sexual orientation, disability, age, marriage and civil partnership, or pregnancy and maternity/paternity with regard to career progression/promotion". In Informatics, 86% of male staff but only 68% of staff who did not identify as male said they agreed or tended to agree.



Figure 30: Columns show % of eligible academic staff (i.e., lecturers, senior lecturers and readers who are not on probation) who applied for promotion. Labels show headcounts.

Fig.29 shows that men are more likely than women to apply for promotion. 2 of the 4 women who applied were successful (50% success rate), while 12 of the 14 men who applied were successful (85.7% success rate). Increasing successful promotion applications from women is identified as a key priority.

Promotions are managed at university level, with documentation provided on the criteria employed. Promotions are held once a year, and if you are unsuccessful you cannot normally apply the following year (unless there is a significant change in circumstances). Applicants are able to disclose personal circumstances that they wish to be taken into account when considering quantitative output (such as a period of parental leave).
Each promotions round, staff are invited to attend a briefing session led by the Dean of the Faculty, and the Faculty circulates clear guidance with a timeline for the following activities:

- applicants meet with the HoD to discuss the content of their application;
- a full draft of the application must be submitted for consideration by the Faculty Academic Staffing Committee;
- feedback is returned to applicants, in some cases advising that they would be best to wait to apply and of the areas that should be strengthened for future promotion;
- Dean of Faculty meets with individuals to discuss their application.

Individual members of staff choose to put themselves forward for promotion, but the HoD is provided by the Faculty with a list of eligible staff and, in consultation with senior colleagues, also approaches members of staff who they consider may be ready to apply. The HoD is required to provide a statement outlining the Department's support for any applications made.

Especially because of the growth in numbers of our academic staff, it is difficult for the HoD to gain a detailed view of the performance of everyone in the Department. Furthermore, it is important to ensure diversity in the HoD's consultation process. With this in mind, our new HoD has recently introduced a departmental promotions panel, held for the first time in November 2017, whose remit is to advise the HoD regarding the supporting statement that should be made, to provide feedback to the applicants, and to aid the HoD in identifying staff who should be encouraged to apply and supported in this.

→ Action 4.2: Department promotions panel.

→ Action 4.3: Women who are identified as being nearly ready to go for promotion to be offered promotion mentoring sessions with a senior member of staff.

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

RAE 2008: all 4 eligible women were submitted (100%); 19 of the 20 eligible men were submitted (95%). REF 2014: 10 of the 11 eligible women were submitted (91%); 36 of the 38 eligible men were submitted (95%). This does not indicate any particular gender imbalance.

5.2 Career development: academic staff

(i) Training

From the university's 2015 staff survey, in Informatics:

- 84% of male staff and 92% of staff who did not self-identify as male⁶ agreed/tended to agree that "I am satisfied with my current level of learning and development";
- 81% of male staff and 79% of staff who did not self-identify as male agreed/tended to agree that "I feel that I am given the same opportunities to develop as other staff".

Any staff wishing to be involved in recruitment must undergo unconscious bias training. Multiple sessions are offered each year and the Faculty monitors attendance at these sessions. At 22/08/2017,

⁶ Recall, the 2015 university staff survey was performed by an external company who declined to separate out responses from "Female" and "Other" staff because of small numbers of responses, hence why we report them together here.

only 5 members of academic staff (<10%) had not attended the university's unconscious bias training, all of whom are recent appointments.

The King's Research Development Unit offers a range of professional development courses for Research Staff and The King's Learning Institute offers a range of professional development courses for development of teaching skills.

The King's Organisation Development offers a range of professional development courses primarily for academic and professional services staff. In particular, they offer a range of extensive leadership courses that are aimed at staff at different career stages. Heads of Department and Deans of Faculty nominate staff for these courses. Since the courses started in 2016, 7 members of Informatics staff have been accepted: 3 women (2 academics and 1 professional services) and 4 men (all academics). A further female academic is on the waiting list for these courses.

Staff and students sometimes report that university courses can feel unsuited to our disciplines and ways of workings. Some of our research groups provide training opportunities for their members, including general (but discipline-specific) training such as how to prepare a strong academic CV or how to review conference papers, and specific relevant technical skills training. However, some PGR students have reported to the King's Doctoral Students' Association Committee that they do not have access to discipline specific training and the SAT identified the inconsistency of support offered by the different research groups as an area of concern.

→ Action 4.4. Head of Research Group Terms of Reference to include responsibility to provide training.

(ii) Appraisal/development review

Performance Development Reviews (PDRs) take place once a year. All staff are invited to partake and it is required to be completed before applying for promotion or a pay recognition award. In 2015/16, all but 2 academic staff completed a PDR (both male, one reader, one professor) giving us a 93% completion rate. However, only 47% of research staff completed a PDR, 80% of women and only 36% of men.

→ Action 4.4. Head of Research Group Terms of Reference to include responsibility to encourage staff to receive a PDR.

Reviewees are asked to reflect on performance, and consider their medium and longer term goals. The process emphasises identification of support to help achieve these goals. Staff with reviewing responsibility are invited to partake in the *Successful Performance Conversations in the Context of PDR* training session. Of the 26 members of academic staff who performed PDRs in 2015/16, only 6 have undergone the training (3 men and 3 women); consultation shows that some reviewers were keen to do so but no sessions were available. In the 2015 university staff survey, only 53% of male staff and 59% of staff who did not identify as male agreed that their PDR was useful.

→ Action 4.5. PDR reviewers to undergo relevant training.

(iii) Support given to academic staff for career progression

The (university-level) King's Diversity Mentoring Scheme, which is open to academic, research and professional services staff who identify as female, trans, non-binary or other gender variant identity, or who are black or minority ethnic. People who want mentoring can only apply to this scheme once a year.

The Department allocates mentors to new members of academic staff, but there is no documentation to explain this role. Furthermore, research staff would also like a mentor:

 2017 induction survey: of the 8 research staff (7 men, 1 woman) who were not allocated a mentor, 4 would like one (3 men, 1 woman).

There is also demand for mentoring from staff who are not new to their role:

• 2014 NMS staff survey: of the 39 Informatics staff who did not have a mentor (34 men, 4 women), 9 said they would like one (7 men, 2 women).

→ Action 4.1. Formalise mentoring scheme, for all staff.

One way in which academic staff can progress their research is through their PGR students. There is no policy around allocation of Department funding for PGR students (DTPs and GTSs, see Section 4.1.(iv)). If there are multiple eligible candidates, lobbying from potential supervisors can affect the outcome and analysis shows that professors have been more likely to get this funding for their potential students than other members of staff (during 2013/14 – 2016/17, professors were 1.4 times more likely than non-professors to get this).

→ Action 4.6. Formal policy for DTP and GTS allocation.

In 2015, research staff across the Faculty were consulted, demonstrating a desire for:

- opportunities for significant teaching experience, to strengthen CV;
- support applying for lectureships and fellowships.

The Faculty established a Faculty Postdoctoral Researcher Committee in June 2017. This committee aims to work with the King's Researcher Development Unit to develop professional support for our research staff that focusses on their specific needs. The Department also has a new administrative academic role of Research Staff Tutor, who sits on this committee.

→ Action 4.7. Training for applying for lectureships and fellowships.

The Department has developed guidelines on the involvement of research staff in the supervision of UG and PGT projects, and in 2016/17 2 research staff (1 man and 1 woman) were recorded as the official supervisor of such a project. Sometimes, research staff are given the opportunity to deliver a lecture, but this typically depends on their PI being able to provide them with this opportunity. As discussed in Section 5.2.(i), some research staff receive career development opportunities via their research groups, but others do not.

→ Action 4.4. Heads of Research Groups Terms of Reference to include responsibility to provide training.

→ Action 4.8. Process for matching research staff with academic staff for whom they could deliver a lecture.

Research staff can be PIs (if their contract extends the funding) and Researcher Co-Is on grants, however informal consultation with staff (academic and research) demonstrated that this valuable career progression opportunity is not well known. The Faculty is currently developing guidance on how research staff can be officially involved in PGR supervision.

→ Action 4.9. Intranet to include information for research staff on how they can strengthen their CV.

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

The university runs a mentoring scheme for students at all levels, which connects current students to alumni mentors. However, informal consultation shows that PGR students and staff in the Department are unaware of this scheme and there is no information about this in our student handbook. Currently, only 4 Informatics students participate in the scheme (1 woman and 3 men).

→ Action 4.10. Encourage students to participate in university mentoring scheme.

The Careers and Employability Service provides careers guidance appointments and application feedback, practice interviews, numerous careers events and bespoke internship programmes as well as a host of information and resources. The services are available to all students, at all levels of study. They also deliver events aimed specifically at taught Informatics students and training aimed specifically at PGR students.

In addition to comprehensive training provided for PGR students by the Researcher Development Unit, the Faculty provides training for PGR students, including sessions for those who teach, about successfully finishing a PhD, on how to network, unconscious bias, open access and research data management. Third year PGR students are expected to participate in the Faculty's annual PGR Poster Competition, which provides opportunities for cross-Faculty networking, as well as development of presentation skills. There are numerous opportunities for PhD students to get involved in teaching activities in the Department, such as leading tutorials or lab sessions; this involves a number of training sessions before they start their teaching and ongoing development.

Each year the Department participates in a Faculty-run event aimed at giving information to UG and PGT students about what is involved in doing a PhD. This includes practical advice about how to apply and the support that is available, and a Department-led session where students can learn about the specific areas of research our academic staff focus on.

The extremely active KCL Tech student society organises many extra-curricular development opportunities, including hackathons and technical training.

From the student focus groups we ran (see Section 5.4.(i)) we know that our female students can find it uncomfortable to participate in events where they are in an extreme minority.

→ Action 2.5. Encourage female students to attend hackathons and other extra-curricular events.

→ Action 6.3. Regular women's lunches.

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

The Faculty Research Development Manager and the Faculty Research Manager provide access to examples of successful applications and one-to-one support around: development of ideas, engaging potential funders and preparing proposals. The central Research Office delivers Faculty-specific training sessions on EPSRC and ERC fellowship schemes.

All funding applications are required to be peer-reviewed and the Department organises mock panel sessions for EPSRC grant applications. These provide valuable feedback to the grant writer, and provide experience of the reviewing procedure and exposure to a range proposals and reviewers' comments to all participants. Research staff are also invited to these sessions and can attend as observers if they do not feel comfortable participating.



Figure 31: Funding applications made. Columns show the proportional gender representation of our academic staff (Staff, labelled with FTE) and of the funding applications submitted for amounts >£20k (Applications).



Figure 32: Funding applications made, excluding those from professors. Columns show the proportional gender representation of our academic staff excluding professors (Staff, labelled with FTE) and of the funding applications submitted from non-professors for amounts >£20k (Applications).

Fig.31 suggests that men are more likely than women to apply for grants, however if we exclude professors (who include only one woman and are far more likely than other staff to apply for grants) we do not see a gendered difference (Fig.32).

The provision of support around grant applications will be reviewed by the new Deputy Head (Research). Terms of Reference for this role include responsibility for ensuring effectiveness of our funding application processes, including development of junior staff, and explicitly reference our E&D aspirations.

5.3 Flexible working and managing career breaks

- (i-iii) Cover and support for maternity and adoption leave: before leave, during leave and returning to work
- 2015 university staff survey: In Informatics, 94% of male staff but only 89% of staff who did not identify as male agree that "King's treats people on their merits regardless of their pregnancy/maternity/paternity".
- 2014 NMS staff survey: In Informatics, 50% of women and 65% of men think Informatics is extremely/very supporting of staff facing/planning a career break.

Prior to leave: Staff meet with line-manager(s) to establish what support/adjustments they need and to discuss cover during absence.

During leave: Managers maintain contact, keeping staff up-to-date with training, events and social gatherings and other changes to the department. Staff can take up to 10 paid keeping-in-touch days throughout maternity/adoption leave, but are encouraged to visit informally when they wish.

Returning to work: Line-managers meet with returning staff to plan return to work. Our current academic workload allocation model has only committed *where possible* to providing relief for staff returning from maternity leave or other career breaks.

→ Action 5.2. Academic staff returning from career break to receive formal relief in workload allocation.

The university has a Parenting Leave Fund which is open to all academic and research staff who have returned to work after a period of maternity/adoption/additional paternity/caring responsibility leave in the last 12 months. Eligible staff can apply for up to £10,000 to support them in their return to work.

There is also a centrally run Carers' Career Development Fund which is available to academic, research and professional services staff to provide up to £250 to support care costs incurred as a result of attending career enhancing opportunities or keeping-in-touch days. PGR students are excluded from this scheme.

→ Action 5.3. Department fund for PGR students' additional care costs resulting from career development opportunities or keeping-in-touch days.

King's 'Maternity Leave Guidance for Managers' and checklist helps ensure academic, research and professional services staff are appropriately supported before, during and after maternity or adoption leave. The SAT reviewed this and the other information available around maternity/paternity/adoption leave and found:

- a lack of maternity leave guidance for PhD supervisors;
- no specific advice for managers regarding shared parental leave, paternity leave or adoption leave;
- it is difficult to navigate the many relevant university policies;
- it is hard to find relevant funders' policies and to understand how these might apply on a case by case basis.

→ Action 5.4. Better guidance around pregnancy/adoption related career breaks.

(iv) Maternity return rate

2012/13-2014/15: One academic staff and one research staff went on maternity leave. Both returned to work, however the member of academic staff left after a year

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

2012/13-2014/15: one academic staff took paternity leave. The provision of information and guidance around paternity, shared parental and adoption leave needs improving.

→ Action 5.4. Better guidance around pregnancy/adoption related career breaks.

(vi) Flexible working

All staff can apply formally for flexible working arrangements, for example to help with caring responsibilities. These are accommodated wherever appropriate and possible. We do not currently record data on formal requests for flexible working.

→ Action 0.1. Department E&D Committee to monitor all relevant data, including on applications for flexible working.

Many academic and research staff work flexibly without a formal arrangement. For teaching arrangements, staff may put forward soft constraints regarding their preferences, including to begin teaching later or finish earlier on up to two days of the week (if guaranteed or more extensive unavailability for caring responsibilities is required, a formal flexible working arrangement is necessary).

In the 2014 NMS staff survey, 87% of Informatics staff agreed that flexibility in working arrangements is easily available in an informal capacity (85% of men vs 93% of women).

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

We do not have any particular policy or practice in place to support and enable staff to transition from part-time back to full-time work after a career break.

→ Action 5.5. Staff transitioning from part-time back to full-time after a career break to receive phased increase in workload allocation and to be allocated a mentor.

5.4 Organisation and culture

(i) Culture







Figure 33: Images from previous Women in Science Week events.

Women in Science Week 4-11 October 2017

Celebrating Women in Science

Monday 9 October - NMS @ the Movies Film screening: Hidden Figures

Wednesday 11 October – Ada Lovelace Day Guest Speaker: Angela Saini

These events are open to all staff and students. Book your place via book via kcl.ac.uk/nms ty of Natural & Mathematical Sciences The Faculty established the NMS Women in Science initiative in 2013 to assess, address and challenge the inequalities women face in their academic careers. Highlights include the following.

- Annual Women in Science Week (Fig.33) featuring:
 - Women in Science to which all prize-winning and scholarship-holding female students are invited and which includes academic female representation from each department and senior management;
 - Ada Lovelace Day, with inspirational talks from a wide variety of invited speakers, including previously Maggi Aderin-Pocock, Kate Russell, Roma Agrawal, and Angela Saini, as well as from women from NMS.
- NMS Ada Lovelace Student Prize awarded annually to the student(s) who have made the strongest contribution to advancing gender equality.
- NMS Gender Equality Student Fund provides grants of up to £200 for student initiatives that promote gender equality.

Since launching the initiative, student engagement in particular has increased: establishment of the KCL Women in STEM student society arose from student discussions at Ada Lovelace Day 2015 and we have increased attendance at events under the "Women in Science" banner. We have a Code of Conduct for events in NMS, which aims to ensure a welcoming and safe environment for attendees. Each new Informatics student induction session (UG, PGT and PGR) includes a talk on diversity and inclusion.

However, while we are pleased with our recent progress, we are conscious that we still have a long way to go. In particular, the SAT had concerns about the culture among our student body, resulting from anecdotal reports and observed online sexist behaviour. We commissioned student ambassadors from the It Stops Here King's Student Union anti-harassment campaign to carry out focus groups with Informatics students who identify as a woman or have a non-binary gender identity. The main issues raised in these groups were:

- underrepresentation of women can cause female students to feel intimidated and unwilling to participate in events;
- lack of female role models;
- inappropriate and sexist comments regarding female staff and students being posted online on various social media platforms;
- lack of awareness about reporting procedures for harassment and bullying;
- microagressions;
- PGR students' experience of sexism while at conferences;
- perceived inconsistencies in support provided by different personal tutors/PhD supervisors.

In recent years, the university has put a lot of effort into addressing harassment and bullying, and is continuing to do so. In September 2017, the Faculty launched a communications campaign to highlight the various support and reporting procedures available. We plan a range of complementary department-level actions.

→ Action 6.3. Regular women's lunches.

→ Action 6.4. Where groups of students are assigned (e.g., tutor groups, labs, group projects) we do not assign groups with a single woman student.

→ Action 6.5. Clearer information on support students can expect from their personal tutor and better monitoring of this support.

→ Action 6.6. Definition of the Department's values and associated expected behaviours.

→ Action 6.7. Compulsory online student training module on expectations of behaviour in Informatics.

→ Action 6.8. Guidance on how students can deal with incidents of harassment or intimidation that occur at a non-King's event (such as a conference) and how the Department can support them with this.

While many staff within the department, especially senior staff, are extremely sensitive to and supportive of E&D issues, application of E&D principles within the Department is currently driven by individuals rather than formally embedded within our policies and practices. The 2015 university staff survey also raises some concern about the staff culture in Informatics:

- 79.2% of staff who did not identify as male agreed/tended to agree that they feel valued by their colleagues (vs. 97.2% of male staff);
- 90.9% of staff who did not identify as male agreed/tended to agree that they feel valued by students (vs. 97.0% of male staff);
- 82.6% of staff who did not identify as male agreed/tended to agree that King's is committed to creating an inclusive environment for its staff (vs. 89.2% of male staff);
- 2 staff reported that they were currently being harassed or bullied at work (1 male, 1 who did not identify as male);
- 4 staff reported that they had felt discriminated against at work in the past 12 months (2 male, 2 who did not identify as male).

The evidence of discrimination, bullying and harassment among staff is particularly concerning.

→ Action 6.9. Working group to investigate bullying, harassment and discrimination of staff.

- → Action 6.6. Definition of the Department's values and associated expected behaviours.
- → Action 0.1. Department E&D Committee.

→ Action 4.4. Terms of Reference for Heads of Research Groups to include responsibility to promote fair and equitable treatment of members.

(ii) HR policies

The university has done much work to improve support for students and staff who are being bullied or harassed, including introduction of specially trained harassment advisors and the It Stops Here campaign against sexual harassment. With input from the Informatics SAT Chair, the Faculty has devised a communication campaign that signposts the various support and reporting mechanisms available, which launched in September 2017.

Responsibility for monitoring the application of HR policies and informing staff about these has not previously been embedded within the Department's management structures. The new E&D Committee will have responsibility for this.

→ Action 0.1. Department E&D Committee.

		Acade sta		Profess services		Resea sta		Teach fello	-	PG	R	PGT/	UG
	Chair	female	male	female	male	female	male	female	male	female	male	female	male
Executive Group*	male prof.	2	1	1	0	0	0	0	0	0	0	0	0
Dept. Board	male prof. (male prof.)			Me	mbershi	ip = all sta	off			0	0	0	0
Dept. Strategy Group*	male prof.	5	5	1	0	0	0	0	0	0	0	0	0
Research	female reader (male prof.)	4 (3)	8 (9)	2 (2)	2 (1)	0 (1)	0 (0)	0 (0)	0 (0)	0 (2)	0 (0)	0 (0)	0 (0)
Educa- tion	female prof. (male lect.)	6 (4)	12 (12)	4 (4)	0 (0)	0 (0)	0 (0)	0 (1)	1 (0)	0 (0)	0 (0)	tbc (1)	tbc (1)
PGT Academic Perfor- mance	female (sen. lect.) (male prof.)	3 (2)	5 (5)	4 (1)	1 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
UG Acad- emic Perfor- mance	male (lect.) female (prof.)	2 (2)	7 (4)	3 (3)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Student recruit- ment and outreach	female lect. (male sen. lect.)	3 (2)	5 (5)	2 (1)	1 (0)	0 (0)	0 (0)	1 (1)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Infor- mation Strategy*	male prof.	2	3	0	0	0	0	0	0	0	0	0	0

Figure 34: Gender breakdown of current Department committees. Shows total male and female membership, and gender and grade of committee chair. Figures are given for 2017-18; where the committee existed last year, information for 2016-17 in parenthesis. Committees that are newly established or renewed in 2017-18 are marked with *.

Gender breakdown of Department committees for 2017/18, with 2016/17 information in parentheses, is shown in Fig.34. The most influential committees are: Executive Group, Department Strategy Group, Department Board (all chaired by the HoD). The Department Board comprises all staff. Executive Board consists of the HoD, DepHoDs and the Department Manager. Department Strategy Group comprises the Executive Board, the HoGs and the Diversity Lead.

The Research and Education committees are chaired by the Deputy Heads for Research and Education respectively. Chairs of the other committees are allocated as an academic administrative role. Academic

and professional services staff membership of other committees is typically determined by role, while research staff and student members are invited to volunteer.

For the new DepHoD roles, the HoD consulted all staff regarding the description of these roles and expressions of interest were invited from staff. Two of the four DepHoDs are women.

We do not in general have any restrictions on the grade of committee chairs, which allows more junior members of staff to get valuable leadership experience, however DepHoD is a senior role, meaning it is unlikely for the Executive Group to include senior lecturers and below (which captures most of our female academics). So while we currently have a good gender balance across our committees, especially on the influential Executive and Department Strategy Group, we must guard against all male committees.

→ Action 3.10. Ensure female representation on committees.

HoGs are expected to be Senior Lecturer or above, which provides a valuable career development opportunity. However, previously, this role has had no Terms of Reference nor Terms of Office, and some have been in position for many years.

→ Action 4.4. Heads of Research Group to be appointed for a term of four years.

(iv) Participation on influential external committees

We do not currently monitor participation in influential external committees. Such activities can be used to demonstrate academic leadership when applying for promotion and so are discussed as part of the PDR.

→ Action 0.1. E&D Committee to monitor data on participation in influential external committees.

(v) Workload model

2015 university survey, Informatics staff:

- 91.7% of staff who did not identify as male agreed/tended to agree that they had to put in a lot of extra time in to meet their workload demands (vs. 78.9% of male staff);
- 62.5% of staff who did not identify as male agreed/tended to agree that they are struggling to cope with their current workload (vs. 47.4% of male staff)

A workload allocation model was established in July 2017. Teaching and administrative roles are included and allocated by the HoD. It is expected that the model will be refined with experience and feedback. Workload is discussed at the PDR and teaching and administrative roles are taken into account for promotion.

Previously, while lack of a model has meant it has not been possible to monitor workload allocation, a number of concerns have been voiced; specifically, it has been perceived that some individuals, some research groups, and junior members of staff (where women are disproportionately overrepresented) have been overburdened. It is only recently that the model has started being used to inform workload allocation and analysis shows that the 2017/18 workload allocation is as yet unbalanced (Fig.35).

→ Action 4.11. Workload allocation model used to inform workload allocation.



Figure 35: 2017/18 workload allocation as a % of the mean for full-time academic staff who are not on sabbatical, not a new member of staff (who typically receive a relief) and do not have a major management role such as HoD.

(vi) Timing of departmental meetings and social gatherings

The Faculty organises a range of social events, including regular cake mornings, beer and wine tasting evenings, and an annual family-friendly picnic. Event dates are announced months in advance.

Within the Department, there is an annual winter party for staff and PGR students, and a summer staff party. These start around 4pm and this can make it difficult for staff with caring responsibilities to attend. We organise social events for UG and PGT students, especially at the start of term, that are typically also in the evening.

→ Action 6.10. Fund to cover caring costs incurred by attendance at Department social events.

All committee meetings are held within core hours of 10 - 4 and wherever possible not during school holidays. Our policy is that research events and seminars should also be held during core hours, except where there is a valid reason for not doing so (such as an event aimed at members of the public or that depends on constrained external engagement).

(vii) Visibility of role models

At Faculty level, much effort has been made in recent years around ensuring visibility of female role models (see Section 5.4.(i)). However, feedback from focus groups indicated our female students perceive a lack of female role models in the Department and that the women we have in the Department are not always accessible to all students (some do not have female personal tutors, or may have few female lecturers).

→ Action 6.3. Regular women's lunches.

At Department level, we normally hold two distinguished lectures a year, one from a man and one from a woman. These are public events with invited speakers. Past lectures from men have typically attracted larger audiences than those delivered by women, since they have often focussed on popular topics in the media such as robotics and AI.

→ Action 6.11. Annual high profile public event featuring a woman, trans* or non-binary speaker.

Seminars are organised within research groups. Faculty guidance for seminar organisers explains that diversity of speakers should be aspired to, and in particular organisers should aim for a gender balance of speakers. We have been monitoring the gender balance of our seminar speakers since 2015/16:

- 2015/16: 44 (72%) of our seminars speakers were men and 17 (28%) were women;
- 2016/17: 78 (75%) of our seminar speakers were men and 25 (25%) were women.

→ Action 4.4. Head of Research Group Terms of Reference to include responsibility to ensure diversity of speakers is considered when organising events.

We will continue to work with central marketing to ensure that our webpages and recruitment materials display diverse staff and students.

(viii) Outreach activities

The Department participates in a range of outreach activities organised by the Faculty, including:

- annual Christmas Lectures, aimed at 15-17 year olds;
- Festival of Science, targets families.

For these events, as well as for open days, we aim to ensure female staff representation, but are conscious of the potential for overburdening of women, especially because these events often fall out of working hours and contribution to such events is not recognised within our workload model (except where a normal expectation of a particular role). We have an active group of student ambassadors, and our excellent student societies are very supportive of such events. Since student ambassadors are paid to attend, we are normally able to ensure female student representation.

Within the Department, we do a range of outreach activities, typically in response to requests from schools or from the university's Widening Participation scheme. Such requests are circulated to the Department for volunteers. Some activities have been at girls' schools, but otherwise our outreach activities have not targeted girls.

→ Action 1.6. Coordinated outreach scheme targeted at girls.

6. FURTHER INFORMATION

Word count: 344

The Department has been extremely supportive of the KCL Women in STEM (WiSTEM) student society since it was founded in 2015. Fatima Vayani, Informatics PGR student and previous WiSTEM President from March 2016 to March 2017:

"WiSTEM has consistently received not only financial, but more importantly, moral support and encouragement from the Head of Informatics. Notably, the Department sponsored our largest and most successful event, a conference discussing women's roles and experiences in Tech. Through changes of the Head of the Department, the support remained consistent; they always gave me their time when I wanted to discuss a proposal. Other staff members in the Department, such as Elizabeth Black, enriched our activities by involving us in discussions that students are not usually aware of, such as aspects of this Athena application and initiatives within the Department. Furthermore, others, such as Simon Miles, facilitated meetings to encourage collaborations between societies and offered much help with logistical aspects of our activities, which are usually what we struggle most with."

Individuals in Informatics act to further the Athena SWAN principles in numerous ways, including:

- Rita Borgo (SAT member) participated in a Diversity in Visualisation panel at the premier data visualisation conference, IEEE VIS2017;
- Michael Luck (Dean of Faculty and Professor in Informatics) recently gave a talk at the University of York on his efforts as Dean of Faculty to address gender inequality;
- Elizabeth Black (SAT Chair) attended a national meeting to shape a UK-wide cross-ICT bid to the EPSRC Inclusion Matters call, is contributing to a bid for an EPSRC network to develop inclusive culture in ICT, and attended an EPSRC ICT Town Hall meeting to discuss responses to a report on "Understanding the Status of under-Represented Groups in the Information and Communication Technologies";
- Maribel Fernandez (DepHoDEd) is a member of the Association for Computing Machinery's Council on Women in Computing (ACM-W) Scholarship panel, which funds female students to attend research conferences in computer science so as to encourage them to choose a research career in CS and to increase the proportion of female participants in conferences.

7. ACTION PLAN

Except for our action to establish a new E&D Committee, we arrange our action plan according to the 6 key challenges identified in our self-assessment (Section 3).

as	Student focussed	1.	Proportion of students who are women.
Areas		2.	Attainment of female UG students.
nge	Staff focussed	3.	Proportion of staff who are women.
Challenge	Starriocussed	4.	Promotion and progression of women.
-	Culture and environment focussed	5.	Managing career breaks and caring responsibilities.
Key		6.	Attitudes, behaviour and inclusivity.

We also categorise each action as being primarily about:

- governance structures and embedding of Athena SWAN principles;
- recruitment of staff and students;
- **understanding** better the issues we face around gender equality;
- **support** of both staff and students in their career progression;
- communication of the Athena SWAN principles and related policies and opportunities, and of our expectations of our staff and students.

The matrix below shows the distribution of types of action planned within each challenge area. High priority actions are marked in our action plan with "H" (under Ref).

	Proportion of students who are women.	Attainment of female UG students.	Proportion of staff who are women.	Promotion and progression of women.	Managing career breaks and caring responsibilities.	Attitudes, behaviour and inclusivity.
Governance	1.11		3.10	4.4, 4.6, 4.11		6.1, 6.4, 6.6
Recruitment	1.3, 1.6, 1.7, 1.9		3.1, 3.3, 3.5, 3.6, 3.7, 3.9			
Understanding	1.1, 1.2, 1.4, 1.8, 1.10	2.1, 2.2	3.2, 3.8			6.9
Support		2.3, 2.4, 2.5		4.1, 4.2, 4.3, 4.5, 4.7, 4.8, 4.9, 4.10	5.2, 5.3, 5.5	6.2, 6.3, 6.10
Communication	1.5		3.4		5.1, 5.4	6.5, 6.7, 6.8, 6.11

Re	ef Action	Rationale	Implementation	Timeframe	Responsibility	Success measure
0.1 H	1 Department E&D Committee.	Application of E&D principles and monitoring of HR policies is not currently embedded in department management structures, rather driven by individuals (Section 5.4.(i- ii)). If good practice is linked to individuals rather than policy we risk losing the good practice if people leave, change roles etc. The new E&D Committee will ensure that consideration of E&D principles is key to the operation of the Department.	 The E&D Committee will: include senior membership and key role holders; provide oversight and guidance on the development of policies and working practices across the department; monitor consistency in application of related HR policies; drive implementation of this action plan; ensure staff are kept informed about relevant policies; monitor all relevant data for any gender differences, including: participation in influential external committees, PGR completion data, applications for flexible working. 	January 2018: Terms of Reference and membership agreed. February 2018: first meeting held.	HoD. Diversity Lead.	All relevant data regularly monitored. Minutes of all department committees show evidence of consideration of E&D aspirations. E&D aspirations explicitly referenced in all policy and practice documents, and all committee terms of reference.

Challenge 1: Proportion of students who are women

Rationale

We want to increase the proportion of our students who are women. In 2015/16 (Figures 8, 12 and 16) we had:

- UG: 14% women;
- PGT: 28% women;
- PGR: 27% women.

We're particularly concerned about the UG level, where we have dropped from 22% in 2012/13 to below the national benchmark of 15% (Figure 8).

We want to increase the proportion of applications that come from women. In 2015/16 (Figures 10, 14 and 19) we had:

- UG applications: 16% women;
- PGT applications: 31% women;
- PGR applications: 23% women.

We want to increase the proportion of our female UG and PGT offer holders who accept. In 2015/16 (Figures 10 and 14):

- UG % of female offer holders who accept: 33% (vs. 35% men).
- PGT % of female offer holders who accept: 25% (vs. 31% men).

Overarching targets

Student numbers

By 2021:

- UG: 17% women.
- PGT: 30% women.
- PGR: 29% women. By 2025:
- UG: 20% women.
- PGT: 32% women.
- PGR: 31% women.

Applications

By 2021:

- UG applications: 19% women.
- PGT applications: 33% women.
- PGR applications: 25% women. By 2025:
- UG applications: 22% women.
- PGT applications: 35% women.
- PGR applications: 27% women.

Conversions of offers to accepts

By 2021:

- UG % of female offer holders who accept: 35%.
- PGT % of female offer holders who accept: 27%.

By 2025:

- UG % of female offer holders who accept: 37%.
- PGT % of female offer holders who accept: 29%.

	Ref	Action	Rationale	Implementation	Timeframe	Responsibility	Success measure(s)
	1.1 H	Investigate why women are more likely to choose "with management"	At UG and PGT, % of students on "with management" programmes who are women is significantly higher than on other programmes (Sections 4.1.(ii) and 4.1.(iii)). If we can	Further interrogation of data to see if there is any interplay with other characteristics such as nationality.	By July 2018.	Diversity Lead.	Reasons why "with management" programmes attract higher % of women understood.
Understanding		programmes.	understand reasons for this we can try to make all our programmes more attractive to women, and can preserve the attractive qualities of these programmes when we undertake our teaching portfolio	Survey and focus groups with UG and PGT students on reasons for choosing programme.	February 2018 – April 2018.	Diversity Lead.	Programmes modified to be more attractive to women. Increase in % of applications from women at UG and
			review (Action 1.9).	Report on what attracts women to "with management" programmes.	July 2018.	Diversity Lead.	PGT levels.
Understanding	1.2 H	Investigate why women are more likely than men to decline offers.	Women are less likely than men to accept offers (UG and PGT). We do not know why this is. (Section 4.1.(ii))	Survey UG and PGT women and men who decline offers to explore reasons not to come to King's and to understand any gender difference.	From June 2018.	Diversity Lead. With support from Faculty Senior Marketing Officer.	Better understanding of why women less likely than men to accept offers. Action plan updated accordingly to better target reasons why women less likely than men to accept offers.

	Ref	Action	Rationale	Implementation	Timeframe	Responsibility	Success measure(s)
Recruitment	1.3	Student recruitment material specifically aimed at women.	Current material does not highlight support aimed at women and we do not currently do anything to specifically target female offer holders (Section 4.1.(ii)).	 Material to include: KCL Women in STEM student society; our Amazon Women in Innovation Bursary scheme; NMS Women in Science scholarships; what it is like to be a female student in Informatics; female role models from Informatics; women in Informatics lunches (Action 6.3); Department's core values and expected behaviours (Action 6.6). 	From April 2018: circulated to potential applicants. From July 2018: circulated to all offer holders. November 2018: material updated with Department's core values and expected behaviours.	UG, PGT and PGR Admissions Tutors. Information Strategy Lead. With support from Faculty Senior Marketing Officer.	When surveyed after enrolment, women indicate positive effect of material. Increase in % of applications coming from women. Increase in % of women who accept offers.
Understanding	1.4	Online question and answer sessions for female offer holders with current female students.	We do not currently do anything to specifically target female offer holders (Section 4.1.(ii)). Current students can encourage offer holders to join King's in a relatable way.	Q&A session to be held once a year for UG and PGT students. Members of student societies to be encouraged to participate.	From April 2019.	UG and PGT Admissions Tutors. Information Strategy Lead. With support from Faculty Senior Marketing Officer.	When surveyed after enrolment, women indicate positive effect of sessions. Increase in % of applications coming from women. Increase in % of women who accept offers.

	Ref	Action	Rationale	Implementation	Timeframe	Responsibility	Success measure(s)
Communication	1.5 H	"Why study at KCL Informatics" webpages.	Current material does not highlight the breadth of support and opportunities available, nor that the Department values inclusivity and diversity (Section 4.1.(ii)).	 To include interviews and blogs with diverse students and information about: range of social and extra-curricular activities; student societies based in Informatics; support structures in place; inclusive and friendly nature of the Department; Department's core values and expected behaviours (Action 6.6). 	April 2018: Webpages in place November 2018: updated with Department's core values and expected behaviours.	UG, PGT and PGR Admissions Tutors. Information Strategy Lead. With support from Faculty Senior Marketing Officer.	When surveyed after enrolment, women indicate positive effect of webpages. High number of page visits (>60% of the number of visits to our "About us" page). Increase in % of applications coming from women. Increase in % of women who accept offers.
Recruitment	1.6	Coordinated outreach scheme targeted at girls.	Current outreach activities are ad hoc, reactive to requests, do not particularly target women and are not well-monitored or evaluated; their effectiveness is unclear (Sections 4.1.(ii) and 5.4.(viii)).	To be developed in a principled manner, through consultation with other relevant departments with successful schemes such as Liverpool and UCL.	November 2017 – September 2018: consultation with other universities. January 2020: scheme in place.	Widening Participation Coordinator. With support from the Faculty Senior Outreach Officer.	Qualitative feedback shows positive influence of outreach on schoolgirls. Longitudinal study shows influence of outreach on career choices.

	Ref	Action	Rationale	Implementation	Timeframe	Responsibility	Success measure(s)
Recruitment	1.7 H	Marketing campaign for new engineering programmes to highlight project- based learning	Evidence suggests women in particular thrive with project-based learning approach (Section 4.2.(ii)).	Recruitment material to highlight project-based learning, with evidence of the benefits.	May 2019 (for first entry in 2020/21).	Vice Dean (Technology). Information Strategy Lead. With support	% of applications to our engineering programmes coming from women is 3% higher than national benchmark (for
Recrui		approach and its benefits.		Recruitment material also includes interviews with diverse students.	May 2021.	from Faculty Senior Marketing Officer.	engineering). When surveyed after enrolment, women indicate positive effect of material.
	1.8 H	Monitor impact of new engineering programmes on recruitment of	We need to collect data in order to understand the impact of any decisions we make with these new programmes, so as to identify any	Data routinely collected and analysed annually.	From May 2020 (first year of the programmes).	UG Admissions Tutor.	Good practice adopted on other programmes. Increase in % of
Understanding		women.	best practice (Section 4.2.(ii)).	Report on how other programmes can be improved based on findings from above.	December 2022.	DepHoD(Ed). E&D Committee	applications coming from women on all programmes.

	Ref	Action	Rationale	Implementation	Timeframe	Responsibility	Success measure(s)
	1.9 H	Diversity to be explicit consideration in teaching portfolio review.	We have seen that women are disproportionately attracted to our "with management" programmes (Sections 4.2.(ii) and 4.2.(iii)). We want to ensure our teaching portfolio	Review carried out, taking account of the findings from Action 1.1.	August 2018.	DepHoD(Ed).	Increase in % of students who are women.
Recruitment		Teview.	attracts a diverse cohort.	Identification of any opportunities to increase diversity and of any changes planned that may negatively affect diversity.	September 2018.	DepHoD(Ed). E&D Committee	
				Actions devised to take advantage of any opportunities and to mitigate against any negative effects and added to the action plan.	October 2018. DepHoD(Ed). E&D Committee		
Understanding	1.10	Collect and monitor data relating to recruitment of DTP and GTS positions.	We do not currently collect this data so we cannot monitor for bias in recruitment (Section 4.2.(iv)).	Applications data routinely collected and analysed. Where any evidence of bias found, actions implemented to	Data monitored from January 2018.	PGR Admissions Tutors. DepHoD(Res).	Any bias in recruitment of DTPs and GTSs is identified and actions added to the
Under				address this.	Actions to address any bias identified from October 2019.	DepHoD(Res). E&D Committee	action plan to address this.

	Ref	Action	Rationale	Implementation	Timeframe	Responsibility	Success measure(s)
Governance	1.11	Formalise process for DTP and GTS recruitment.	We have no policy around how DTPs and GTSs are recruited, meaning we cannot be sure that Athena SWAN principles are being adhered to. (Section 4.2.(iv)).	 Process should include: how positions are advertised; eligibility requirements; shortlisting and interview process. 	September 2018.	DepHoD(Res).	Consideration of E&D explicit in process. Introduction of process shows reduction in any bias identified for 1.10.

Challenge 2: Attainment of female UG students

Rationale

We have identified a gender attainment gap at the UG level. Across the period 2012/13 – 2015/16, at UG level (Section 4.2.(ii)):

- women are less likely than men to get a first (p-value 0.0036);
- women are less likely than men to get either a first or an upper second class (p-value 0.0003).

Overarching target

By 2021, no statistically significant difference in the performance of men and women at UG level.

	Ref	Action	Rationale	Implementation	Timeframe	Responsibility	Success measure(s)
Understanding	2.1 H	Thorough investigation of gender attainment gap.	Reasons for attainment gap are currently unclear. We need to identify underlying cause, as well as any confounding factors, in order to target actions effectively. (Section 4.2.(ii).)	 To include: investigation of impact of other characteristics such as ethnicity, socio- economic background and entrance qualifications; module level analysis; analysis of students who do not progress; analysis of students who do not achieve intended degree. 	January 2018 -April 2018: Work with central analytics team to ensure useful progression and completion data. Investigation complete by July 2018. By September 2018: Action plan updated with targeted actions based on findings from above.	Diversity Lead. With support from Faculty E&D Coordinator. E&D Committee	As consequence of better understanding of the problem, targeted actions developed and added to action plan. No statistically significant difference in performance of men and women on UG programmes.

	Ref	Action	Rationale	Implementation	Timeframe	Responsibility	Success measure(s)
Understanding	2.2 H	Monitor impact of new engineering programmes on performance of women.	We need to collect data in order to understand the impact of project-based learning approach, so as to identify any best practice. (Section 4.2.(ii).)	Data routinely collected and analysed annually.	From July 2021 (first year of new programmes).	Director of Engineering Programmes. With support from Programme Administrators.	Good practice adopted on other programmes. No statistically significant difference in performance of men and women on UG
Under				Report on how other programmes can be improved based on findings from above.	December 2024.	Diversity Lead.	programmes.
	2.3	Peer support initiative.	Peer support has been shown to be an effective way of improving women's confidence and	Possible schemes investigated for suitability to our Department.	September 2017 – March 2018.	UG Senior Tutor. Student engagement lead. With support from	40% of women UG students participate in scheme. Qualitative feedback
			performance. (Section 4.2.(ii).)	Scheme in place for UG students.	September 2018.	Programme Administrators and from the Disability Advisory Service.	(gathered from survey and focus groups) indicates positive effects of the scheme on women.
Support				Investigate whether such a scheme could benefit PGT or PGR students, with a view to extending it to these groups if perceived to be beneficial.	September 2018 – March 2019	PGR Senior Tutors. PGT Senior Tutors.	Improvement in performance of women participating in the scheme.

	Ref	Action	Rationale	Implementation	Timeframe	Responsibility	Success measure(s)
Support	2.4	Funding for women students to attend the womENcourage conference ⁷ .	Attendance at women focussed events like this has been shown to increase women's confidence, passion and	Policy in place for allocation of funding for up to 5 students at year.	February 2018.	HoD.	5 women sent to womENcourage each year. Qualitative feedback (gathered from survey
			performance. (Section 4.2.(ii).) Women students report that they want more access to female role models (Section 5.4.(i)).	First allocation made.	June 2018.	E&D Committee.	(gathered from survey and interviews) indicates positive effects of attendance. Improvement in performance of women attending the conference.
Support	2.5 H	Encourage female students to attend hackathons and other extra- curricular events.	Working in teams at events such as hackathons has been shown to improve female students' confidence and thus performance (Section 4.2.(ii)). Our female students have reported that being in such a minority is intimidating and makes it uncomfortable for them to participate in events such as these (Section 5.4.(i)).	Through working closely with our student societies to improve the inclusivity of their events.	January 2018 – March 2018: Discussions with student societies to determine ways of making events more inclusive. May 2018: plan to improve inclusivity of events agreed.	Diversity Lead. Student Community Manager.	Increase in % of participants who are women.

⁷ This annual ACM Europe Celebration of Women in Computing is "a scientific event, as well as an event aimed at networking and exploring career opportunities for women in computer science and related disciplines. This conference brings together undergraduate and graduate students, as well as researchers and professionals, to present and share their achievements and experience in computer science." <u>https://womencourage.acm.org/2017/02/01/about/</u>

Challenge 3: Proportion of staff who are women

Rationale

During the period 2012/13 – 2015/16, the proportion of our academic staff who are women has remained reasonably steady, at around 22% (FTE: \approx 10 – 11), just over the national benchmark of 21%, and the proportion of our research staff who are women has grown from 17% (FTE: 3.9) to 23% (FTE: 6.1), just above the national benchmark of 22% (Section 4.2.(i)).

We are especially concerned about the proportion of our senior staff who are women: the percentage of our professors who are women has dropped from 13% (FTE: 2) to 11% (FTE: 1.2), below the national benchmark of 13% (Section 4.2.(i)); and since September 2012 we have recruited for 7 professor posts, which were all appointed to men (Section 5.1.(i)).

Overarching targets

Research staff

By 2021:

- 25% women. By 2025:
- 27% women.

Academic staff By 2021:

24% women.

- By 2025:
- 26% women.

Professors

By 2021:

- 20% women professors (ca. 4 FTE). By 2025:
- 22% women professors (ca. 7 FTE).

	Ref	Action	Rationale	Implementation	Timeframe	Responsibility	Success measure(s)
Recruitment	3.1 H	All relevant job adverts to be circulated to staff and PGR students.	When people are redeployed within the department it can be as a result of connections and networking rather than a particular process (Section 4.2.(ii)).	Recruitment process redefined to include this.	From January 2018.	Diversity Lead. HoD. With support from Senior Departmental Coordinator.	Data shows men are no more likely than women to be redeployed within Department.

	Ref	Action	Rationale	Implementation	Timeframe	Responsibility	Success measure(s)
Understanding	3.2 H	Ensure gender- related recruitment data is recorded.	We need reliable data to allow us to identify any bias in our processes and to measure the effectiveness of our actions. While central HR are meant to collect this data, our experience is that this is not done reliably. (Section 5.1.(i).)	As this is a central process, we first need commitment from senior members of the university to prioritise this. Then we need to work with HR to ensure they understand what data we need, and to help make sure the process functions effectively.	From December 2017: meetings with HR and Central D&I team to discuss process. From February 2018: recruitment data effectively recorded.	Diversity Lead. Faculty E&D Coordinator. Central HR Department. College Director of Diversity.	Complete data available for >80% of recruited posts.
Recruitment	3.3 H	Recruitment agency to prioritise diverse shortlists.	Since September 2012, we have recruited 7 professors, all male. Our planned strategic growth provides an opportunity to recruit more senior posts and the university has committed to supporting this process by providing access to a recruitment agency who will help identify suitable candidates. (Section 5.1.(ii).)	Recruitment agency should commit to putting forward at least 1 strongly recommended woman on each shortlist.	From November 2017.	HoD. Vice Principal Arts & Sciences.	Shortlists for professor positions contain at least one woman. Women appointed to professor roles.

	Ref	Action	Rationale	Implementation	Timeframe	Responsibility	Success measure(s)
u	3.4 H	Webpages highlight our Athena SWAN activities and	Webpages do not highlight our work around, or commitment to, equality, diversity and inclusion (Section 5.1.(i)).	Comprehensive webpages detailing our Athena SWAN plans and progress to date.	February 2018.	Diversity Lead. With support from the Faculty E&D	When surveyed after appointment, women indicate positive effect of
Communication		family friendly policies.		Webpages include case studies of diverse staff and what it is like to work in Department.		officer.	webpages. Number of page visits >60% of visits to "About us" page. Increase in % of applications coming from women.
lent	3.5 H	, , ,	Budget and process for this agreed and in place for recruitment of academic staff.	February 2018.	HoD. With support from Senior	Take up of offer from applicants. Increase in % of applications coming	
Recruitment			applicants our commitment to	Investigation of feasibility and benefit of fund to support recruitment of research staff and professional services staff, with a view to extend the scheme if deemed beneficial.	April – September 2018.	Departmental Coordinator.	from women.

	Ref	Action	Rationale	Implementation	Timeframe	Responsibility	Success measure(s)
Recruitment	3.6 H	All job descriptions to be reviewed for inclusive language.	Evidence shows that the use of gendered language in job adverts can put women off from applying. ⁸ While Faculty guidelines encourage review of job descriptions for gendered language, consultation in the Department shows staff are unaware of this (Section 5.1.(i)).	Job description language to be reviewed for inclusivity and accessibility, with the help of a gendered language decoder website: <u>http://gender-</u> <u>decoder.katmatfield.com</u> To be monitored as part of recruitment process.	From December 2017.	Diversity Lead. With support from Senior Departmental Coordinator.	All job descriptions recorded as having been reviewed. Increase in % of applications coming from women.
Recruitment	3.7 H	All jobs to be circulated to at least one mailing list that targets women.	While Faculty guidelines encourage this, consultation in the Department shows staff are unaware of this expectation (Section 5.1.(i)).	Post manager to confirm that they have done this, otherwise to provide a reason why not.	From July 2018.	Diversity Lead. With support from Senior Departmental Coordinator.	>90% of job descriptions recorded as having been circulated to at least one mailing list that targets women; for others, justification for non- circulation recorded. Increase in % of applications coming from women.

⁸ D. Gaucher, J. Friesen and A. C. Kay. Evidence That Gendered Wording in Job Advertisements Exists and Sustains Gender Inequality. *Journal of Personality and Social Psychology*, 101(1), p109-28, 2011.

	Ref	Action	Rationale	Implementation	Timeframe	Responsibility	Success measure(s)
Understanding	3.8	Maintain a list of how many interview panels staff have sat on.	Since June 2014, 26% of interview panels for research staff have not included any women. (Section 5.1.(i).) Some women are overburdened by having to sit on interview panels. (Section 5.1.(i).) By maintaining such a list, people can more easily identify who to ask to join a panel, and people can accurately identify whether they have sat on more than the expected number of interview panels.	To be made available on intranet, together with average number of interview panels sat on, to allow people to accurately judge who is being overburdened. Guidelines to be developed around how to use list (e.g., to decide when to turn down/agree to a request; to decide who to approach).	From August 2018.	Senior Departmental Coordinator.	Reduction in % of interview panels that do not contain a woman. Data shows reduction in women who are overburdened by agreeing to sit on interview panels.
Recruitment	3.9	Staff at one grade below post being recruited to be allowed as member of interview panel.	Currently, one member of the interview panel can be at the same grade as post being recruited (Section 5.1.(i)). Relaxing this constraint would make it easier to include women on interview panels, and would provide valuable career development opportunities for staff who would benefit from a better understanding of the kind of competition and expectations for a post at the grade above them.	This is determined by the central HR department. We will coordinate with other academic departments in the university and jointly prepare a statement lobbying for this change which we will submit to central management.	Statement to be submitted by May 2018.	E&D Committee.	Change in university policy is implemented. Reduction in % of interview panels that do not contain a woman. Data shows reduction in women who are overburdened by having to sit on interview panels.

	Ref	Action	Rationale	Implementation	Timeframe	Responsibility	Success measure(s)
Governance	3.10 H	Ensure female representation on committees.	While we currently have good female representation on our committees, given our low numbers of senior women there is a danger (especially for Executive Group, whose academic membership is only the HoD and Deputy HoDs) that we may in future end up with all-male influential committees.	If role holders are such that we have an all-male committee, HoD to identify women to invite to join.	From November 2017.	HoD.	No all-male committees.

Challenge 4: Promotion and progression of women

Rationale

Our pipelines (Figure 23) indicate that there are barriers to women progressing to professor level. The percentage of our professors who are women has dropped from 13% (FTE: 2) to 11% (FTE: 1.2), below the national benchmark of 13% (Section 4.2.(i)).

During the period 2012/13 – 2015/16, 21% (headcount: 14) of eligible men applied for promotion but only 17% (headcount: 4) of eligible women applied to promotion; men who applied were also more likely to be successful than women, 86% of men who applied (12/14) were successful, while only 50% of women who applied (2/4) were (Section 5.1.(iii)).

Results from the 2015 university staff survey: 68% of Informatics staff who do not identify as male (vs. 86% of male Informatics staff) agreed that "King's acts fairly, regardless of ethnic background, gender, religion, sexual orientation, disability, age, marriage and civil partnership, or pregnancy and maternity/paternity with regard to career progression/promotion".

Overarching targets

By 2021:

- 20% women professors (ca. 4 FTE).
- When surveyed, 80% of women agree that King's acts fairly with regard to career progression/promotion.
- No difference in application for promotion rates between men and women.
- No difference in promotion success rates between men and women.

By 2025:

• 22% women professors (ca. 7 FTE).

	Ref	Action	Rationale	Implementation	Timeframe	Responsibility	Success measure(s)
Support	4.1 H	Formalise mentoring scheme, for all staff.	 New academic staff are meant to be allocated a mentor but consultation and review of processes show (Section 5.1.(ii)): allocation is inconsistent; role of mentor is unclear; allocated mentor may have appraisal relationship with mentee; research staff would also like a mentor. Some staff who are not new would also like access to mentoring (Section 5.2.(iii). The university runs mentoring schemes for underrepresented groups such as women, but people can only apply for this scheme once a year. (Section 5.2.(iii).) 	All new staff to be allocated mentor. All staff to be able to put themselves forward for a mentor. Mentors not to have appraising responsibilities for mentee. To include guidance on what to expect from the relationship and how to get the most out of it.	From April 2018.	HoD.	 >30% of women being mentored. Qualitative feedback shows positive impact of mentoring relationship. Longitudinal study shows positive impact of mentoring on career prospects.
Support	4.2 H	Department promotions panel.	Given diversity and size of department, it is unrealistic to expect the HoD to provide a balanced view of performance of all staff. A diverse panel will allow the supporting statement and the advice given to potential applicants to be more balanced. (Section 5.1.(iii).)	 Panel to include female representation. Remit is: to identify and support staff who may be ready to apply; to provide guidance on applications; to provide diverse input into the HoD's supporting statement. 	First panel held in November 2017.	HoD.	Qualitative feedback, gathered through surveys, shows positive impact of panel, especially on women. Increase in proportion of female staff who successfully apply for promotion.

	Ref	Action	Rationale	Implementation	Timeframe	Responsibility	Success measure(s)
Support	4.3	Women who are identified as being nearly ready to go for promotion to be offered promotion mentoring sessions with a senior member of staff.	Women in the Department are less likely than men to apply for promotion and less likely than men to be successful when they do apply (Section 5.1.(iii)).	Department promotions panel responsible for identifying such women, including women who are unsuccessful at promotion or recommended to wait before applying, and women who may not have considered putting themselves forward.	From November 2018.	HoD. Department promotions panel.	At least 1 woman takes up the mentoring every 2 years and is successfully promoted within 3 years.
Governance	4.4 H	 Head of Research Group Terms of Reference to include: responsibility to provide training; responsibility to encourage staff to receive a PDR; to be appointed for a term of four years; responsibility to promote fair and equitable treatment of members; responsibility to ensure diversity of speakers is considered when organising events. 	We do not currently have defined Terms of Reference for our Heads of Research Groups. The SAT has identified inconsistency in support provided by different groups (Section 5.1.(i)). 2015/16 (Section 5.2.(ii)): only 47% of eligible research staff received a PDR. While the role offers potential for Senior Lecturers and above to develop their leadership experience, some staff have stayed in the role for many years, meaning it is not been possible for other staff to take up the opportunity (Section 5.4.(iii)). In 2015/16, only 28% of seminar speakers were women. In 2016/17, only 25% of seminar speakers were women. (Section 5.4.(vii).)	Head of Group roles open to senior lecturers and above. Expressions of interest invited and all group members (including PhD students and Research staff) consulted on appointment.	Terms of Reference defined by November 2017. Implemented January 2018.	HoD. Heads of Research Groups.	Qualitative feedback shows improvement of research group culture and support, especially for PhD students and more junior staff members. 100% of staff complete PDR. By 2022, at least 2 more women have held the Head of Research Group role. By 2019, >40% of seminar speakers are women.
	Ref	Action	Rationale	Implementation	Timeframe	Responsibility	Success measure(s)
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Support	4.5	PDR reviewers to undergo relevant training.	University provides some training but it is hard to book a place on this. 2015/16: 23% of reviewers had taken recommended training. 2015 university staff survey: 59% of Informatics staff who do not identify as male agreed their PDR was useful. (Section 5.2.(ii).)	Take up of university training to be monitored. Explore possibility of Faculty specific training to be provided by Organisational Development unit. Reviewers not taking up training to be followed up by HoD.	Faculty specific training offered annually from June 2018.	HoD. With support from the Faculty professional services team.	 >80% of reviewers take recommended training. >80% of women agree their PDR was useful.
Governance	4.6	Formal policy for DTP and GTS allocation.	PGR students help academic staff to progress their research, but funding is often a barrier to recruiting PGR students. There is no policy for allocation of DTPs and GTSs, which can be affected by lobbying from potential supervisors, and professors have been 1.4 times more likely to be receive such funded students than non-professors. (Section 5.2.(iii)).	Excellence of candidate to be primary consideration. In case there are multiple well-qualified incomparable candidates, policy to provide guidelines for selecting which potential supervisor should receive allocation.	May 2018: Policy in place. From May 2018: Allocation data routinely analysed.	DepHoD(Res).	In the case of multiple well- qualified incomparable candidates, reasons for selecting supervisor for allocation are clear and adhere to policy. Data shows women are not disadvantaged by policy.

	Ref	Action	Rationale	Implementation	Timeframe	Responsibility	Success measure(s)
Support	4.7	 Training for applying for: lectureships; fellowships. 	Informal feedback shows that university-level training not always relevant to our staff (Section 5.1.(i)). 2015 consultation with research staff showed desire for better support around applying for lectureships and fellowships (Section 5.1.(iii)).	To be developed in collaboration with King's Researcher Development Unit. Open to PGR students as well as research staff. Destinations of leaving research staff and PGR students to be recorded so that impact of this training can be measured.	From March 2018: research staff and PGR students leaving the Department to be surveyed about their destination.	Diversity Lead. With support from Senior Departmental Coordinator and from PGR Programme Administrators.	 >50% of women research staff take up training. Qualitative feedback shows benefits of training. Destination data shows benefits of training.
Sup					March 2018 – November 2018: Consultation with research staff and PGR students to establish what is needed. September 2019: Training in place.	Research Staff Tutor. Research Staff Tutor.	

	Ref	Action	Rationale	Implementation	Timeframe	Responsibility	Success measure(s)
Support	4.8	Process for matching research staff with academic staff for whom they could deliver a lecture.	2015 consultation with research staff showed desire for more significant teaching opportunities. Opportunities to deliver a lecture typically depend on PI. (Section 5.2.(iii)).	Should provide opportunities for research staff to deliver lectures within their expertise. Academic staff responsible for module to provide guidance and feedback.	From September 2018.	Research Staff Tutor.	 >30% of female research staff take up opportunity. Qualitative feedback shows benefits of scheme. When surveyed, research staff report satisfaction with available teaching opportunities.
Support	4.9 H	Intranet to include information for research staff on how they can strengthen their CV.	Informal consultation with staff shows that the opportunity for research staff to act as PI/Researcher Co-I on grants is not well known (Section 5.2.(iii)).	To include both university-wide and Department-specific opportunities.	From May 2018: Page in place and maintained. May 2019: Case studies added.	Research Staff Tutor.	High number of page visits (equal to number of research staff). Qualitative feedback shows research staff are satisfied with available development opportunities.

	Ref	Action	Rationale	Implementation	Timeframe	Responsibility	Success measure(s)
Support	4.10	Encourage students to participate in university mentoring scheme.	The university runs a mentoring scheme that connects UG, PGT and PGR students with alumni mentors. This scheme is not well known in the Department and is not advertised in the Department's student handbook. Currently 4 Informatics students (1 woman, 3 men) participate. (Section 5.1.(iv).)	To be advertised in the Handbook, and via social media, personal tutors and student societies.	From September 2018.	UG, PGT and PGR Senior Tutors. With support from Senior Programme Administrator.	>10 women from Informatics participate in scheme. Qualitative feedback shows positive benefits of scheme.

	Ref	Action	Rationale	Implementation	Timeframe	Responsibility	Success measure(s)
Governance	4.11 H	Workload allocation model used to inform workload allocation.	 2015 university staff survey (Section 5.4.(v)): 91.7% of Informatics staff who do not identify as male (vs. 78.9% of male Informatics staff) agree with "I have had to put in a lot of extra time in the last 12 months to meet the demands of my workload" 62.5% of Informatics staff who do not identify as male (vs. 47.4% of male Informatics staff) agree with "I find my current workload too much and am struggling to cope". There is a perception that some individuals, some research groups, and junior members of staff have previously been overburdened. While we now have a model, this has yet to be used to its best effect in workload allocation and analysis of workload for 2017/18 shows allocation is unbalanced. (Section 5.4.(v).) 	HoD to refer to model when allocating workload. Model also to be referred to when identifying people to ask to perform service tasks such as attending open days or participating in recruitment panels.	From 2018/19.	HoD.	 Staff whose load is significantly different from the norm are identified. Justification for this variation is recorded and agreed between the member of staff and HoD. When surveyed: decrease in % of female staff who agree with "I have had to put in a lot of extra time in the last 12 months to meet the demands of my workload" decrease in % of female staff who agree with "I find my current workload too much and am struggling to cope".

Challenge 5: Managing career breaks and caring responsibilities

Rationale

From the 2015 university staff survey: 89% of Informatics staff who do not identify as male agree that King's treats people on their merits regardless of their pregnancy or maternity/paternity (vs. 95% of Informatics staff who identify as male) (Section 5.3.(i-iii)).

From the 2014 NMS staff survey: 50% of women and 65% of men think Informatics is extremely or very supportive of staff facing/planning a career break (Section 5.3.(i-iii)).

Overarching targets

By 2021:

- When surveyed, > 95% of women think King's treats people on their merits regardless of their pregnancy or maternity/paternity.
- When surveyed, > 90% of women think Informatics is extremely or very supportive of staff facing/planning a career break.

	Ref	Action	Rationale	Implementation	Timeframe	Responsibility	Success measure(s)
Communication	5.1 H	Induction process to cover flexible working and other family friendly policies.	Induction process does not currently ensure staff are informed of various family friendly policies (Section 5.1.(ii)).	Family friendly policies to be collected on a webpage. Induction checklist to ensure this page is highlighted to new staff.	January 2019.	Diversity Lead. With support from Senior Departmental Coordinator.	When surveyed, new staff report that their induction gave them the information they needed to understand the family friendly policies in place.

	Ref	Action	Rationale	Implementation	Timeframe	Responsibility	Success measure(s)
Support	5.2 H	Academic staff returning from career break to receive formal relief in workload allocation.	Current workload allocation model only commits to relief if possible. Planned increase in staff numbers should make it possible to commit to this in all cases.	For all staff returning from extended career break, including long- term sick, caring, maternity, adoption and shared parental leave. To be publicised so that it can be factored into life decisions.	From September 2019.	HoD.	All eligible staff receive relief in workload allocation. Qualitative feedback (gathered through surveying recipients 6 and 18 months after return) shows positive impact of relief.
Support	5.3	Department fund for PGR students' additional care costs resulting from career development opportunities or Keeping In Touch days.	The university provides funding for academic, research and professional services staff to cover additional care costs incurred as a result of attending career development opportunities or Keeping In Touch days, but PGR students cannot apply to this fund. (Section 5.3.(i-iii).)	To follow the university Carers' Career Development fund model.	From June 2018.	Dep.HoD(Res).	Take up of fund. When recipients are surveyed, qualitative feedback shows positive impact of fund.

	Ref	Action	Rationale	Implementation	Timeframe	Responsibility	Success measure(s)
Communication	5.4 H	Better guidance around pregnancy/adoption related career breaks.	 Review of current information (Section 5.1.(i-iii)) showed: lack of guidance for PhD supervisors of PGR students facing career break; no advice regarding shared parental leave, paternity leave or adoption leave; difficult to navigate the many relevant university policies; hard to find relevant funders' policies and to understand how these might apply on a case by case basis. 	 To be coordinated at Faculty level. To include: information on adoption leave, shared parental and paternity leave; advice for PhD supervisors; clear information about different funders' policies; case studies of how others have managed career breaks. 	By September 2018: information and guidance in place. By September 2020: case studies added.	Faculty E&D Officer.	Qualitative feedback shows positive impact of information (gathered through university staff survey and through surveying staff who take career breaks).
Support	5.5 H	Staff transitioning from part- time back to full-time after a career break to receive phased increase in workload allocation and to be allocated a mentor.	We currently have nothing in place to support staff in transitioning from part-time back to full-time after a career break (Section 5.2.(vii)).	Phased increase in workload to be formalised as part of workload allocation model. To be publicised so that it can be factored into life decisions.	From March 2019: to be allocated a mentor (through Department mentoring scheme, action 4.1). From September 2019: phased increase in workload allocation.	HoD.	Qualitative feedback shows positive impact of policy (gathered through surveying part-time staff and particularly staff who transition from part-time to full-time).

Challenge 6: Attitudes, behaviour and inclusivity.

Rationale

Female student focus groups (2017) raised issues including microagressions, lack of access to female role models, feeling uncomfortable participating when in the minority and sexist online behaviour (Section 5.4.(i)).

From the 2015 university staff survey: 79% of Informatics staff who do not identify as male agree they feel valued by their colleagues (vs. 97% of male Informatics staff); 91% of Informatics staff who do not identify as male agree they feel valued by their colleagues (vs. 97% of male Informatics staff); 2 members of staff reported that they were currently being harassed or bullied at work (1 male, 1 who did not identify as male); 4 members of staff reported that they had felt discriminated against at work in the past 12 months (2 male, 2 who did not identify as male) (Section 5.4.(i)).

Overarching targets

By 2021:

- Qualitative feedback gathered from focus groups and survey indicates that female students find the culture in the Department to be inclusive.
- When surveyed, > 95% of female staff agree they feel valued by their colleagues and students.
- 0 staff report being bullied, harassed or discriminated against at work.

	Ref	Action	Rationale	Implementation	Timeframe	Responsibility	Success measure(s)
Governance	6.1 H	Standard induction process for research staff.	There is no standard induction process for research staff. PIs are expected to provide induction, meaning experience is inconsistent. (Section 5.1.(ii).)	Includes checklist for PI to complete and return to Department Manager.	Process in place January 2019.	HoD. With support from Department Manager.	Records show 100% of research staff receive induction. Qualitative feedback shows positive effect of induction on research staff.

	Ref	Action	Rationale	Implementation	Timeframe	Responsibility	Success measure(s)
Support	6.2 H	Cake morning once a semester to welcome new staff to the Department.	When surveyed, members of staff appointed in past 3 years reported that induction process did not help them to meet their colleagues (Section 5.1.(ii)).	For all new staff. To be arranged so that key members of existing staff can attend. To be advertised well in advance so that as many members of existing staff as possible can attend.	From February 2018.	HoD. With support from Department Oficer.	High levels of attendance (>20% of staff). Qualitative feedback shows new staff more likely to agree that induction process helps them to meet their colleagues.
Support	6.3 H	Regular women's lunches.	 Findings from student focus groups (Section 5.1.(i)) indicate: female students can find it hard to participate in these typically male-dominated events; perceived inconsistency of support from personal tutors/supervisors; lack of access to female role models. Regular lunches such as this should allow an informal support network to develop. It will provide female staff and students with: access to role models and informal careers advice; professional networking opportunities; a forum to raise E&D issues. 	To happen twice a semester. All staff and students who identify as a woman or have a non-binary gender identity to be invited.	From March 2018.	Diversity Lead. With support from Department Officer.	>20% women staff attend. >20% women students attend. Qualitative feedback shows positive impact of lunches.

	Ref	Action	Rationale	Implementation	Timeframe	Responsibility	Success measure(s)
Governance	6.4 H	Where groups of students are assigned (e.g., tutor groups, labs, group projects) we do not assign groups with a single woman student.	Some female students are put off participating in group activities because of underrepresentation of women (Section 5.1.(i)).	Timetabling constraints may mean this is not always possible, but wherever possible, to include tutor groups, labs, small group tutorials, group projects.	From September 2018.	Dep.HoD(Ed). With support from the Senior Programme Administrator.	Qualitative feedback (gathered by focus groups and survey) indicates female students are less affected by the underrepresentation of women and more comfortable participating in group activities.
Communication	6.5	Clearer information on support students can expect from their personal tutor and better monitoring of this support.	Female students perceive inconsistencies in support provided by different personal tutors (Section 5.1.(i)). Currently, if a personal tutor does not arrange the required number of meetings with their tutees they are sent automated reminder emails but there is no further follow up.	Information to include mechanisms to complain. UG and PGT Senior Tutors to follow up with personal tutors who are not arranging meetings with their tutees to find out why. If a problem with a personal tutor is identified, this is to be reported to HoD.	From November 2017: Senior Tutors to follow up with personal tutors who are not arranging meetings with their tutees. From September 2019: information in place.	UG and PGT Senior Tutors. With support from Senior Programme Administrator.	Qualitative feedback (gathered by focus groups and survey) indicates improvement in female students' perception of support provided by personal tutors.

	Ref	Action	Rationale	Implementation	Timeframe	Responsibility	Success measure(s)
Governance	6.6 H	Definition of the Department's values and associated expected behaviours.	 Female students at all levels report problems with inappropriate and sexist comments being posted on various social media platforms, and pervasive incidences of microagressions. Women staff less likely than men to: feel valued by their colleagues; feel valued by their students; agree that King's is committed to creating an inclusive environment. Some staff report they are being harassed or bullied, or have felt discriminated against. (Section 5.1.(i).) 	Department's values to be co-created with staff and students, and other external stakeholders (such as potential students and industry). Associated behaviours to be identified that embody those values, also through co- creation with staff and students.	January 2018 – August 2018: co- creation of the Department's values and associated behaviours, through a series of events, focus groups and activities. September 2018: Plan in place to embed Department's values and behaviours throughout recruitment and marketing material, as well as webpages, publicity, policy and our environment. Campaign to expose staff and students to values and behaviours throughout the year.	Diversity Lead. HoD. DepHoD (Technology).	Qualitative feedback (gathered by focus groups and survey) indicates reduction in inappropriate and sexist online comments, reduction in occurrences of microagression, and increased satisfaction of female students with Department culture. When surveyed: • >95% of women staff feel valued by their colleagues; • >95% of women staff feel valued by their students; • >95% of women agree that King's is committed to creating an inclusive environment. No staff report they are being harassed or bullied, or have felt discriminated against.

	Ref	Action	Rationale	Implementation	Timeframe	Responsibility	Success measure(s)
Communication	6.7 H	Compulsory online student training module on expectations of behaviour in Informatics.	Female students at all levels report problems with inappropriate and sexist comments being posted on various social media platforms, and pervasive incidences of microagressions (Section 5.1.(i)).	To include expected behaviour, potential impact of inappropriate behaviour, unconscious and conscious bias, how to directly address or report harassment, support available. To be co-created with students and implemented by an external provider. This is being developed in collaboration with colleagues from Departments of Chemistry and War Studies, financial support from our faculties' teaching funds has been sought for this.	Available to students from January 2019.	Diversity Lead.	Qualitative feedback (gathered by focus groups and survey) indicates reduction in inappropriate and sexist online comments, reduction in occurrences of microagression, and increased satisfaction of female students with Department culture.

	Ref	Action	Rationale	Implementation	Timeframe	Responsibility	Success measure(s)
Communication	6.8	Guidance on how students can deal with incidents of harassment or intimidation that occur at a non- King's event (such as a conference) and how the Department can support them with this.	Student focus group highlighted female students' experiences of harassment and intimidation at external events and the challenges they face in dealing with this (Section 5.1.(i)).	To include practical advice on how to deal with this oneself, but also information about how members of the Department or university can help deal with such situations.	From January 2019.	PGR Senior Tutors.	Qualitative feedback (gathered by focus groups and survey) indicates positive impact of this guidance.
Understand	6.9 H	Working group to investigate bullying, harassment and discrimination of staff.	 2015 staff survey: 2 staff reported currently being harassed or bullied (1 male, 1 who did not identify as male); 4 staff reported that they had felt discriminated against in past 12 months (2 male, 2 who did not identify as male). 	Addressing harassment and bullying among staff is a priority of the Faculty Equality & Diversity Committee. This working group will explore ways of better understanding the problem and feed into the Faculty level work.	To be established in March 2018	Diversity Lead. Faculty E&D Officer.	Qualitative feedback (gathered by survey) indicates reduction in numbers of staff reporting experiences of bullying, harassment and discrimination.

	Ref	Action	Rationale	Implementation	Timeframe	Responsibility	Success measure(s)
Support	6.10	Fund to cover caring costs incurred by attendance at Department social events.	The main Informatics staff and PGR social events (winter and summer parties) typically start at 4pm, which makes it harder for people with caring responsibilities to attend. Social events for students are also typically in the evenings. (Section 5.4.(vi).)	Lightweight application process.	December 2017: Piloted with staff and PGR students at the winter party. January - July 2018: Investigate whether this may be beneficial for UG and PGT students, with a view to implementing for taught students if it is found to be feasible and valuable.	HoD. With support from Department Officer.	Uptake of the fund. Qualitative feedback indicates benefits.
Communication	6.11	Annual high profile public event featuring a woman, trans* or non- binary speaker.	Previously, our distinguished lectures from men have typically attracted bigger audiences than those from women, due to their focus on areas more popular with the general public (Section 5.4.vii).	Interest to general public and our student body to be key consideration in inviting a speaker. To be publicised via groups that focus on women in STEM/Tech. Budget to be provided to pay for speaker.	From March 2018.	Events Coordinator.	> 200 attendees. Qualitative feedback shows positive impact, especially on women.