Athena SWAN Silver Department award renewal application
Name of institution: University of Reading
Date of application: November 2013
Department: School of Mathematical and Physical Sciences
Contact for application: Marguerite Gascoine
Email: m.b.gascoine@reading.ac.uk ..... Telephone: 01183786012
Departmental website address: http://www.smps.reading.ac.uk/
Date of previous award: Silver awarded May 2010
Date of university Bronze award: renewed November 2011
Level of award applied for: Silver renewal


#### Abstract

Athena SWAN Silver Department award renewals recognise that in addition to universitywide policies the department has made progress in promoting gender equality and addressing challenges particular to the discipline. It is expected that after three years Athena SWAN Bronze Department award holders should be at the stage to make a new application for a Silver Department award. However, in exceptional circumstances a Bronze Department renewal award submission can be made.

Not all institutions use the term 'department' and there are many equivalent academic groupings with different names, sizes and compositions. The definition of a 'department' for SWAN purposes can be found on the Athena SWAN website. Where the department unit that made the original application has changed, it is up to the new unit for submission to decide whether a renewal application is appropriate or whether a new award application should be made. If in doubt, contact the Athena SWAN Charter Coordinator well in advance to check eligibility.


It is essential that the contact person for the application is based in the department.
At the end of each section state the number of words used.
Click here for additional guidance on completing this template.

## Letter of endorsement from the Head of Department

# University of Reading 

## School of Mathematical \& Physical Sciences

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Sarah Dickinson, Athena SWAN Manager
Athena SWAN Charter
Equality Challenge Unit
Queen's House
55-56 Lincoln's Inn Fields
London WC2A 3LJ
6 December 2013

Dear Ms Dickinson,

## Athena SWAN Silver Award Renewal: Letter of Endorsement from the Head of School

I am writing to convey my strong support for this application. Previously I was part of the team for our Athena SWAN Silver bid, awarded in May 2010. I took over as Head of School in August 2010, keen to embed the principles of Athena SWAN in our decision-making and to deliver on our action plan.

The School values and supports the Athena SWAN charter. Indeed a strategic School aim is "to develop a world-class working environment which actively supports diversity". This is a superb goal in its own right - we want an environment that supports all staff and their career development. At the same time this goal enables our other aims. In particular, it promotes a supportive research environment and the attraction and retention of the highest quality staff. This in turn is key to our goal of establishing the School as the preeminent academic centre in the world for weather and climate.

To make the above paragraph concrete, let me give an example of a specific action on flexible working (that we are proud of and commend). Through surveying the varied practices across the School and advertising these to staff through a flexible working website (with Head of School endorsement), we have normalised flexible working across the School, making clear that staff working flexibly are highly valued. (Celebrating the many flexibly-working and part-time staff promoted in the last three years has also helped here.) This website, advertised routinely in our recruitment, has played a significant role
in attracting excellent male and female staff. This year alone, two senior academic staff have been appointed in flexible working arrangements, with these arrangements a crucial element of the offer.

A key Athena SWAN principle addresses the importance of diversity at management and policy-making levels. We are proud that in the last three years five female staff have been promoted to professor, and that our female staff are leading and embedded in policy-making across the School, for example as Head of the Department of Mathematics and Statistics for Research (Pelloni), School Director of Enterprise (Todd), a Head of the Department of Meteorology (Highwood, flexibly working 0.8FTE), Director of the EPSRC TSBE Doctoral Training Centre (Barlow), School Director of Postgraduate Research Studies (Gray).

I am proud also of our work in promoting Athena SWAN principles. Prof Macdonald has long played a large national role, Prof Pelloni has spoken externally on our Athena SWAN activities and as a member of the London Mathematical Society Women's Committee, and Prof Highwood has promoted flexible working, for example through an invited blog on the Guardian website. Gascoine and Macdonald have been active members of the University Athena SWAN committee and we have hosted an Athena SWAN lecture given by Prof Paul Walton (York) for the School and the wider University, attended by the Vice-Chancellor and other senior staff.

Yours sincerely,




Prof Simon Chandler-Wilde
Head of School

## 2. The self-assessment process - $\mathbf{1 0 2 4}$ words ( $\mathbf{1 0 0 0}$ words allowed)

Describe the Self-Assessment Process. This should include:
a) A description of the self assessment team: members' roles (both within the department and as part of the team) and their experiences of work-life balance, parental leave, flexible working etc

| Prof Simon <br> Chandler-Wilde | Simon is Professor of Applied Mathematics and Head of the School of <br> Mathematical and Physical Sciences. A major influence on career decisions <br> and on timing of children has been the "two-body problem" and the parallel <br> career of his wife. Simon has two teenage children, Rosie (13), Helen (19): <br> current remaining family responsibilities are managed jointly though previously <br> through his wife working 0.8FTE and employing a nanny. |
| :--- | :--- |
| Mrs Marguerite <br> Gascoine | Marguerite is School Manager. Her role in the renewal process has been to <br> support the Self-Assessment Panel in organizing meetings and general <br> administration, as well as working with HR to provide the necessary data. She <br> comes from a two career family with two grown up children, and has <br> experience of flexible work, shared with her husband when her children were <br> younger. |
| Prof Eleanor <br> HighwoodEllie is Professor of Climate Physics and Head of Department (Academic Staff) <br> of Meteorology. In addition to research, research management and teaching, <br> she has responsibility for the workload management and personal <br> development of upwards of 50 academic staff in Meteorology. She has worked <br> 0.8FTE since returning from leave following the birth of her first child in 2008. <br> She is mother of 1 primary age child and 1 nursery age child and her partner <br> works full-time in a local government role. One of the original "Met Mums" with <br> interests in coaching, mentoring and flexible working, she worked on the <br> section on workloads in this submission. |  |
| Beatrice is Professor of Mathematics, and currently the Head of Department <br> (for Research) of the Department of Mathematics and Statistics. She has a 2- <br> career family with 4 children, 2 of school age. She is also involved as a <br> Pelloni |  |
| member of the Women in Mathematics committee of the London Mathematical <br> Society and has given 3 talks at events, nationally and locally, on her <br> department's Athena SWAN activities Beatrice worked on the section on staff <br> recruitment. |  |
| Dr Stephen | Stephen is Associate Professor in the Mathematics and Statistics. He jointly <br> wrote the section on Career Development. He is part of a 2-career family <br> (spouse works part time) with two school age children (age 4 and 6) and has <br> personal experience of the impact having small children has on one's ability to <br> work long hours, to attend conferences, etc. |
| Langdon | Emma is an early-career Postdoctoral Researcher in Meteorology. She did <br> both her undergraduate and PhD in the department. She led the focus group <br> for early career researchers, and worked on career development in this <br> submission. She is married with no children. |
| Dr Emma Irvine |  |


| Charlton-Perez | child at infant school and a second at pre-school. He led the focus group and <br> wrote the section on flexible working and managing career breaks with Pete. |
| :--- | :--- |
| Dr Calvin Smith | Calvin, part of a two career same-sex family working in education, is a <br> Teaching Fellow in Mathematics and Statistics. He is responsible for authoring <br> the sections relating to undergraduate students and outreach in the <br> Department of Mathematics and Statistics. |
| Ms Hannah <br> Gough | Hannah is a Final year Meteorology student within the School of Mathematical <br> and Physical Sciences, who is currently co-habiting with no dependents. <br> Hannah acted as the representative for the final year Meteorology students to <br> gather focus group feedback as part of the self-assessment process. |
| Dr Natalie <br> Lowery | Natalie did both her MMath and PhD at Reading University where, during her <br> final year she ran the focus group for the final year MMath students. Natalie <br> has now completed her PhD and moved on as a Modelling Analyst on the <br> Smart Systems and Heat programme at the Energy Technologies Institute. She <br> does not have children. |
| Prof Averil <br> Macdonald | Averil is Professor of Science Engagement and project managed the Self- <br> Assessment Process. She has worked part time (progressively increasing <br> hours) since her daughters were born, has recent experience of the promotions <br> process, is married and is mother to two daughters currently at university. <br> Averil project managed and coordinated the submission. |

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

The School of Mathematical and Physical Sciences (MPS) Athena SWAN (AS) Steering group has met termly since the 2010 Silver Award, monitoring progress against the Action Plan (attached), proactively discussing new initiatives and reporting at termly Staff Meetings. Marguerite Gascoine coordinates meetings and represents MPS on the University Athena SWAN (AS) Steering Group, reporting MPS progress and feeding back university initiatives and progress.

On reflection we have to admit that, when MPS obtained Silver, the award was received with mixed feelings. Many men did not see it as a relevant exercise, and others were not convinced of the need to undergo this assessment of HR policies. Some women felt that "women only" actions were unfair, indicating that they want to be judged on their merits, rather than perceive preferential treatment because of their gender. Others did not understand how the award had improved things, or the statistical evidence which backed up the arguments to change culture. Conversely those who had experienced incidents of sexism were much more supportive of the SWAN agenda and said that they had used this when dealing with these comments.

In 2011, the new Head of School took the opportunity to support Marguerite Gascoine, MPS School Manager, to undertake a study entitled 'Mending the Leaky Pipeline: Challenges and Recommendations for the School of Mathematical and Physical Sciences' as part of her MA in Applied Management at Henley Business School. Marguerite used statistical
evidence, questionnaires, focus groups and individual interviews to make recommendations for improving the management of Equality and Diversity in MPS. Marguerite's study was used to inform this submission and a copy provided to the ECU Athena SWAN Manager.

In 2011 the Mathematics and Statistics (M\&S) department became one of the first Good Practice Supporters through the London Mathematical Society Scheme and, in 2012, was one of 30 departments to participate in the LMS study that led to the Good Practice Scheme Guide, published 2013. Analysis was based upon School-wide practice, and feedback from the study has informed this submission.

In September 2012 the AS Steering Group reconstituted as the SelfAssessment Team (SAT) with a renewed membership (an open invitation for membership was circulated across MPS), and began the self-assessment process. The SAT determined to use all available information and to undertake an in-depth analysis of MPS culture in order to understand changes to date and how to embed further change.

The Quick Culture Analysis Tool (QCAT) on-line survey was circulated to all staff in late 2012 to gauge differences in perception between men and women regarding the changes in culture and fairness of processes since the 2010 award. The response rate was $58 \%$ of which $37 \%$ female (female staff percentage 28\%). All students were invited to complete an on-line Student Culture Analysis Survey (SCAS). 84 students responded - response rate of $18 \%, 50 \%$ self-identifying female, $47 \%$ male and $3 \%$ preferred not to say (female students $=34 \%$ ).

From the data and free responses, the SAT identified issues to be explored further by mixed focus groups. Open invitations were sent to all staff. Groups represented career level, job role or current family situation, and each group was led by one or two SAT members with personal relevance to the group. Focus groups were held in January and February 2013 and responses are incorporated into this narrative where appropriate.

One option discussed was to 'go for Gold' which would mean MPS being recognised as a beacon of good practice. The 2011 MA interviews had shown that there was less recognition for Athena SWAN than expected, and that people still did not fully understand what it was there for. Those interviewed felt that, overall, progress was evolving through the experiences of women reaching the top, rather than resulting from the award. The Athena "Measuring success 2011" report states that often this award is an opportunity to "bring focus, awareness and recognition for good practice already being undertaken". Focus groups recognised there was already good practice, but still insufficient staff commitment. MPS needs to consolidate this good practice before it 'goes for Gold' to ensure that it has full staff understanding.

To engage staff more fully Professor Paul Walton was invited to lead a oneday Athena SWAN event in January 2013 to raise awareness both within the

School and across the university. The SAT took the opportunity to seek his advice and insight.

It was clear that this AS event and the survey, interview and focus group experiences initiated a change cycle as it asked people to reflect on fairness across MPS and what they wanted MPS to be. Selecting people from both sides (supportive and unsupportive) is a good way of allowing people to voice their views: getting people to discuss issues is the first step in raising awareness and developing a common vision. Getting people to understand the reasons for actions using statistical evidence makes a strong business case, especially in a School with many scientists.

Having gathered data and focus group feedback, SAT members each undertook to draft a section of the template. These drafts were circulated via the AS Blackboard site, discussed at SAT meetings and modified during Summer before being finalised in Autumn 2013. In parallel the SAT gathered evidence of the level of success, failure and impact against the 2010 Action Plan and devised the 2013 Action Plan based upon outcomes from surveys and suggestions from focus groups as well as analysis of the data in this submission.

Subsequently MPS was invited to participate in a national review of the impact of Athena SWAN, led by Loughborough, and will receive analysis of staff responses in February 2014.
935 words
c) Plans for the future of the self assessment team, such as how often the team will continue to meet, any reporting mechanisms and in particular how the self assessment team intends to monitor implementation of the action plan.

The SAT will reduce in size, though retain its coverage of career level and family experience, and revert to the Athena SWAN Steering Group. It will continue to meet termly to monitor the action plan and report to MPS Staff meetings. Marguerite Gascoine will remain as MPS representative on the University Athena SWAN Steering Group. MPS is ambitious to progress and would, should this renewal be successful, aim to submit for a Gold award in 2016.

76 words

## 3. A picture of the department -1609 words ( 2000 allowed)

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

The School of Mathematical and Physical Sciences (MPS) at Reading is a large academic School, with over 280 staff, including 237 academic and research staff, over 100 PhD students, 475 undergraduate and 50 taught course masters students.

Schools are the University's main academic unit. Thus a very large part of our administrative, management, and academic functions are led from the School, through School Directors of Research, Teaching and Learning, Enterprise, etc. However, MPS has also substantial sub-units with their own leadership, namely a Department of Meteorology (Met), a Department of Mathematics and Statistics (M\&S), and the Statistical Services Centre (15 staff), a selffunding unit with strong links to the rest of MPS which focuses on shortcourse training and consultancy.

The Departments of Met and of M\&S project strong external identities, but the boundaries of these departments are blurred. In particular these departments share five joint academic staff and many joint research staff and PhD students, run BSc and Masters programmes jointly, and have just won funding for an EPSRC Centre for Doctoral Training in the Mathematics of Planet Earth, as a joint venture between MPS and Imperial College London, that will be led on our side by Prof Beatrice Pelloni as Deputy Director.

MPS is also host to large parts of two national research centres, the NERC National Centre for Earth Observation and its directorate, and the directorate and a large part of the staffing of two sections of the NERC National Centre for Atmospheric Science (NCAS), NCAS Climate and NCAS Models and Data. The staff of these NERC Centres are part of the research and academic staff complement of MPS. Additionally, MPS plays host to a group of 20 scientists (MetOffice@Reading), employed by the Met Office, but embedded physically and scientifically within the School.

The size of MPS, its track record of very large scale, long-term research funding (currently over £60M), and the presence of part of the Met Office embedded within the School, enable us to offer stronger career development trajectories than are possible at other institutions. Many PhDs become postdocs, and a significant number of postdocs at Grade 6 are promoted to Grade 7 (equivalent to Lecturer) and/or move to permanent research or Lecturer positions within the School. Other staff, having completed PhDs and/or postdocs, move to positions within the Met Office based within the School. A typical example here is Laura Stewart who, having completed a PhD in 2010, supervised by Prof Nancy Nichols and Dr Sarah Dance (these joint staff between our two departments), held a temporary research fellow position and is now a MetOffice@Reading staff member, based within our

School, on 0.8 FTE flexible working balancing a successful career with childcare.

A significant change since the last Athena SWAN award is that, in September 2010, the Statistical Services Centre joined the School. Simultaneously, a group of statisticians from the Faculty of Life Sciences joined our (newly renamed) Department of Mathematics and Statistics. Two of our current academic staff joined with this group and have been promoted since 2010 to Associate Professor and Professor.

A further significant change has been a large project at University level on changing and making more transparent the criteria for promotion across the staff body. The changes here have been substantial and positive and many staff across the School, from Grade 6 up to Head of School, have contributed to steering these changes through participation in focus groups. One key achievement has been changes to academic promotion routes to make clear that a very wide range of contributions are valued - and we have seen this in action through the promotion of staff up to professorial level whose main focus has been teaching and management. A further key achievement has been a clarification of what excellent behaviours the University is looking to reward, through lump sums, additional increments and, at the highest end, meritbased promotions. This, coupled with moving decision-making closer to Schools, has aided transparency and encouraged a larger number of promotion cases to come forwards.

In advance of these changes that have been led from HR, we have introduced in 2010 a new School Promotions Committee, with $40 \%$ female representation, explicitly tasked with advising on readiness for promotion and giving careful feedback on borderline cases. This formal promotions board (now recommended as best practice across the University), coupled with communications to staff and line managers that make clear the published criteria, the remit of the promotions committee, and the availability of its membership to give advice on potential cases, has been very helpful in achieving the improvements in female promotion rates that we report below.

Another significant change, this assisted by five female promotions to professor since our Athena SWAN award, has been the large increase in the female presence at managerial and leadership levels within the School. Facilitating this has been the use of job-sharing at a Head of Department level, which has enabled senior staff to take on leadership roles while maintaining substantial research careers and a sensible work-life balance. Senior female staff now in senior leadership roles include: Prof Beatrice Pelloni, currently Head of the Department of Mathematics and Statistics for Research and Deputy Director of the EPSRC Mathematics of Planet Earth Doctoral Training Centre; Prof Sue Todd, currently School Director of Enterprise; Prof Ellie Highwood, currently a Head of the Department of Meteorology (and flexibly working 0.8FTE); Prof Janet Barlow, currently Director of the EPSRC TSBE Doctoral Training Centre; and Prof Sue Gray, currently Weather Theme Leader in the Department of Meteorology and School Director of Postgraduate Research Studies. All of Profs Pelloni,

Highwood and Todd are members of the School Steering Committee, the main policy and strategy body for the School. Profs Gray, Highwood, and Todd are members of the Meteorology Strategy Committee, and Prof Pelloni chairs the Mathematics and Statistics Research and Strategy Group, with Prof Todd a member.
(975 words)
Total gender distribution across MPS

| School of Mathematical and Physical Sciences |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Current staff and students enrolled | Department of Mathematics \& Statistics |  |  |  | Department of Meteorology |  |  |  | Total \% female MPS |
|  | Male | Female | TOTAL | \% Female | Male | Female | TOTAL | \% Female | \% Female |
| UG | 275 | 146 | 421 | 35\% | 38 | 17 | 55 | 31\% | 34\% |
| PG Taught | 3 | 8 | 11 | 73\% | 27 | 18 | 45 | 40\% | 46\% |
| PG Research | 26 | 17 | 43 | 40\% | 46 | 31 | 77 | 40\% | 40\% |
| Staff inc. academic/ Research | 36 | 11 | 47 | 23\% | 109 | 46 | 155 | 30\% | 28\% |

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

## Student data

Data are shown for Maths and Statistics (M\&S) and for Meteorology (Met) separately as this compares variations in female representation as benchmarked against Athena SWAN data for Mathematical Sciences and for Physics (nearest relevant comparator for Meteorology as both require A-Levels in Physics and Maths for entry).
(i) Access and foundation male and female numbers - full and part time. N/A
(ii) Graphs of undergraduate male and female numbers in M\&S and Met - full time (there are no part time courses).

## MATHS AND STATS UNDERGRADUATES



Fig. 1a: M\&S offers 9 full time degree courses. Since Silver the average percentage of M\&S female students has been ~43\%, just above the national average of 40.4\% though with a fall this year due to the significant unexplained increase in male applicants.

## METEOROLOGY UNDERGRADUATES



Fig. 1b: Met offers 1 x 3 year and 1 x 4 year with a year in USA. Female Met numbers, though small, at around $40 \%$ have been above the national average of Physics (nearest comparator) at $20.5 \%$. The fall in female numbers since 2012 will be investigated.

The majority of MPS home/EU undergraduate students come straight from school/college, and none of the current undergraduate students have caring responsibilities. A small number of Met students, ~2-3 each year, are mature overseas students - professional meteorologists in their home countries.

MPS aims to maintain the recruitment/open day activity that has generated above national average female representation (while investigating recent female number reductions in Met) and extend this to our new degree BSc Environmental Physics (recruiting now). Met student guides on visit days are always both genders while M\&S are majority female. Currently both admissions tutors are male but female academics make up approx.40\% of those participating in Visit Days - though care has to be taken not to overburden females in this respect.

While some Student Cultural Analysis Survey (SCAS) respondents indicated MPS could communicate its diversity message more clearly, with members of the focus group noting "...don't know how it's promoted" others comment that it is "...certainly not discouraged", $62.5 \%$ of respondents believe that MPS "takes positive action to encourage applications from...female students". 174 words

## ACTIONS:

| 1.1 | Maintain the representation of female staff and students that the applicants are <br> exposed to at a) Open days and b) UCAS Visit days (once they have received an <br> offer). In particular, applicants for our 4 year MMet degree are now required to <br> attend the department for an interview and we will ensure that the interview panel for <br> all applicants (2 staff) includes at least one female member of staff. |
| :--- | :--- |
| 1.2 | Investigate increase in male applicants to M\&S and drop in female applicants to Met <br> and identify any required changes to recruitment process. |
| 1.3 | Ensure female applicants are in 'critical mass' numbers on UCAS Visit days to <br> reduce possibility of perception of isolation to increase 'conversion' levels. |
| 1.4 | Focus groups to identify and embed ways tomake the opportunity to study in MPS <br> more attractive to female students to encourage greater conversion from offers to <br> enrolments. |
| 1.5 | Ensure students to talk about the departmental leadership and culture surrounding <br> gender days at UCAS Visit days |
| 1.6 | Utilise the new interactive whiteboard in Met Departmental library on open and visit <br> days to include videos and snapshots of women from the Department and the wider <br> subject area. |
| 1.7 | Ensure female representation on the "news" board in the Met foyer around Open <br> days |
| 1.8 | Recognise Open Day and Visit Day activity as part of Workload Model |

## (iii) Graph of postgraduate numbers for taught courses and research

We have included only full time students as part time are only 1 or 2 students per year so show no particular trend.

## MATHS AND STATS POSTGRADUATES TAUGHT



Fig. 2: Numbers of taught postgraduates in M\&S are small but female representation has shown a broadly increasing percentage since the Silver, averaging $50 \%$, above the national average of 40.3\% for full time (F/T).

There has been a reduction in male applicants over three years, which is yet to be explained, and an overall growth in female applicants, which indicates that we should focus on how we persuade them to accept offers.

MATHS AND STATS POSTGRADUATES RESEARCH


Fig. 3: Numbers of M\&S students on research degrees are also small, but, with an average of $45 \%$, is again exceeding the national average of $30.3 \%$ F/T.

Female applications have grown modestly since Silver but the increase in enrolments is only visible this year. We will focus on the good work and try to replicate this.

## METEOROLOGY POSTGRADUATES TAUGHT



Fig. 4: The percentage of female Met taught postgraduates is high averaging 50\% compared with 25.8\% Physics F/T.

The apparent decrease in female student percentages since Silver is due to the number of male applicants and enrolments increasing significantly. This will be investigated.

METEOROLOGY POSTGRADUATE RESEARCH


Fig. 5: Numbers of female Met research postgraduates, again small numbers, has shown an increase more recently, averaging 40\% of the cohort compared with $\mathbf{2 1 . 8 \%}$ F/T Physics.

Numbers of female applicants are growing slowly but more slowly than male applicant numbers. Efforts will be made to increase female application rates (action noted later under next section).
121 words
(iv) Graph of Postgraduate (taught and research) numbers and completion times over 5 years for M\&S and Met shown separately.

MATHS \& STATS COMPLETION RATES

|  | Female average completion times (days) |  |  |  | Male average completion times (days) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Academic <br> Year <br> of Entry | F/T <br> Research | F/T <br> Taught | P/T <br> Research | P/T Taught | F/T <br> Research | F/T <br> Taught | P/T <br> Research | P/T <br> Taught |
| 2004/5 |  | 365 |  |  | 1468 | 365 |  | . |
| 2005/6 |  | 364 |  | 730 |  | 364 |  |  |
| 2006/7 | 1457 | 364 |  |  | 1346 | 364 |  |  |
| 2007/8 | 1453 | 364 |  |  | 1641 | 364 |  |  |
| 2008/9 | 1361 | 365 |  |  | 1391 | 365 |  | 308 |

Fig. 6: All M\&S P/G students have completed in the period so we have shown the mean length of time (in calendar days) for M\&S postgraduate completions, by gender and programme type for start dates 2004/5-2008/9. There is no evidence that either gender takes longer on average to complete research degrees.

METEOROLOGY COMPLETION RATES

|  | Female average completion times (days) |  |  |  | Male average completion times (days) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Academic <br> Year <br> of Entry | F/T <br> Research | F/T <br> Taught | P/T <br> Research | P/T <br> Taught | F/T <br> Research | F/T <br> Taught | P/T <br> Research | P/T <br> Taught |
| 2004/5 | 1316 | 365 | 2830 | 601 | 1492 | 359 | 1733 | 545 |
| 2005/6 | 1367 | 405 |  |  | 1497 | 364 |  |  |
| 2006/7 | 1376 | 354 |  |  | 1473 | 362 | 1681 | 659 |
| 2007/8 | 1500 | 364 |  | 729 | 1530 | 385 |  |  |
| 2008/9 | 1223 | 365 |  |  | 1351 | 365 |  |  |

Fig. 7:All Met P/G students have completed in the period so we have shown mean length of time (in calendar days) for Met postgraduate completions, by gender and programme type for start dates 2004/5-2008/9. Female students on F/T research and on post graduate taught (PGT) degrees complete more quickly than males.

The Postgraduate focus group identified that female doctoral students undertake their research in a different, but equally valid, way when compared with some of their male peers. One participant noted that the men in her office will "plough in with some computer programming stuff and then think it through if it goes wrong" whereas she prefers to "read, think ...[the problem]... through, plan and then programme." This difference in approach was noted in conversations about interactions with their supervisors, especially where supervisors had only experienced supervising male research students, where it was felt that "[the supervisor's]... questioning of her method may be undermining."

There was a strong feeling amongst focus group participants that the system, for training doctoral students should change with the need for greater awareness amongst supervisors and their male peers for support (rather than this just being perceived as "the way it is" and ignoring the issue).
150 words

## ACTIONS:

| 2.1 | Table a discussion of support for all students, specifically to address issues raised <br> regarding gender differences in study/research styles by PG students at the <br> School PG Board of Studies. |
| :--- | :--- |
| 2.2 | Add standing agenda item on Equality and Diversity to Board of Studies meetings |
| 2.3 | Teaching and Learning seminar to ensure all supervisors are aware of different <br> study styles for female and male students |

(v) Graphs of ratio of course applications to offers and acceptances by year for 5 years for $u / g, p / g$ taught and $p / g$ research

## MATHS \& STATS UNDERGRADUATE RATIOS



Fig. 8: A slightly higher percentage of female UG applicants are given offers but a very slightly lower percentage accepts offers, indicating there is no bias in the selection process.

## METEOROLOGY UNDERGRADUATE RATIOS



Fig. 9: Comparable percentages of female and male UG applicants are given offers but a very slightly lower percentage of females accepts offers. Numbers are very small so there is no evidence of bias in the process.

## MATHS \& STATS POSTGRADUATE TAUGHT RATIOS



Fig. 10: Student numbers are small but a higher percentage of females receives offers with, on average, a lower percentage accepting, although the percentage accepting has been increasing every year except for this last year.

## meteorology postgraduate taught ratios




Fig. 11: A higher percentage of female applicants receives and accepts offers although, as noted above, male student application rates are much higher and rising faster than female application rates, so efforts will be made to increase female application rates.

## MATHS \& STATS POSTGRADUATE RESEARCH RATIOS



Fig. 12: M\&S numbers are small but a higher percentage of female M\&S research applicants receive offers and, on average, comparable percentage of male and females accept, indicating no evidence of bias. Female research application rate are rising (noted before).

## METEOROLOGY POSTGRADUATE RESEARCH RATIOS



Fig. 13: Other than 2010/11, similar percentages of males and females are made offers and, on average, similar percentages accept offers, though, as noted above male application rates are rising faster than female application rates. Efforts will be made to encourage female applications.

## ACTIONS:

| 2.4 | Identify ways to make the opportunity to study in MPS more attractive to female <br> students to encourage greater applications and conversion from offers to <br> enrolments. |
| :--- | :--- |
| 2.5 | Ensure that the departments have visible female presence on Visit days and for <br> PhDs get students to talk about the departmental leadership and culture <br> surrounding gender |

## DEGREE CLASSIFICATIONS

## Maths \& Stats Undergraduate Degree Classification

|  |  |  |  | 든 물 N |  | 운 추 | 둔 치 | ¢ 운 응 ¢ | 둔 - ¢ | \% | ¢ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| M\&S average \% by class |  | $\begin{array}{r} \text { M } \\ 32 \% \\ \hline \end{array}$ | $\begin{array}{r} F \\ 33 \% \end{array}$ | $\begin{array}{r} \text { M } \\ 23 \% \end{array}$ | $\begin{array}{r} F \\ 29 \% \end{array}$ | $\begin{array}{r} \text { M } \\ 31 \% \\ \hline \end{array}$ | $\begin{array}{r} \text { F } \\ 23 \% \end{array}$ | $\begin{array}{r} M \\ 10 \% \\ \hline \end{array}$ | $F$ $11 \%$ | $\begin{array}{r} \text { M } \\ 5 \% \end{array}$ | $\begin{array}{r} F \\ 4 \% \end{array}$ |
| Benchmark \% by class |  | M | F | M | F | M | F | M | F | M | F |
|  |  | 31\% | 32\% | 33\% | 36\% | 22\% | 22\% | 9\% | 7\% | 3\% | 3\% |
| 2012/3 | Number | 12 | 13 | 12 | 11 | 10 | 16 | 7 | 5 | 3 | 4 |
|  | $\begin{aligned} & \text { \% ratio by } \\ & \text { class } \end{aligned}$ | 48.0 | 52.0 | 52.2 | 47.9 | 38.5 | 61.5 | 58.3 | 41.7 | 42.9 | 57.1 |
|  | \% Female by class | 27.1 | 26.0 | 27.1 | 22.5 | 22.7 | 32.7 | 15.9 | 10.2 | 6.8 | 8.2 |
| 2011/2 | Number | 8 | 2 | 5 | 13 | 15 | 11 | 4 | 4 | 1 | 1 |
|  | \% ratio by class | 80.0 | 20.0 | 27.8 | 72.2 | 57.7 | 42.3 | 50.0 | 50.0 | 50.0 | 50.0 |
|  | \% Female by class | 24.2 | 6.5 | 15.2 | 41.9 | 45.5 | 35.5 | 12.1 | 12.9 | 3.0 | 3.2 |
| 2010/1 | Number | 11 | 15 | 14 | 17 | 17 | 8 | 6 | 4 | 3 | 1 |
|  | $\begin{gathered} \text { \% ratio by } \\ \text { class } \end{gathered}$ | 42.3 | 57.7 | 45.2 | 54.9 | 68.0 | 32.0 | 60.0 | 40.0 | 75.0 | 25.0 |
|  | \% Female by class | 21.6 | 33.3 | 27.5 | 37.8 | 33.3 | 17.8 | 11.8 | 8.9 | 5.9 | 2.2 |
| 2009/0 | Number | 11 | 20 | 6 | 10 | 12 | 5 | 3 | 5 | 1 | 2 |
|  | \% ratio by class | 35.5 | 64.5 | 37.5 | 62.5 | 70.6 | 29.4 | 37.5 | 62.5 | 33.3 | 66.7 |
|  | \% Female by class | 30.6 | 45.5 | 16.7 | 22.7 | 33.3 | 11.4 | 8.3 | 11.4 | 2. 8 | 4.5 |
|  |  |  |  |  |  |  |  |  |  |  |  |
| 2008/9 | Number | 21 | 15 | 9 | 6 | 8 | 5 | 0 | 3 | 1 | 0 |
|  | \% ratio by class | 58.3 | 41.7 | 60.0 | 40.0 | 61.6 | 38.5 | 0 | 100 | 100 | 0 |
|  | \% Female by class | 53.9 | 51.7 | 23.1 | 20.7 | 20.5 | 17.2 | 0 | 10.3 | 2.6 | 0 |

Fig. 14 M\&S undergraduate degree classifications compared with national benchmarking data show both our males and females achieve a (slightly) higher percentage of 1sts, a (considerably, especially for the males) lower percentage of 2:1s, a higher percentage of 2:2s (slightly for the females, very considerably for the males), and a slightly higher percentage of $3^{\text {td }}$ class and pass degrees than the national benchmark. There does not seem to be any systematic bias for gender in the degree assessment process.

Female students in focus groups identify a loss of confidence in their ability to get a good degree relative to when they started the course; whereas, male undergraduates declare themselves more confident now than at the start of their studies. Demonstrating female achievement from these data could reassure them. 49 words

Meteorology Undergraduate Degree Classification

|  |  |  | 둔 핟 |  | ¢ं 물 N | 둔 추 |  | 둠 을 | 둘 을 | ¢ | ¢ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Met average \% by class |  | $\begin{array}{r} M \\ 46 \% \end{array}$ | $\begin{array}{r} F \\ 42 \% \end{array}$ | $\begin{array}{r} \text { M } \\ 29 \% \end{array}$ |  | $\begin{array}{r} M \\ 20 \% \end{array}$ |  | $\begin{array}{r} \text { M } \\ 3 \% \end{array}$ | $\begin{array}{r} F \\ 0 \% \end{array}$ | $\begin{array}{r} \text { M } \\ 2 \% \end{array}$ | F <br> $0 \%$ |
| Benchmark \% by class |  | $34 \%$ | $\begin{array}{r} F \\ 30 \% \end{array}$ | $\begin{array}{r} \text { M } \\ 34 \% \end{array}$ | F $39 \%$ | $\begin{array}{r} M \\ 23 \% \\ \hline \end{array}$ | $\begin{array}{r} F \\ 23 \% \\ \hline \end{array}$ | $\begin{array}{r} \text { M } \\ 8 \% \\ \hline \end{array}$ | $\begin{array}{r} \text { F } \\ 5 \% \end{array}$ | $\begin{array}{r} M \\ 1 \% \\ \hline \end{array}$ | $\begin{aligned} & F \\ & 1 \% \end{aligned}$ |
| 2011/2 | Number | 5 | 6 | 1 | 2 | 1 | 1 | 1 | 0 | 0 | 0 |
|  | $\begin{array}{r} \% \text { ratio by } \\ \text { class } \end{array}$ | 45.5 | 54.5 | 33.3 | 66.7 | 50 | 50 | 100 | 0 | 0 | 0 |
|  | \% F by class | 62.5 | 66.7 | 12.5 | 22.2 | 12.5 | 11.1 | 12.5 | 0 | 0 | 0 |
| 2010/1 | Number | 7 | 3 | 2 | 1 | 1 | 1 | 0 | 0 | 1 | 0 |
|  | \% ratio by class | 70 | 30 | 66.7 | 33.3 | 50 | 50 | 0 | 0 | 100 | 0 |
|  | \% Female by class | 63.6 | 60 | 18.2 | 20 | 9.1 | 20 | 0 | 0 | 9.1 | 0 |
| 2009/0 | Number | 5 | 2 | 7 | 2 | 2 | 4 | 1 | 0 | 0 | 0 |
|  | $\begin{array}{r} \text { \% ratio by } \\ \text { class } \end{array}$ | 71.4 | 28.6 | 77.8 | 22.2 | 33.3 | 66.7 | 100 | 0 | 0 | 0 |
|  | \% Female by class | 33.3 | 25 | 46.7 | 25 | 13.3 | 50 | 6.7 | 0 | 0 | 0 |
| 2008/9 | Number | 5 | 2 | 4 | 5 | 6 | 1 | 0 | 0 | 0 | 0 |
|  | \% ratio by class | 71.5 | 28.6 | 44.4 | 55.6 | 85.7 | 14.3 | 0 | 0 | 0 | 0 |
|  | \% Female by class | 33.3 | 25 | 26.7 | 62.5 | 40 | 12.5 | 0 | 0 | 0 | 0 |
| 2007/8 | Number | 5 | 2 | 3 | 2 | 2 | 2 | 1 | 0 | 0 | 0 |
|  | \% ratio by class | 71.4 | 28.6 | 60 | 40 | 50 | 50 | 100 | 0 | 0 | 0 |
|  | \% Female by class | 45.5 | 33.3 | 27.3 | 33.3 | 18.2 | 33.3 | 9.1 | 0 | 0 | 0 |

Fig. 15: Met numbers are small but students seem to outperform the national benchmark levels of the nearest comparator (Physics) with males and females patterns of performance being comparable to the national pattern.

## ACTIONS:

| 2.6 | Teaching and Learning seminar to raise awareness amongst colleagues of potential <br> for female student confidence drop off and seek ways to retain female student <br> confidence levels, in particular using the data to show that female outperform males in <br> M\&S. |
| :--- | :--- |
| 2.7 | Specific training for personal tutors and module convenors in unconscious bias, basic <br> coaching skills, and communication skills as they relate to all students, but to include <br> awareness of research on importance of study styles to female scientists |

```
2.8 "Inspiring women" section on Equality and Diversity part of website with quotes from graduates and staff rather than celebrities. Also include quotes from males to show some issues do not just affect females, but females more affected by them.
```


## Staff data:

Staff data are provided at School level as the same policies and processes are applied across the school.
(vi) Female:male ratio of academic staff and research staff researcher, lecturer, senior lecturer, reader, professor (or equivalent).

MPS Academic Staff


Fig. 16: The university has replaced Senior Lecturer and Reader with 'Associate Professor'(AP). The significant increase in total numbers in 2010 is due to the Department of Statistics joining the Department of Maths to create M\&S. The decline in number of females at AP since 2011 corresponds with an increase at Professor due to promotions. See later for details of how this was achieved.

It is worth noting that the breakdown of staff per gender does not necessarily depict the culture of a department. Focus group feedback recognised M\&S, having a large undergraduate cohort, its culture is very inclusive, but genderwise it is very male dominated. Met is a very successful research department with relatively large proportions of females and of researchers but the MA study participants commented that it can sometimes be perceived as more of a male type success enclave than its numbers would suggest, but they also said that although the environments they worked in were predominantly masculine they felt that the culture was fairly balanced. However, some said
that they might choose to do things slightly differently if they were in a group of women. One participant related to how comforting it had been to discuss things with other women in a women's network, and that this had attracted many laughs from within her very masculine environment. This indicates that there is still a way to go before everyone understands the issue of culture and its impact on colleagues.
177 words
MPS Research Staff


Fig. 17: Grades 6 \& 7 are PDRA roles whereas grade 8 is Research fellow and Grade 9 is Research Professor of which there are very few. MPS has had significant success in enabling Grade 6 Researchers to be promoted to Grade 7 (open ended) since 2010.

It is notable that the critical mass of women research staff is at the lower echelons and this might affect the way women are perceived by others. Until there is a critical mass of women in the higher level posts, unconscious bias can lead people to associate women with lower grades. Training in unconscious bias is of value in mitigating this.
61 words
(vii) Turnover by grade and gender - where numbers are small comment why individuals left

Recognising the value of retaining talent, since 2011, MPS now maintains a list of redeployment opportunities and a list of Postdoctoral Research Assistants (PDRAs) whose contracts end in 6 months is circulated to all Principal Investigators (PIs) with successful grants pending, to offer PDRAs the opportunity to apply for new positions before they are advertised. We also routinely use department funds as a bridge between research contracts. The impact is that, to date, of 69 Met PDRAs listed 56 ( $52 \%$ female) have been retained either through the list or through bridging funds before being
recruited on new grants, while 3 M\&S PDRAs (1 female) have been bridged between contracts using School funds. Focus groups recognised that this has been a very successful and helpful strategy.
MPS has arranged for the Research and Enterprise Development Manager to visit weekly to advise staff on fellowships which has resulted in four women winning prestigious fellowships, extending their research contracts by a significant amount of time, and this will lead them into permanent positions. 170 words


Fig. 18: This graph shows reasons for leaving, though numbers are small so these figures are only indicative. Contract ending (more F than M colleagues), the need to return home for overseas (mainly M colleagues) and career progression (more M than $F$ ) are the highest scoring reasons. No female staff gave 'insufficient flexibility' as a reason for leaving.


Fig. 19: Looking more closely at where leavers move to indicates differences with male leavers being much more internationally mobile (some returning home as noted above) while more females go into the public sector. However numbers are very small so this is indicative.

## Supporting and advancing women's careers - 6686 words ( 6500 words agreed)

The Action Plan from the last application with an additional column indicating the level of progress achieved (e.g. zero, limited, excellent, completed) is attached.

## See previous action plan on page 72.

## 4. Key career transition points

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

MPS JOB APPLICATION AND SUCCESS RATES
$\left.\begin{array}{|l|l|r|l|r|r|}\hline \text { Year } & \text { Position } & \begin{array}{l}\text { Female } \\ \text { applicants }\end{array} & \begin{array}{l}\text { Female } \\ \text { Appointed }\end{array} & \begin{array}{l}\text { Male } \\ \text { applicants }\end{array} & \begin{array}{l}\text { Male } \\ \text { appointed }\end{array} \\ \hline 2008 / 9 & \text { Post-Doctoral Researcher } & 17 & 6(35 \%) & 48 & 10(21 \%) \\ \hline 2008 / 9 & \text { Lecturer } & 2 & 0 & 18 & 2(11 \%) \\ \hline 2008 / 9 & \text { Associate Professor } & & & & \\ \hline 2008 / 9 & \text { Professor } & 2 & 0 & 34 & 2(\%) \\ \hline 09 / 10 & \text { Post-Doctoral Researcher } & 111 & 8(7 \%) & 318 & 15(5 \%) \\ \hline 09 / 10 & \text { Lecturer } & 11 & 1(9 \%) & 34 & 3(1 \%) \\ \hline 09 / 10 & \text { Associate Professor } & & & 1 & 1(100 \%) \\ \hline 09 / 10 & \text { Professor } & & & & \\ \hline 10 / 11 & \text { Post-Doctoral Researcher } & 103 & 6(6 \%) & 256 & 13(5 \%) \\ \hline 10 / 11 & \text { Lecturer } & 49 & 1(2 \%) & 137 & 11(8 \%) \\ \hline 10 / 11 & \text { Associate Professor } & 1 & 1(100 \%) & 2 & 1(50 \%) \\ \hline 10 / 11 & \text { Professor } & & & & \\ \hline 11 / 12 & \text { Post-Doctoral Researcher } & 66 & 9(14 \%) & 179 & 9(5 \%) \\ \hline 11 / 12 & \text { Lecturer } & 26 & 3(11 \%) & 129 & 4(3 \%) \\ \hline 11 / 12 & \text { Associate Professor } & 5 & 1(20 \%) & 18 & 1(6 \%) \\ \hline 11 / 12 & \text { Professor } & 2 & & 0 & 9\end{array}\right) 4(44 \%) \quad$.

Fig. 20: At PDRA level and at lecturer level a slightly higher proportion of female applicants is appointed. At higher levels the very small numbers of posts and applicants means that trends are not apparent. Efforts are being made to elicit applications from females eligible for higher grade posts in particular.



Fig 20: This shows the tabled data above graphically. Due to small numbers there are no clear trends in recruitment in higher grades however see below for actions to support fairer recruitment processes.
(ii) Impact of activities to support the recruitment of staff - how the department's recruitment processes ensure that female candidates are attracted to apply and how the department ensures its short listing and selection processes and criteria comply with the university's equal opportunities policies

In addition to following university equal opportunities policies, MPS advertising materials and person specifications are now carefully checked to ensure no hidden preferences for gender-specific traits. MPS advertises, in writing and verbally, the procedures for flexible working, our Silver Award and London Mathematical Society (LMS) Good Practice Supporter status. As fewer women applied for jobs (particularly in mathematics), than we would like, we now encourage staff to ensure that suitable women are contacted and explicitly encouraged to apply for jobs when they come up and by posting them on lists such as the email list of the European Women in Maths. As one impact, during the recent Academic Investment Programme, our first choice recruit, a female professor, initially turned down the job offer. During the second phase of recruitment, the Head of School (HoS) and Head of Department (HoD) in Met contacted the candidate in person to check whether the personal issues could be resolved via flexible working. Subsequently she accepted the offer, stating that, without this direct approach she would not have applied again.

Since Silver we have improved shortlisting procedures with clear and robust selection criteria, but we are not complacent and we plan to trial blind longlisting. MPS makes interview panels representative, gender-balanced and fair. Currently Gender Awareness training is only available for panel Chairs. We intend to formalise our requirement that all panel members undergo gender and bias awareness training, and that panels explicitly take into account personal circumstances, career breaks, and other personal circumstances, by requesting additional information from candidates if necessary. At interview we invite all applicants for academic contracts to spend two days in the department and meet informally with all potential immediate colleagues so they can discuss with a wide variety of staff members and are aware of our policies. We also reiterate our support for those wishing to work flexibly/parttime during the assessment process. An impact of this was the appointment of a woman on a part time contract, at her request, to M\&S in October 2011. 336 words

## ACTIONS:

| 3.1 | Introduce mandatory Gender Awareness Training for all interview panel <br> members |
| :--- | :--- |
| 3.2 | Organise Unconscious Bias training for all staff involved in recruitment. |
| 3.3 | Trial of blind long-listing process to see if it changes the composition of long <br> lists |
| 3.4 | Routinely approach potential female applicants for posts. |
| 3.5 | Continue our lobbying for family-friendly university policies |

## (iii) Applications for promotion and success rates by gender and grade

As per our 2010 Action Plan, MPS has been very active, setting up regular promotion and progression workshops to reduce loss of talent, redesigning forms and helping staff in preparing for development reviews, the impact of which is shown in the data below:
43 words

| Promotion from Grade 6 (Post-doc) to Research Grade 7 |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | :--- |
|  | Total <br> Proposed | Female <br> Proposed | Total <br> Successful | Female <br> Successful | Female <br> successful as <br> \% of total <br> proposed | Male <br> successful as <br> $\%$ of total <br> proposed |
| $2007-08$ | 0 | 0 | 0 | 0 | $0 \%$ | $0 \%$ |
| $2008-09$ | 3 | 1 | 1 | 0 | $(0 / 3) 0 \%$ | $(1 / 3) 33 \%$ |
| $2009-10$ | 5 | 2 | 3 | 1 | $(1 / 5) 20 \%$ | $(2 / 5) 40 \%$ |
| $2010-11$ | 4 | 2 | 3 | 1 | $(1 / 4) 25 \%$ | $(2 / 4) 50 \%$ |
| $2011-12$ | 6 | 2 | 5 | 2 | $(2 / 6) 33 \%$ | $(3 / 6) 50 \%$ |
| $2012-13$ | 4 | 3 | 3 | 2 | $(2 / 4) 50 \%$ | $(1 / 4) 20 \%$ |

Fig. 21: Total Success rate from Grade 6 Researcher to Grade 7
Male: 12 proposals and 9 successful therefore $75 \%$ success rate
Female:10 proposals and 6 successful therefore $60 \%$ success rate
Women are increasingly being put forward for promotion from researcher grade 6 to grade 7 and, given small numbers, a trend to increasing probability of success is seen, which we relate to the promotion workshops available for staff on grade 6 since 2012.

The university has changed progression to Associate Professor now instead of Reader or Senior Lecturer. The benefit to women is that more women tended to go to Senior Lecturer and it was perceived to be hard to achieve Professor from there. Promotion routes should be more straightforward in the future.
50 words

| Promotion from Lecturer to Associate Professor (Grade 8) |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | :--- |
|  | Total <br> Proposed | Female <br> Proposed | Total <br> Successful | Female <br> Successful | Female <br> successful as <br> $\%$ of total <br> proposed | Male <br> successful as <br> $\%$ of total <br> proposed |
| $2007-08$ | 3 | 0 | 3 | 0 | $(0 / 3) 0 \%$ | $(3 / 3) 100 \%$ |
| $2008-09$ | 7 | 2 | 4 | 1 | $(1 / 7) 14 \%$ | $(3 / 7) 43 \%$ |
| $2009-10$ | 5 | 0 | 4 | 0 | $(0 / 5) 0 \%$ | $(4 / 5) 80 \%$ |
| $2010-11$ | 7 | 1 | 6 | 1 | $(1 / 7) 14 \%$ | $(5 / 7) 72 \%$ |
| $2011-12$ | 4 | 0 | 2 | 0 | $(0 / 4) 0 \%$ | $(2 / 4) 50 \%$ |
| $2012-13$ | 6 | 0 | 2 | 0 | $(0 / 6) 0 \%$ | $(2 / 6) 33 \%$ |

Fig. 22: Total success rate for Lecturer to Associate Professor per gender:
Male: 29 proposals and 19 successful therefore 65\% success rateFemale: 3 proposals and 2 successful therefore 66\% success rate
The percentage of women at Lecturer level peaked just after our Silver award when we recruited 3 female academics between 2010 and 11.These will be ready for promotion in the next cycles. Action will be taken to support these women moving from Lecturer to Associate Professor.

| Promotion to Professor (Grade 9) |  |  |  |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
|  | Total <br> Proposed | Female <br> Proposed | Total <br> Successful | Female <br> Successful | Female <br> successful as <br> \% of total <br> proposed | Male <br> successful as <br> $\%$ of total <br> proposed |  |
| $2007-08$ | 1 | 0 | 1 | 0 | $(0 / 1) 0 \%$ | $(1 / 1) 100 \%$ |  |
| $2008-09$ | 2 | 1 | 2 | 1 | $(1 / 2) 50 \%$ | $(1 / 2) 50 \%$ |  |
| $2009-10$ | 2 | 1 | 1 | 0 | $(0 / 2) 0 \%$ | $(1 / 2) 50 \%$ |  |
| $2010-11$ | 4 | 2 | 2 | 2 | $(2 / 4) 50 \%$ | $(0 / 4) 0 \%$ |  |
| $2011-12$ | 3 | 3 | 2 | 2 | $(2 / 3) 67 \%$ | $(0 / 3) 0 \%$ |  |
| $2012-13$ | 6 | 1 | 4 | 1 | $(1 / 6) 17 \%$ | $(3 / 6) 50 \%$ |  |

Fig. 23: Total success rate to Professor per gender
Male: 10 proposals and 6 successful therefore $60 \%$ success rate
Female: 8 proposals and 6 successful therefore $75 \%$ success rate
Since the Silver Award females have been more successful in promotion to Professor.

| Accelerated Incremental progression |  |  |  |  |  |  |  |
| :--- | ---: | ---: | :--- | :--- | :--- | :--- | :--- |
|  | Total <br> proposals | Female <br> Proposals | Total <br> Success | Female <br> successes | Female <br> success as \% <br> of total <br> proposed | Male <br> success as \% <br> of total <br> proposed |  |
| $2007-08$ | 11 | 5 | 5 | 3 | $(3 / 11) 27 \%$ | $(2 / 11) 18 \%$ |  |
| $2008-09$ | 9 | 2 | 6 | 1 | $(1 / 9) 11 \%$ | $(5 / 9) 55 \%$ |  |
| $2009-10$ | 9 | 2 | 5 | 2 | $(2 / 9) 22 \%$ | $(3 / 9) 33 \%$ |  |
| $2010-11$ | 3 | 3 | 2 | 2 | $(2 / 3) 67 \%$ | $(0 / 3) 0 \%$ |  |
| $2011-12$ | 12 | 5 | 6 | 2 | $(2 / 12) 16 \%$ | $(4 / 12) 33 \%$ |  |
| $2012-13$ | 9 | 3 | 8 | 3 | $(3 / 9) 33 \%$ | $(5 / 9) 55 \%$ |  |

Fig. 24: Total success rate per gender for incremental progression:
Male: 33 proposals and 17 successful therefore $51 \%$ success rate
Female :20 proposals and 12 successful therefore $60 \%$ success rate Females are much more likely to be successful in gaining increments to their salaries

| Lump Sums awarded |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | Female | Total | Female success as \% of total proposed | Male <br> success as \% <br> of total proposed |
| 2007-08 | 5 | 5 | 10 | 50\% | 50\% |
| 2008-09 | 4 | 3 | 7 | 43\% | 57\% |
| 2009-10 | 5 | 3 | 8 | 38\% | 62\% |
| 2010-11 | 3 | 7 | 10 | 70\% | 30\% |
| 2011-12 | 7 | 4 | 11 | 36\% | 64\% |

Fig. 25: On average over 5 years as many females as males have been awarded lump sum payments for recognised exceptional service.

On studying the number of years post-PhD for promotions across the different staff grades, the MA study found that women are likely to take approximately 2.5 years longer to reach these grades than men. Some of the women interviewed reported being comfortable with these trade-offs in return for the possibility of working flexibly - as did one of the men interviewed!

The academic career path lends itself well to flexible working: many women in MPS have permanent positions and have had career breaks successfully and continue working flexibly. However in the MA study flexible workers reported feeling insufficiently visible and felt under-valued compared to other full time equivalents as they felt they are not likely to progress as quickly, while in the QCAT $54 \% \mathrm{~F}: 50 \% \mathrm{M}$ indicated agreement that those who work part time or flexibly are offered the same career development opportunities. A big question for MPS is how to enable balancing of ambition and managing to work in nontraditional ways and still progressing within the organisation to the highest levels. MPS is ambitious to be the leading School for this in the university, and a leading School nationally.
187 words

## ACTION:

3.6 $\quad$ Ensure that those working part time or flexibly are able to (and seen to) progress as readily as full time colleagues

## (iv) Impact of activities to support staff at key career transition points

 - interventions, programmes and activities that support women at the crucial stages, such as personal development training, opportunities for networking, mentoring programmes and leadership training.
## Promotions workshops

Since 2010 we have instigated School-level promotion workshops and mentoring, targeted at supporting women making the critical transition from fixed term contract researcher to Lecturer. 30 people attended in Autumn 2010, and 39 ( 19 women, 20 men) in Autumn 2012. The data (tables above) indicate real success in numbers and success rates in promotion to Grade 7 in particular.

These workshops became a case study in a GeCo good practice guide (the Improving Gender Equality Competences of Persons Responsible for Personnel Development in Private Enterprises and Higher Education project) in 2012 and Marguerite Gascoine was invited to present on this at a good practice workshop, enabling us to share our good practice nationally.

The LMS study scored MPS Appointment and Promotion Processes as 'Very Good' (16.5 cf 9.1 national average) and Support and Encouragement as 'Very Good' (15.1 cf 10.2 national average).

Staff QCAT responses indicated that women still feel less confident than men that they understand the promotions process or that it is transparent and fair (25\%F:18\%M disagreeing they understand the process). Subsequent Focus Group discussions indicated a perception of lack of transparency and that more specific advice and guidance is required to support women to feel confident in submitting applications. However it is important to note that the

School processes are felt to be substantially more transparent than those of the University.
"I understand the School process, just not sure about the University."
"Any ambiguity is due to the University, not the School"
More significantly there is lack of clarity in how colleagues are selected for administrative jobs that can sometimes help with promotion.
"(l) receive emails with opportunities and encouragement at annual SDR but otherwise no specific encouragement"
"Beyond SDR which is good, little proactive encouragement - it's mostly come from people outside the department"
"Academic staff are lightly managed so it's rare for anyone to suggest, to me at least, such opportunities"
"Difficulty in balancing external opportunities/commitments with internal ones"
This has been noted and Met have just introduced an open (internal) advert policy for every vacant administrative role carried out by academics. The expectation is that roles will be held for a fixed term period, though with the option to renew, allowing individuals to access development opportunities, and Met to build up a larger pool of expertise across all the roles. If this proves effective, good practice will be shared and M\&S will take this approach.

The confidence issue was seen by women to be very relevant and therefore MPS will develop ways of supporting women more actively. Research has indicated that in the sciences, there is often a lack of confidence by female groups, which may be due to the fact that these disciplines have traditionally been seen as male enclaves or else linked to their minority in these groups (Ceci, 2009, Vedantam, 2012). Support groups for women is one way of addressing this and allowing them to share in confidence their experiences and good ideas.

## Mentoring and Coaching

All Schools provide mentors for both Teaching \& Learning and Research. New lecturers undertaking the Post Graduate Certificate in Academic Practice (PGCAP) are allocated a mentor as part of the programme and CSTD (Centre for Staff Training and Development) supports this by training mentors, as required. New staff are invited to join this scheme and line managers are asked to suggest a mentor when they have initial discussions with their staff. This is also discussed during the HR induction session run by the School Manager for all new staff, once a month. Research staff can request that their mentor becomes their PDR (Performance and Development Review = appraisal) reviewer. In the QCAT 59\%F:66\%M agree that MPS provides them with useful mentoring opportunities (17\%F:16\%M disagree). Furthermore all staff can request up to two coaching sessions by Henley Coaching Certificate participants.

## Leadership Training

The university bought the Springboard training course and 28 women from across the university completed the trial Programme - 26 staff and 2 PhD students. Based upon the feedback (see below) three cohorts are planned for 2013/14 and females within MPS will be encouraged to sign up for this.

## FEEDBACK FROM SPRNGBOARD PARTICIPANTS

"This programme had a positive impact from day one. It really helped me to improve my self-confidence and to understand my strengths. I feel more able to cope with challenges and, in fact, look forward to facing them. I would recommend this programme to all women".
"It has transformed my attitude and enabled me to make the most of my strengths and skills".
"I applied to Springboard as I saw an opportunity to assess where I am now and where I want to go. It has far exceeded my expectations - I quickly found myself thinking differently and making positive changes. It's been surprisingly revelatory and I feel the next 12 months will be exciting!"
"Springboard is an excellent programme. I am extremely glad I participated. It will definitely help me define myself and my goals and it will enable me to achieve them. It is a great tool to help me learn about myself, my strengths and weaknesses. Thank you Chris and thank you UoR!"
"Springboard has brought together a group of colleagues who would otherwise have had nothing to do with each other. It is a valuable opportunity for women to share experiences, network and provide informal mentoring".
"I have found the Springboard programme very valuable and very much appreciate the University's support of the programme. I have benefitted greatly from the strategies for self-reflection and goal setting, and plan to keep in touch with the people l've met here".
685 words

## ACTION:

| 4.1 | Further confidence building workshops and promotion support |
| :--- | :--- |
| 4.2 | $20 \%$ of MPS female staff to attend Springboard course |
| 4.3 | Improved mentoring availability and visibility |
| 4.4 | Engage with university to establish transparent process and promotion criteria for <br> Profesional \& Managerial staff (particularly administration and scientific computing) <br> and in professorial pay review |

## 5. Career development

## (i) Impact of activities to support promotion and career development

 - appraisal, career development process, promotion criteria.
## Targeted Career Development Processes

MPS has identified women eligible for promotion to Professor and recommended their attendance at university level 'Promotions workshops' set up under the University's Action Plan. Data (above) show increasing numbers being proposed and promoted. Only 10\%F:11\%M disagree that they were encouraged to take up career development opportunities. MPS has a supportive environment for career development, and feedback suggests that activities are effective, but:
"would like to see more information made available regarding career development for early career researchers"
(Research staff focus group).
The LMS study scored Career Development as 'Good' (13.5 cf national average 9.5) with a recommendation to instigate focus groups to suggest improvements.
105 words

## ACTIONS:

| 4.6 | Increase information for PDRAs on career development opportunities |
| :--- | :--- |
| 4.7 | Focus Groups to suggest improvements to career development |

## Impact of Activities to Support Success in Appraisal Processes

All staff should have annual appraisals (SDRs). Following the 2010 Action Plan great care is now taken to make sure that all staff have an appropriate reviewer to provide impartial and effective career development advice: HoS, HoDs and other line managers meet to allocate reviewers, and identify staff who may be nearing promotion, with such staff being assigned to reviewers with experience of this process. All research staff are given an academic reviewer (not their line manager), and those in research centres allocated reviewers who are part of the academic job family so that they receive broader guidance on career development. Attendance at SDRs is mandatory and is monitored and rates compare well with university and national rates. 118 words

MPS APPRAISAL RATES

| Year | Total school | Total due | Total Exempt | Total Completed | \% <br> Participants |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2009 | 223 | 156 | 67 | 135 | 87\% |
| 2010 | 228 | 183 | 45 | 135 | 74\% |
| 2011 | 250 | 189 | 61 | 161 | 85\% |
| 2012 | 252 | 179 | 73 | 138 | 77\% |
| 2013 | 274 | 221 | 53 | 179 | 81\% |

Fig. 26: SDR uptake: comparing with national data, this paints a positive picture, with 2010 statistics for SDR uptake being: 65\% University of Reading, 55\% for the 1994 group (excluding Reading) and $48 \%$ for the Russell group. From 2013 SDRs will become PDRs (performance and development review) and full training will be set up in advance of roll out.
$79 \% \mathrm{~F}: 75 \% \mathrm{M}$ agreed that the full range of skills and experience are valued at appraisal, however focus group research suggests that there is still a perception that the effectiveness of an SDR "was very dependent on your reviewer" and that "more training should be available for reviewers".

Training for SDR reviewers was introduced as part of our 2010 action plan, and so far 23 people (of whom 10 were female) have received training.

From the 2010 Action Plan we have given substantial thought to ensuring that our procedures address in a systematic way issues of staff and career development, ensuring in particular that all research staff think carefully about their next steps in engaging with the wide range of activities that are valuable for academic success (through a structured 'Research Staff Development Prompter'), and that all academic staff plan their career development carefully in relation to promotion criteria. MPS now collates a training wish-list drawn from the SDR forms so relevant courses can be offered.
164 words

## ACTIONS:

| 4.8 | Ensure all appraisers are fully trained in the new process |
| :--- | :--- |
| 4.9 | Ensure all staff are appraised (PDR) |
| 4.10 | Include a prompt for discussion at the appraisal (PDR) asking staff members to <br> comment on how well they are being mentored |
| 4.11 | Encourage appraisees to give feedback on how helpful they found the process <br> after each staff development review |
| 4.12 | More information on career development to be provided to early career <br> researchers via a dedicated website, |

## Impact of Career Development Processes (inc. Training and Networking opportunities)

The training needs of staff vary considerably according to the individual, and their experience,
"it is remarked that the training and appraisal needs of PDRAs differ from those of more experienced researchers"
(Advancing Women in Mathematics report).
For more senior staff an important aspect is to safeguard research time which can conflict the training needs:
"more time to get on with their jobs"
(Associate professor focus group)

## Networking Opportunities

MPS has introduced internal networking opportunities such as the parents monthly lunch, and the young researcher staff forum. The atmosphere is informal and encouraging and, as emerged in the focus groups, these activities are highly rated by staff at all levels while female participants in the MA study spoke about the different systems available to them, which had been useful to them including:

- informal networks of friends across the university,
- networks across job families, e.g. administrative staff within the same gender group,
- line manager advocacy for promotions and at return from parental leave,
- wider committee membership - useful in setting up networks, externally.

68\%F:71\%M agree that they are given useful networking opportunities (7\%F:11\%M disagree) while 72\%F:68\%M staff now state they feel they have been encouraged and given opportunities to represent their department externally.

The University supports the Women in Academia Network, with monthly meetings scheduled through the Staff Training and Development portal, to enable networking and to offer thought-provoking talks. Over the last 12 months 4 events have taken place - one hosted in MPS - and a total of 81 women attended including colleagues from MPS.
223 words
Career development training uptake:

| Year | Gender | Number of staff | Percentage of gender group in MPS <br> who took at least one course |
| :--- | :--- | :--- | :--- |
| 2011 | Male | 163 | $52 \%$ |
|  | Female | 94 | $68 \%$ |
| 2012 | Male | 158 | $46 \%$ |
|  | Female | 99 | $54 \%$ |

Fig. 27: Percentage of all staff taking at least one training course. There is a higher percentage of female staff taking at least one course compared to male staff. This runs contrary to notions that women are less likely to take advantage of training opportunities. However, one academic spoke of the lack of support at key transition
points, e.g. when people moved to new academic positions, or as Principal investigators, where they are expected to work independently.

Following the 2010 Action Plan we have held MPS specific training sessions, including a workshop for line managers in September 2011 with 36 attendees, covering the REF, managing research staff and the support available from the University. Focus groups highlighted that "line manager support is crucial to their career development" A second workshop for line managers was held in June 2013.
61 words

## ACTIONS:

| 4.12 | Feedback and user provided ratings for training courses to be made available to <br> view to all staff in the school, via a dedicated webpage |
| :--- | :--- |
| 4.13 | Formal monitoring and reviewing of data (e.g. gender) regarding nominations <br> /recommendations made by the School for professional, representative, <br> management roles and for prizes, awards and marks of esteem |
| 4.14 | Networking/mentoring/reviewing activities to be counted towards workload allocation <br> models |
| 4.15 | Greater sharing of administrative roles that enable networking, e.g. Isaac Newton <br> Institute representative |
| 4.16 | Yearly Day for women PhD students with talks on careers and funding etc |

## Impact of Changes to Promotion Criteria and Processes

The university has changed its promotion criteria to reflect broader contributions to the university and to allow more academics to apply for promotion on the basis of wider criteria for the 2013 round of promotions. There are no limits imposed on the numbers that may be put forward for promotion from any School or the number of promotions made in any one year.

In MPS we value all aspects of the service that an individual brings to the School, and have designed a promotion request form that specifically requests information across a wealth of possible activities including research, enterprise, teaching/pastoral, 'shaping the School' (admin) and public engagement, and applicants are invited to indicate if they have taken career breaks so that this can be taken into consideration. The QCAT survey indicated that $80 \% \mathrm{~F}: 92 \% \mathrm{M}$ agreed that staff are treated on their merits ( $7 \% \mathrm{~F}: 6 \% \mathrm{M}$ disagree while the remainder did not know). Individuals are entitled to put themselves forward to the school promotion committee, and their application does not need the endorsement of the HoS.

We are also aware of the need for promotions committees to be gender balanced:
186 words

Gender balance of Promotions Committees:

| School level | Female | Male |
| :--- | :--- | :--- |
| Academic Personal Titles Promotions Committee | 4 | 6 |
| Rewarding Excellence (support staff) | 5 | 6 |
| Faculty Level |  |  |
| Academic Personal Titles Promotion Committee | 2 | 5 |
| Rewarding Excellence (support staff) | 3 | 5 |

Fig. 27: Gender representation on Promotions Committees showing a good balance at faculty level though a need for improvement at university level. The MPS second representative on the Faculty Academic Titles (promotions) committee is female; this was a deliberate appointment recognising the otherwise unbalanced Faculty level committee.

Focus groups identified concern in Met, a large department, that it's possible to become less visible, particularly if part time, so it's important that the SDR is robust to ensure people aren't overlooked. The HoD Research monitors the research staff promotion candidates and encourages those for whom the SDR process suggests it is appropriate. The HoD Academic Staff considers all academic staff at the start of each cycle and encourages applications, offering early discussion of cases. In the last cycle, this led to 2 successful promotions to professor who otherwise wouldn't have put themselves forward at this stage. This is less of an issue in M\&S which is smaller and where the HoD feels confident she knows personally how all her staff are progressing.

The feedback from the School level promotions panel is considered as supportive but there are concerns that the feedback from the university level promotion committees is opaque with only $68 \% \mathrm{~F}: 59 \% \mathrm{M}$ agreeing that the full range of skills and experience are valued in promotion. This will be reported to the University level AS Steering Group.

The QCAT indicated that $82 \% \mathrm{~F}: 88 \% \mathrm{M}$ agreed that work is allocated on a fair basis although focus group feedback indicated some worry that administrative/teaching activities have been falling disproportionately onto women's shoulders and may not carry an adequate weight in the promotions process. As women might disproportionately involve themselves in different activities which may not be valued in promotion processes, this will have an impact on whether they are put forward for promotion. This is evident in the way international recognition is enhanced by periods of travel and work abroad. There are different ways of responding to this criterion, for example, writing book chapters, being on review panels etc., which are much more acceptable to men and women with family responsibilities but take longer to amass evidence of international recognition.

As impact of these initiatives, the first teaching only promotion to Professor (M\&S) was successful this year and we have evidence that part time working does not delay promotion, with 2 female Professors in MPS recently promoted while working part-time or flexibly and cases within the university of women being promoted to Professor while on parental leave. Only 54\%F:51\%M agreed that staff who work part-time or flexibly are offered the same career development opportunities as full-time. Interestingly 43\%F:48\%M don't know
whether working part-time affects career development so more effort has to be put into making this clear.
404 words

## Promotions of part-time staff in MPS

1 promotions granted while the (male) staff member was on extended parental leave
1 part time woman promoted from grade 6 (researcher) to grade 7
5 women promoted while on flexible, part-time working arrangements.
Current female Head of Meteorology Department promoted both to Professor and to this leadership position while working part time
Fig. 28: Impact of improvements to promotion process showing opportunities for people to be rewarded regardless of fraction of time worked.

Furthermore, for research staff, a potential issue was inconsistent advice being given to part-time staff that their publication rate had to be the same as full-time staff. The HoS and HoD (Met), took action to dispel this misconception and the HoD advised on the case which was subsequently successful having failed previously.
52 words

## ACTIONS:

| 4.17 | Further effort to ensure that promotions criteria are clearly explained and understood <br> by all to improve confidence in the process. |
| :--- | :--- |
| 4.18 | Ensure female colleagues are encouraged to apply for promotion in a timely fashion. |
| 4.19 | Raise visibility of those working part time or flexibly who are promoted |

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

## Induction

Following the 2010 action plan a new induction programme has now been implemented across MPS (in addition to the university's induction day). New staff members are given a full induction and a MPS Welcome pack when they start. This programme includes meetings with relevant support staff as well as their line managers to discuss their role. In addition, the School Manager runs a monthly "HR induction session" for all new staff, to inform them about the School's HR processes such as probation, mentoring, staff appraisals, managing absences, and support available to them.

There is a buddy scheme in which a buddy helps the new starter in their first few weeks with advice and support and in M\&S new staff are given a mentor as the department is much smaller, and the post-doc community smaller and tight-knit so that new people will tend to find peers to help them out.

## Gender training

There is no School specific gender training currently, apart from the University's training for Recruitment (which has a section on Equality and Diversity) and the University's Equality and Diversity e-learning tool which staff have been encouraged to take. We are intending to hold the first of several training sessions for staff on Unconscious Bias in Spring 2014. Discussions of Equality and Diversity issues are also raised in weekly department staff meetings.
223 words
ACTION:
3.2 (above) Organise unconscious bias training
(iii) Impact of activities that support female students - support (formal and informal) provided for female students to enable them to make the transition to a sustainable academic career, particularly from postgraduate to researcher, such as mentoring, seminars and pastoral support and the right to request a female personal tutor.

## Tutoring Systems

All students are able to request a change of tutor, which includes requesting a tutor of a particular gender. Since Maths amalgamated with Statistics the number of female staff available to be tutors has increased making this much easier.

## Social Interactions

An issue revealed by the SCAS was the lack of gender neutral and non-drinks based social events organised amongst the cohort by itself. The M\&S finalists focus group suggested that there should be more mathematics focussed activities such as "maths games, fun stuff' and not just "drinking and clubbing" as is the norm for many student societies. To address this M\&S successfully applied for a grant in 2013 from the Annual Fund to set up a Maths Arcade at the University which will be a powerful tool for promoting the inclusive nature of the Department/School. The likely success of this initiative is predicted by the fact that M\&S has an established bond of trust with its students with in excess of $80 \%$ of respondents satisfied that our social events are welcoming to both male and female students.

The MPS postgraduate focus group also recognised that the majority of postgraduate student organised social events were aimed at male participants (such as the staff-student football competition) so it is hoped that the Maths Arcade will also address the needs of the postgraduate community.

## Student Induction

Students are told of MPS commitment to fairness and non-discrimination as part of the induction package in the University's Welcome Week; however, this crucial message is at risk of being lost in the sheer volume of information presented to students in this week. 75\% of respondents agreed that MPS made it clear that unsupportive language and behaviour were unacceptable, but 12\% disagreed that this was the case and $13 \%$ didn't know whether this was the case or not.

A related issue is that of unacceptable behaviour in the University environment. $90 \%$ of respondents felt that both genders are given the opportunity to take the lead in activities equally, $93 \%$ felt lecturers gave equal amounts of help to both male and female students, $93 \%$ felt that academic staff treated both male and female students with equal respect, $85 \%$ of respondents felt that, if a situation arose where one gender were dominating proceedings in group work, then something would be done about it.
385 words

## ACTIONS:

| 5.1 | Clearer information to be included in course handbooks to ensure clarity on <br> expectations on equality and diversity. |
| :--- | :--- |
| 5.2 | Make use of Refreshers Week to reiterate the Department's commitment to equality, <br> explain the various mechanisms and policies for promoting and enforcing equality <br> and to re-advertise the various services around the institution |
| 5.3 | Undertake a review of visual image on web-pages to ensure no gender bias; |

Female students in the focus groups in M\&S did not believe that there was gender bias in STEM, although this is likely to be due to their focus on the undergraduate environment where it is not so prevalent. The disconnect between the perception of equality and the reality in society as a whole suggests that further work needs to be done to address this within the undergraduate curriculum to raise awareness of this issue. While most students believed that career success in STEM was a gender neutral issue, $21 \%$ of respondents believed that males are more likely to have a successful career than females, compared to just $2 \%$ who thought the reverse, while $62 \%$ believed that both genders were equally likely to have successful careers in STEM (14\% didn't know).

There was a feeling that while some female students felt that they "..always wanted to do a PhD" they had found it a "...bit off putting having all male lecturers." However, the reasons why female students are put off pursuing further study is unclear especially as $78 \%$ of respondents agreed that they had access to both male and female role models within their department, with only $10 \%$ feeling that they didn't have access to both male and female role models

Members of M\&S also promote female role models in STEM using social media. For example, on International Women's Day, Dr Smith tweeted a
series of profiles of female mathematicians and scientists (such as Noether, Curie, Lovelace, etc.) which were picked up by some undergraduates and the online mathematics magazine The Aperiodical.
261 words
6. Organisation and culture
(i) Male and female representation on committees - provide a breakdown by committee.

This is dealt with under 'decision making committees' below.
(ii) Female:male ratio of academic and research staff on fixed-term contracts and open-ended (permanent) contracts


Fig 29: Recently the overall number of staff on fixed term contracts has increased, but more significantly on these positions, typically junior research positions (postdoctoral level), we have been increasing significantly the proportion of women (see staff data above). The trend has also been upwards (on average) in the proportion of permanent contracts for females due, at least in part, to the success of workshops to enable females to be promoted to Grade 7 from Grade 6 (PRDA Fixed term) as noted above.

| Year | Contract Type | Ratio F:M | Female | Male | Unspecified | Total | \% Female |
| :---: | :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| 2008 | Fixed Term | 0.45 | 22 | 49 |  | 71 | $30.99 \%$ |
|  | Permanent | 0.21 | 15 | 72 |  | 87 | $17.24 \%$ |
| 2009 | Fixed Term | 0.5 | 27 | 54 |  | 81 | $33.33 \%$ |
|  | Permanent | 0.2 | 15 | 74 |  | 89 | $16.85 \%$ |
| 2010 | Fixed Term | 0.5 | 27 | 54 | 1 | 82 | $32.93 \%$ |
|  | Permanent | 0.3 | 26 | 86 |  | 112 | $23.21 \%$ |
| 2011 | Fixed Term | 0.54 | 32 | 59 | 1 | 92 | $34.78 \%$ |
|  | Permanent | 0.33 | 29 | 89 | 1 | 119 | $24.37 \%$ |
| 2012 | Fixed Term | 0.62 | 40 | 65 | 1 | 106 | $37.74 \%$ |
|  | Permanent | 0.26 | 25 | 96 | 1 | 122 | $20.49 \%$ |

Fig. 30: The number of female PDRAs has increased recently and this has resulted in higher percentage of people on fixed term contracts being female. However cross referencing with the success in promotions to open ended contract reported earlier we are confident that we are increasing the pipeline and supporting advancement. It is notable that, in part in response to pressure from MPS, the university's HR department is working on guidance as to the conversion of fixed term research staff to permanent status.

## Impact of Fixed Term Contracts

In the MA study women report following their partners more than men and so finding the next opportunity is much more challenging for them than their male counterparts. Some women (typically at post-doc level) spoke about prioritizing their partners' careers, as men are not as impacted by career breaks. This may make women more likely to accept a fixed term contract particularly when geographic mobility is an issue. As a number of women have been successful in applying for and obtaining fellowships this might indicate that women prefer to apply for independent (mobile) funding rather than opting for positions which might entail a geographic move as corroborated by the Leaver's statistics. The system noted above to underwrite and retain staff is helping to halt this attrition of both men and women.

Opportunities for recruitment into Professorial and other senior positions are infrequent and the MA study noted that factors such as geographic mobility as well as the effects of career breaks come into play here. So it is more likely that women progress internally rather than be recruited externally to these academic positions. The fact that very few women are being recruited to higher level open-ended academic positions makes this a key issue.

The MA study noted that working conditions are important to retention of women and our retention rates indicate that women are very loyal to their employers if they have good working conditions and the possibility of working flexibly. $20 \%$ of women leaving the university overall have taken complete career breaks for family reasons

The female PDRAs who participated in the MA study related that they felt valued and supported by MPS and that the main issues for them related to job security and how to manage career breaks to have families. Many of the
problems they recounted were related to the structural implications of working on fixed term contracts where the project management issues of delivering certain research tasks to deadline did not fit comfortably with planning for parental breaks, and they felt that they did not fully understand how this could be organised.
347 words

## ACTION:

4.6 Improved career planning advice for PDRAs (from above)
(iii) Representation on decision-making committees -evidence of gender equality in the mechanism for selecting representatives.

As in 2010, female participation is representative of MPS as a whole in all committees except the MPS Steering Committee. Female participation has fallen in both the finance and PhD Board of studies, but these committees have only 3 or 4 members and are thus very vulnerable to staff role changes. Concerns regarding overburdening female staff, particularly in M\&S, led to focus on large female representation in the strategy-decision-making committees and promotions committees.


Fig. 30: Participation in School level committees. The number of School committees has been rationalised since 2010.The top level strategic committee is the School Steering Committee. The School Promotion Committee is responsible for considering applications for promotion for all staff, and mentoring applicants through the process. Female representation on the top level School Steering Committee has risen from 17 to 25\%, since Silver and the new School Promotions committee, which is highly visible, has 40\% female members.

The MA study noted that Frase-Blunt has identified formal succession planning as key to getting women to the top jobs and refers to this as "bench warming", where people are groomed to take on responsibilities so that they are ready to do this when needed (she terms these people as on the "ready now bench"). We undertake to identify and support all staff in this and partnering system of mentoring between senior men and women and more junior staff would provide the opportunity to discuss these issues.

In the cultural survey, a slightly greater proportion of women (73\%) than men (69\%) considered that they were "encouraged and given opportunities to represent my Department externally and/or internally", and a substantially smaller fraction of women (4\%) than men (16\%) actively disagreed that they received such encouragement. Thus in MPS, women are likely to be encouraged to participate in committees and female representation is increasing. We anticipate that as more women reach the senior level, the representation on these strategic committees will continue to increase. 245 words

## ACTIONS:

| 6.1 | Remind all PIs to discuss the role of staff on committees etc in the SDR process <br> (already on the form) |
| :--- | :--- |
| 6.2 | Make public the Terms of Reference and membership of each committee on <br> school website |
| 6.3 | Advertise committee membership opportunities for applications from staff |
| 6.4 | Target to have 30\% female minimum on all committees |
| 6.5 | Identify ways of formal succession planning - bench warming - including through <br> mentoring |

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

The role of an academic has become increasingly diverse since 2010. MPS compiles information on teaching activities and administrative duties and, in the past, these have been considered informally alongside research and other activities when planning for the forthcoming year. However, the details differ somewhat between the two Departments, reflecting the focus on postgraduate students and research in Met, and a larger contribution from undergraduate teaching in M\&S. Indeed, in M\&S the involvement with undergraduates carries a somewhat higher weight, and activities such as Admission Tutor or Open Day Organiser are very demanding - and factored as such in allocating teaching duties. In M\&S the workload model is under scrutiny and discussion, as part of our periodic review of how it is constructed. In Met, a new more open system accounting for a wider variety of tasks has been developed in the past year, and is being trialled in the 2013-2014 session which will:

- Compile information on, and account for a wider range of activities, in response to
"I think staff could be rewarded more strongly and visibly for outreach work",
"I do not think outreach and pastoral work are given any consideration"
- Define job descriptions, fixed term appointments and hours for administration tasks:
"people seem to get pigeon-holed into certain tasks"
- Provide each member of staff with a personalised statement of where they rank within each category of activity (recognising that positions will vary from year to year and it is acceptable to focus on a reduced number of areas in many cases).
- Share rankings with names redacted (staff colour coded) in staff meeting and on the web.
- Allocate tasks previously done on an adhoc basis (e.g. open days, project supervision) at the start of the year.

The new workload model will give specific attention to staff on part-time contracts, who are overwhelmingly staff with caring responsibilities in their personal life. It emerged from all focus groups however that the flexible working scheme the school operates is extremely well received and thought to have improved attitudes and practices towards a much better work-life balance, helping female staff at all stages to feel empowered and less concerned with fulfilling a given model of a successful researcher or academic.
"I reserve my judgement on this - I have recently become part time and don't have enough experience of it yet to know for sure. However my gut feeling is that yes I will be offered the same career development opportunities but it will be harder to take full advantage of them within the working hours available."

In the staff survey, $85 \%$ of all staff agreed to some extent that "work is allocated on a clear and fair basis irrespective of gender" however, men were more than twice as likely to agree strongly with this statement than women. Comments made suggest that although allocation of the main tasks is viewed as fair "this is certainly true of the formal work allocation" (open comment) females may be unfairly overloaded with many incidental tasks:
"it's the adhoc requests that seem to fall disproportionately on females", "the willing get more work than the unwilling, and in my experience, women are generally more likely to say "yes" when asked to do jobs"
One participant queried whether there was a compensating reduction in other administrative tasks when women were "required" for equality purposes (e.g. panel interviews).

The LMS study scored Effective Management, including resource allocation and workload allocation as Good (13 cf 9.8 nationally).
580 words

## ACTIONS:

| 6.6 | Monitor roll out of workload model recognising teaching, research, administration <br> and outreach/other external activities. |
| :--- | :--- |
| 6.7 | Make all admin roles fixed term posts, though with the possibility of renewal, and |


|  | advertise their availability. |
| :--- | :--- |
| 6.8 | Use data from PDRs (appraisals) and staff activities from past and current years, to <br> plan workload allocation and career developing activities |
| 6.9 | Ensure that training opportunities are accessible to those on part time contracts. |

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

Since 2010 all meetings are now held during the hours of 10-3 to accommodate, in particular, those with school-age children. This policy is emphasised by the HoS every year. The timings of the Termly Staff Meetings and School Steering Committee meetings have for example been moved to the 1-3pm slot. This is well known within the School with $88 \% \mathrm{~F}: 82 \% \mathrm{M}$ agreeing that "meetings in my Department are completed in core hours to enable those with caring responsibilities to attend".
Comments suggest that:
"the moves in this direction have been very positive",
although there were 2 comments (both from men) that disagreed with having meetings over lunchtime:
"staff should be allowed to have a proper lunch break every day". Social gatherings are viewed as accessible and welcoming to all by $83 \%$ of staff. In M\&S the main social event is tea and cake at 11am - a shift from the pub at 5 after the seminar. 154 words
(vi) Culture-demonstrate how the department is female-friendly and inclusive and ensures visibility of women, for example external speakers. 'Culture' refers to the language, behaviours and other informal interactions that characterise the atmosphere of the department, and includes all staff (academic, technical and support) and students.

## Culture

The MA study found that culture is very much affected by the leadership of the organisation and the choices these leaders make. Their visible support of a change action is absolutely crucial to its success. MPS leadership is very supportive of women and the Athena SWAN charter (the HoS sponsored the MA report). Having more women at the top will also improve the status of any initiatives to further promote this.

The LMS study scored Culture and Ethos, including collegiality and valuing individuals, as Good (11.5 cf 11,2 national average).

MPS is felt to be female-friendly and inclusive. $80 \% \mathrm{~F}: 55 \% \mathrm{M}$ agree or strongly agree that "unsupportive language and behaviour are not acceptable", with <

10\% disagreeing with this statement. 90\%F:74\%M agree that "inappropriate images that stereotype women or men are not acceptable", $93 \% \mathrm{~F}: 80 \% \mathrm{M}$ have confidence in line managers/HoDs to deal with any incidents of harassment, bullying or offensive behaviour and $77 \% \mathrm{~F}: 84 \% \mathrm{M}$ say that they have not experienced a situation when they have felt uncomfortable because of their gender, though, notably, 8 F and 5 M (numbers) disagreed.

However focus groups found that some confusion remained about MPS's policies on gender discrimination, and that the attitude towards the Athena SWAN award was not as positive as we would have liked across the School. We therefore emphasise that many of the things introduced through the Athena process benefit both genders (e.g. promotion workshops, parents group).
"I am not sure I have received information from the department about discrimination",
I have found the University more useful than the department in this regard" "In a generic sense we are a made aware of such policies"
"Gender is not the only diversity area in which we need to take action" Further investigation will be undertaken to identify the differences in male and female responses in this area and steps taken to increase awareness of MPS's stance,

A step change in attitude was felt following the seminar and visit by Prof. Paul Walton from the University of York, with focus groups reporting much more support for the fairness agenda and understanding of issues surrounding unconscious bias. The "fairness agenda" is now a standing item on the Met Termly Staff Meeting agenda and is introduced by either the HoS or a HoD to indicate its importance.

## 378 words

## Visibility of women as role models

Virtually all the staff in the School perceive that "the Department uses women as well as men as visible role models". The ECR focus group commented:
"It was encouraging to see women at the top, especially HoDs, who have been on parental leave and are now working part-time. This sets a great example."
"As a woman I do not have to see other women achieving to feel that I can also achieve.... however, I do think it is helpful to see both men and women balancing their career with child-rearing."

MPS is keen to raise the profile of successful women and regularly nominates then for recognition. Chimene Daleu of Met was selected by the Faculty of Science as their nomination for the new "PhD Researcher of the Year" competition run by the University Graduate School - an excellent role model as she had had a child during her PhD. Professor Nancy Nichols was nominated for Woman of Outstanding Achievement and Ellie Highwood has been nominated for the Rosalind Franklin award and Beatrice Pelloni won the Olga Tausski-Todd prize lecture of ICIAM (see also case study).
120 words

Seminar speakers

| Calendar Year | Spring |  |  | Summer |  |  | Autumn |  |  | Yearly |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% W | \# W | \# M | \% W | \# W | \# M | \% W | \# W | \# M | \% W | \# W | \# M |
| 2003 | 0 | 0 | 9 | 17 | 2 | 10 | 15 | 2 | 11 | 17 | 4 | 20 |
| 2004 | 0 | 0 | 10 | 10 | 1 | 9 | 23 | 3 | 10 | 12 | 4 | 29 |
| 2005 | 0 | 0 | 10 | 10 | 1 | 9 | 0 | 0 | 13 | 3 | 1 | 32 |
| 2006 | 0 | 0 | 9 | 10 | 1 | 9 | 17 | 2 | 10 | 10 | 3 | 28 |
| 2007 | 9 | 1 | 10 | 0 | 0 | 10 | 18 | 2 | 9 | 9 | 3 | 29 |
| 2008 | 9 | 1 | 10 | 9 | 1 | 10 | 18 | 2 | 9 | 12 | 4 | 29 |
| 2009 | 0 | 0 | 10 | 10 | 1 | 9 | 15 | 2 | 11 | 9 | 3 | 30 |
| 2010 | 17 | 2 | 10 | 20 | 2 | 8 | 23 | 3 | 10 | 20 | 7 | 28 |
| 2011 | 17 | 2 | 10 | 25 | 2 | 6 | 17 | 2 | 10 | 19 | 6 | 26 |
| 2012 | 17 | 2 | 10 | 22 | 2 | 7 | 22 | 2 | 7 | 20 | 6 | 24 |

Fig. 31a \% women speakers in Meteorology Departmental Seminar Series. The representation of women has been consistently elevated since 2010, but is still below the 30\% female representation target. Summary yearly statistics (period 2003-2011) give a mean of 12\% with a mean of 20\% since Silver. Sample size 286.

| Calendar Year | Spring |  |  | Summer |  |  | Autumn |  |  | Yearly |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% W | \# W | \#M | \% W | \# W | \#M | \% W | \# W | \#M | \% W | \# W | \#M |
| 2003 | - | - | - | 0 | 0 | 7 | - | - | - | 0 | 0 | 7 |
| 2004 | 12.5 | 1 | 7 | 0 | 0 | 4 | - | - | - | 8 | 1 | 11 |
| 2005 | - | - | - | - | - | - | - | - | - | - | - | - |
| 2006 | 11 | 1 | 8 | - | - | - | 37.5 | 3 | 5 | 23.5 | 4 | 13 |
| 2007 | 14 | 1 | 6 | 14 | 1 | 6 | 22 | 2 | 7 | 17 | 4 | 19 |
| 2008 | 0 | 0 | 9 | 11 | 1 | 8 | 10 | 1 | 9 | 7 | 2 | 26 |
| 2009 | 14 | 1 | 6 | 33 | 2 | 4 | 22 | 2 | 7 | 23 | 5 | 17 |
| 2010 | 30 | 3 | 7 | 0 | 0 | 5 | 22 | 2 | 7 | 21 | 5 | 19 |
| 2011 | 0 | 0 | 8 | 0 | 0 | 4 | 22 | 2 | 7 | 9.5 | 2 | 19 |
| 2012 | 11 | 1 | 8 |  |  |  |  |  |  |  |  |  |

Fig. 31b \% women speakers in M\&S Departmental seminar series. Summary yearly statistics (period 2003-2011) give a mean of 14\%, Sample size 144

Since 2010 MPS has introduced quotas for seminar series of a minimum 30\% of each gender, although we have not yet achieved this, levels exceed the $18 \%$ female representation at Reader and Professorial level in the school, and since the speakers invited are more likely to be senior, this perhaps reflects that we are inviting a proportional number of senior women to speak. This issue resulted in discussion on quotas which reflected the wider societal debate and is a healthy sign that equality and diversity is being considered at all levels in MPS.

We also introduced the "Edith Morley Lecture" which not only provides an opportunity for staff and students to hear a senior female scientist or mathematician speak, but also celebrates the success of the first female Professor in a UK University (Reading). Successes of existing female staff are more widely publicised via email, and the website (e.g. prize winners).
153 words

## ACTIONS:

| 6.10 | Ensure that improvements due to AS are recognised as due to AS scheme. |
| :--- | :--- |
| 6.11 | Encourage change in language in all meeting documents and train all meeting <br> chairs etc to refer to "parental leave" and "caring responsibilities", "colleagues", <br> "chair", rather than more gender specific terms. |
| 6.12 | Investigate differences in male and female perception of acceptable behaviour and <br> increase awareness of MPS's stance on this. |
| 6.13 | Celebrate female success alongside other success |
| 6.14 | Provide profiles of diverse range of academics and other staff on website |
| 6.15 | Review and monitor seminar speakers and make further efforts to hit the 30\% <br> target. |

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

Outreach activities are provided on a regular basis to local schools and colleges by staff within MPS. Several members of staff are STEM ambassadors and increased involvement with this scheme is regularly promoted by senior staff (inc. HoD in M\&S). The Director of Outreach in M\&S has also set up a STEMath ambassadors scheme which trains undergraduate students to delivery appropriate outreach activities, in the year 2012-13 there have been three student ambassadors delivering sessions for this scheme, two of whom are women. For the year 2013-14, a total of nine students have signed up of whom four are female.

The interactive workshop event "Magnificent Maths" has been run each December since 2010 and showcases work from across MPS. In 2012 this event was attended by over 70 participants from local Schools. Feedback from this event was positive with all sessions "rated highly in terms of being enjoyable and interesting" and approximately a third of the participants declaring that as a direct result of the event that they were more likely to go to university to study maths. Met runs a MetDay for Year 10 students and another for Year 12 students annually, as well as having a work experience programme with excellent feedback from participants.

Both male and female staff have been involved in delivering these sessions and are expected to continue to do so. In Met female participation in events is $43 \%$ while in M\&S it is $50 \%$.
240 words

## ACTION:

| 6.16 | Collect outreach participants gender on feedback forms to discern which <br> sessions are more effective at inspiring women into STEM |
| :--- | :--- |

## 7. Flexibility and managing career breaks

## i. Maternity Return Rate

## Parental Leave Preparation

Staff meet with the School Manager before going on leave and the various elements of support and options available to them on their return are discussed, such as formal requests for flexible working, using sabbaticals or accrued leave, so that they fully understand how they can return to work flexibly. A risk assessment and staff development review is held before the parental leave is taken. The School Manager has a check list of actions that should take place, and this is kept to. The person about to go on leave is made aware of support arrangements (for example, the monthly parents club) and it was reported in focus groups that this alleviates some of the worry connected with returning to work. The person going on leave is also offered a buddy to support them during their leave.
137 words
MPS Parental Leave return rate

| Year | Staff on parental <br> leave | Staff returning after <br> parental leave | Parental return <br> rate |
| :--- | :--- | :---: | :--- |
| $2007-8$ | 0 | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ |
| $2008-9$ | 1 | 1 | $100 \%$ |
| $2009-10$ | 6 | 6 | $100 \%$ |
| $2010-11$ | 2 | 2 | $100 \%$ |
| $2011-12$ | 3 | 3 | $100 \%$ |

Fig. 32:The return rate has been 100\% consistently. The average length of parental leave for the academic years 2009/10-2011/12 inclusive was 245 days (or 35 weeks).

Evidence from the focus group was that most staff who took parental leave were aware of Keeping in Touch Days (KITD) and made use of these. All staff who have taken Parental or Additional Childbirth Support Leave have been paid for KIT days worked during the period where they only receive Statutory Parental Pay. One impact of MPS promoting a family friendly culture is that a lecturer in MPS was the first in the University to take additional paternity leave (14 weeks) October 2012 to January 2013 and that that MPS Parental Leave practice has been adopted by the university as good practice. See Case study for more details.
100 words

## ACTION:

| 7.1 | Promote KITD further by adding examples to the parental leave document on <br> what KITD can be used for and how these have helped staff on parental leave <br> in the past, including Case Studies on the website |
| :--- | :--- |

## ii. Paternity, adoption and parental leave uptake

MPS uptake of Paternity leave

| Year | Grade 5 <br> staff on <br> paternity <br> leave | Grade 6 <br> staff on <br> paternity <br> leave | Grade 7 <br> staff on <br> paternity <br> leave | Grade 8 <br> staff on <br> paternity <br> leave | Professorial <br> staff on <br> paternity <br> leave | Total |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $2007-8$ |  | 1 |  |  |  | 1 |
| $2008-9$ |  | 2 |  |  | 1 | 3 |
| $2009-10$ |  | 3 |  | 1 |  | 4 |
| $2010-11$ |  | 5 | 2 | 1 |  | 8 |
| $2011-12$ | 1 | 2 |  |  |  | 3 |

Fig. 32: MPS uptake of paternity leave. There have been no requests for adoption leave in the period.

Focus groups revealed that most paternity leave was for two weeks and that the school was happy to allow additional annual leave to be taken directly after paternity leave.
29 words
iii. Flexible working -numbers of staff working flexibly and their grades and gender, whether there is a formal or informal system, the support and training provided for managers in promoting and managing flexible working arrangements, and how the department raises awareness of the options available.

## Uptake and promotion of flexible working

There has been a real push to promote flexible working since the Silver and MPS has developed a website which gives examples of various people across the hierarchy who work flexibly, and how this is achieved. There are also guidelines to help them make this choice. Evidence from focus groups suggests a good awareness of flexible working options and there was repeated agreement that more detail is readily available from the School Administrator. Most staff who work flexibly do so based on an informal arrangement with their line manager and therefore there are no data available. An e-mail survey of staff showed that many staff had informal agreements in place with their line managers and that this was well supported by line managers and valued by staff. The HoS and HoD in Met have promoted flexible working arrangements and the availability of flexible working guidance at the formal staff meeting in Met, a meeting of all contract researchers and at the University wide Women in Academia network. The HoD Met has also contributed an invited Guest blog in The Guardian Higher Education section on flexible working in academia.

In the MA study most participants felt that they were being judged on output rather than presence and many recounted that initial concerns about colleagues' perceptions of their flexible working were unfounded. So the culture is very supportive of these working patterns. However, heads of units voiced the shortcomings of flexible work, in terms of the organisation of
meetings, arranging cover, and the impact of flexible work on the culture of an environment.

The LMS study scored Flexibility (approaches to flexible working and flexibility built in) as Good. (12.5 cf 10.2 national average).
281 words

## ACTIONS:

| 7.2 | Develop parental leave form to support staff and line managers to carry out <br> required actions to manage the break |
| :--- | :--- |
| 7.3 | The guarantee of a return to full-time working after a period working part-time - if <br> people want to! |
| 7.4 | Mentoring for those returning from parental leave |
| 7.5 | Put 'flexible working' document onto web as profiles to make flexible working more <br> visible. |
| 7.6 | Encourage people to add "availability statements" to emails to show part time <br> working as supported. |
| 7.7 | Make public an expectation that it is ok not to read emails in evenings and <br> weekends. |
| 7.8 | Advertise when academics are on leave to make this more acceptable. Lots of <br> people don't take their holiday entitlement increasing the tendency to the 'long <br> hours culture', |
| 7.9 | Establish a survey on perception of working hours/long hours culture followed by <br> discussion at Women in Academia network, and a report for School and university. |

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

## Cover for Parental and Adoption Leave

Whilst staff are away on Parental or Additional Childbirth Support Leave their teaching commitments are covered by sessional staff/teaching fellows who are brought in and paid for by the university to cover for these absences. Currently the university offers $50 \%$ of the academic's salary as a fund to hire additional staff to cover during the period of absence. However, the way cover is organised is very much dependent on the period when the staff member is away, as well as informal offers of help from colleagues, and this is an area that the school should do more to clarify best practice.

## Support on Return from Parental and Adoption Leave

Focus group discussions for research staff showed that staff who had been on parental leave commented that MPS had been incredibly supportive compared with other external organisations. Returning staff meet with their line manager to discuss how the return to work will be managed. Discussion at this time of flexible working options is encouraged. Most staff returners have used this to return gradually and increase their hours on full salaries.

Staff returning from parental leave are also offered the facility of using a Lactation Room to enable them to continue breast feeding their babies. Currently MPS offers academic staff returning from leave one term with no teaching or two terms with a reduced teaching load. They have their normal pay and teaching allocations are juggled across other academics but we recognise the needs to find a better way to support this and are lobbying the university to allow funding to buy in teaching cover.

Evidence from the focus groups is that the career slow-down of being a parent affects men and women more equally than used to be the case. Part-time researchers appear to think they should match reduced pro-rata output when compared with full-time colleagues, however some have noted that administration and supervision cannot always be reduced to $60 \%$ and therefore there can be a tendency for the research time to be squeezed. This will be addressed in the new work load models.

The LMS study scored support for Career Breaks (before, during and after) as Very Good ( 15.5 cf .8 .5 national average).

University staff benefit from the "Little Learners Nursery" with full day care available and a 'salary sacrifice' child care voucher scheme is available with an increasing number of individuals taking advantage of this in the School. 398 words

## MPS uptake of child care voucher scheme

| YEAR | Number of <br> child care <br> vouchers | Staff <br> headcount | Percentage <br> takeup |
| ---: | ---: | ---: | ---: |
| 2007 | 21 | 213 | 9.86 |
| 2008 | 25 | 208 | 10.10 |
| 2009 | 23 | 219 | 9.59 |
| 2010 | 24 | 221 | 9.50 |
| 2011 | 29 | 248 | 8.47 |
| 2012 | 32 | 251 | 8.37 |

Fig. 34: Uptake of childcare vouchers by staff in MPS

## ACTIONS:

| 7.10 | Establish means of funding to cover teaching for 2 terms after parental <br> leave. |
| :--- | :--- |
| 7.11 | Following on from Prof Walton's advice we will explore funding options to <br> provide PDRA cover during and for year after return from leave. |
| 7.12 | Ensure members of the Institute of Physics are aware of the 'Carers' Fund' <br> which offers grants to cover additional child care for those attending <br> conferences (male and female) and investigate options for providing <br> similar support for others. |

## 8. Any other comments - maximum 500 words

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

## Bibliography

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## 9. Action plan

School of Mathematical and Physical Sciences, University of Reading, Silver Award renewal submission, November 2013

## Key to Action Plan:

HoS = Head of Schoo
HoDs = Head of Departments of Maths and Stats and of Meteorology
DT\&L = Director of Teaching and Learning
SDPGRS = School Director of Postgraduate Research Studies

|  | Description of action | Responsibility | Start date | $\begin{array}{\|l\|} \hline \text { Time } \\ \text { Scales } \end{array}$ | Progress Log | Success Measure |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Increasing numbers of female applicants accepting offers - building the pipeline |  |  |  |  |  |
| 1.1 | Maintain the representation of female staff and students that the applicants are exposed to at a) open days and b) UCAS visit days (once they have received an offer). In particular, applicants for our 4 year MMet degree are now required to attend the department for an interview and we will ensure that the interview panel for all female applicants (2 staff) includes at least one female member of staff. | Admission Tutor | $\begin{aligned} & \text { Nov } \\ & 2013 \end{aligned}$ | 3 years | Numbers of female participants monitored: |  |
| 1.2 | Investigate increase in male applicants to Maths \& Stats (M\&S) and drop in female applicants to Meteorology and identify any required changes to the recruitment processes. | Admission Tutor | $\begin{array}{\|l\|l\|} \text { March } \\ 2014 \end{array}$ | $\begin{aligned} & \text { June } \\ & 2014 \end{aligned}$ | Significant changes to applicant numbers investigated compared with this year- may be a 'blip' | Identify whether there is a trend and identify and put in place actions to mitigate unwanted effects. |
| 1.3 | Ensure female applicants are in 'critical mass' numbers on UCAS visit days to reduce possibility of perception of isolation to increase 'conversion' levels. | Admission Tutor | $\begin{aligned} & \text { Nov } \\ & 2013 \end{aligned}$ | 2 years | Numbers of females on any visit days above 30\% (or zero) | Improved experience by female visitors on UCAS visit days resulting in greater proportions accepting offers. |


|  | Description of action | Responsibility | Start date | $\begin{array}{\|l\|} \hline \text { Time } \\ \text { Scales } \end{array}$ | Progress Log | Success Measure |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1.4 | Focus groups to identify and embed ways to make the opportunity to study in MPS more attractive to female students to encourage greater conversion from offers to enrolments. | Admission Tutor | $\begin{array}{\|l\|l\|l} \text { March } \\ 2014 \end{array}$ | 18 months | Dates and feedback from focus groups of students | Changes to open days based upon feedback |
| 1.5 | Ensure students to talk about the departmental leadership and culture surrounding gender at UCAS visit days | Admission Tutor | Oct 2014 | Ongoing | Dates of visits | Better awareness of department's focus on equality |
| 1.6 | Utilise the new interactive whiteboard in Meteorology Departmental library on Open and Visit days to include videos and snapshots of women from the Department and the wider subject area. | Admission Tutor | Oct 2014 | 1 year | Monitor number of females on videos and snapshots | Female representation on whiteboard to be above 40\% |
| 1.7 | Ensure female representation on the "news" board in the Meteorology foyer around Open days | Admission Tutor | $\begin{aligned} & \text { June } \\ & 2014 \end{aligned}$ | Ongoing | Monitor numbers of females noted on newsboard | Female representation on newsboard to be 40\% |
| 1.8 | Recognise Open Day and Visit Day activity as part of Workload Model | HoD | Oct 2014 | 2 years | Evidence of workload model incorporating Open Day work | Staff perception of workload model incorporating Open Day work |


|  | Description of action | Responsibility | Start date | Time Scales | Progress Log | Success Measure |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Enabling female students' progression and success |  |  |  |  |  |
| 2.1 | Table a discussion of support for all students, specifically to address issues raised by PG students about gender differences in study/research styles, at the School PG Board of Studies. | DT\&L | $\begin{aligned} & \text { April } \\ & 2014 \end{aligned}$ | 6 months | Dates of discussions | Staff awareness of gender specific differences in learning and problem solving raised |
| 2.2 | Add standing agenda item on Equality and Diversity to Board of Studies meetings | DT\&L | $\begin{aligned} & \text { Jan } \\ & 2014 \end{aligned}$ | Ongoing | Dates and minutes of meetings where discussions take place | Staff awareness of gender specific differences in learning and problem solving raised |
| 2.3 | Teaching and Learning seminar to ensure all supervisors are aware of different study styles for female and male students | DT\&L | Summer term 2014 |  | Date of Teaching and Learning seminar on gender specific differences in learning and problem solving raised | Staff awareness of gender specific differences in learning and problem solving raised |
| 2.4 | Identify ways to make the opportunity to study in MPS more attractive to female students to encourage greater applications and conversion from offers to enrolments. | Admission Tutor | Spring term 2014 |  | Date of focus groups of female PhDs offering ideas | Establish improved processes for encouraging female applicant and conversion - increased numbers of female students. |
| 2.5 | Ensure that the departments have visible female presence on visit days and for PhDs get students to talk about the departmental leadership and culture surrounding gender | Admission Tutor | Spring term, 2014 |  | Monitor numbers of females involved in open days | Increased numbers of female students. |

\(\left.$$
\begin{array}{|l|l|l|l|l|l|}\hline & \text { Description of action } & \begin{array}{l}\text { Respon- } \\
\text { sibility }\end{array} & \begin{array}{l}\text { Start } \\
\text { date }\end{array} & \begin{array}{l}\text { Time } \\
\text { Scales }\end{array} & \text { Progress Log } \\
\hline 2.6 & \begin{array}{l}\text { Teaching and Learning seminar to raise awareness amongst } \\
\text { colleagues of potential for female student confidence drop off } \\
\text { and seek ways to retain female student confidence levels, using } \\
\text { the data to show that females outperform males in M\&S }\end{array} & \text { DT\&L } & & & \\
\hline 2.7 & \begin{array}{l}\text { Specific training for personal tutors and module convenors in } \\
\text { unconscious bias, basic coaching skills, and communication } \\
\text { skills as they relate to all students, but to include awareness of } \\
\text { research on importance of study styles to female scientists }\end{array} & \text { DT\&L } & \begin{array}{l}\text { Staff awareness of } \\
\text { gender specific } \\
\text { differences in confidence } \\
\text { and performance }\end{array} \\
\hline 2 . .8 & \begin{array}{l}\text { "Inspiring women" section on Equality and Diversity part of } \\
\text { website with quotes from graduates and staff rather than } \\
\text { celebrities. Also to include quotes from males to show some } \\
\text { issues do not just affect females, but females are more affected } \\
\text { by them. }\end{array} & \begin{array}{l}\text { Web } \\
\text { Content } \\
\text { Developer }\end{array} & \begin{array}{l}\text { Jan } \\
2014\end{array}
$$ \& 2 year \& Dates of training <br>
Staff awareness of <br>
gender specific <br>

differences\end{array}\right]\)| Monitoring numbers of |
| :--- |
| 'inspiring women'and |
| quotes on the website |
| over time |


|  | Description of action | Responsibility | Start date | Time Scales | Progress Log | Success Measure |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Support at key career transition points |  |  |  |  |  |
| 3.1 | Introduce mandatory Gender Awareness Training for all interview panel members | School <br> Manager | $\begin{aligned} & \text { Jan } \\ & 2014 \end{aligned}$ | 10 months | Dates of Gender Awareness training and numbers attending | All interview panel members to be trained |
| 3.2 | Organise unconscious bias training for all staff involved in recruitment | School Manager | $\begin{aligned} & \text { Jan } \\ & 2014 \\ & \hline \end{aligned}$ | 1 year | Dates of unconscious bias training | Staff undertaking unconscious bias training |
| 3.3 | Trial of blind long-listing process to see if it changes the composition of long lists | HoDs | $\begin{aligned} & \text { March } \\ & 2014 \end{aligned}$ | 2 years | Dates and outcomes of blind long-listing events | Conclusion on whether blind long-listing makes a difference |
| 3.4 | Routinely approach potential female candidates for posts | HoDs | $\begin{aligned} & \text { Jan } \\ & 2014 \end{aligned}$ | 1 year | Dates and numbers of women approached | Increased numbers of female applicants for all posts. |
| 3.5 | Continue our lobbying for family-friendly university policies | HoS | $\begin{aligned} & \text { Jan } \\ & 2014 \end{aligned}$ | 3 years | Monitoring of changes to university policy | Changes to university policies |
| 3.6 | Ensure that those working part time or flexibly are able to (and seen to) progress as readily as full time colleagues | $\begin{aligned} & \mathrm{HoS} / \\ & \mathrm{HoDs} \end{aligned}$ | $\begin{aligned} & \text { Nov } \\ & 2014 \end{aligned}$ | 2 years | Monitor and advertise successes and monitor awareness through QCAT | Greater awareness of potential for promotion while working flexibly |


|  | Description of action | Responsibility | Start date | Time Scales | Progress Log | Success Measure |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Supporting career progression |  |  |  |  |  |
| 4.1 | Further confidence building workshops and promotion support | School <br> Manager | Jan 2014 | Ongoing | Number of attendees and feedback | Continued uptake of training and positive feedback from attendees |
| 4.3 | 20\% of MPS female staff to attend Springboard course | School <br> Manager | Jan 2014 | 1 year | Monitor numbers attending | 20\% to have attended |
| 4.4 | Improved mentoring availability and visibility | School <br> Manager | Jan 2014 | Ongoing | Monitor mentoring uptake | $20 \%$ increase in mentoring uptake |
| 4.5 | Engage with university to establish transparent process and promotion criteria for Professional \& Managerial staff (particularly administration and scientific computing) and in professorial pay review | HoS | Ongoing | Ongoing | Monitor changes to promotions processes and levels of understanding | Changes to perceptions of transparency of promotions process for P\&M staff measured by QCAT |
| 4.6 | Increase information for PDRAs on career development opportunities | School <br> Manager | $\begin{aligned} & \text { March } \\ & 2014 \end{aligned}$ | 2 years | Monitoring information available e.g. on website and elsewhere | Improved feedback from PDRAs on information on careers. |
| 4.7 | Focus Groups to suggest improvements to career development | School <br> Manager | Jan 2014 | 2 months | Dates and feedback from focus groups | Improvement to PDRAs feedback on quality of careers development |
| 4.8 | Ensure all appraisers are fully trained in the new appraisal process | School Manager | Jan 2014 | 1 year | Monitoring numbers of appraisers trained | All appraisers fully trained |


|  | Description of action | Responsibility | Start date | Time Scales | Progress Log | Success Measure |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4.9 | Ensure all staff are appraised (PDR) | School <br> Manager | June $2014$ | 6 months | Monitoring appraisal numbers | 100\% appraisal |
| 4.10 | Include a prompt for discussion at the appraisal (PDR) asking staff members to comment on how well they are being mentored | HoDs | May 2014 | 1 month | Date when prompt included in appraisal documents | Prompt included in documentation |
| 4.11 | Encourage appraisees to give feedback on how helpful they found the process after each staff development review | HoDs | Sept 2014 | Ongoing | Appraisees providing feedback | Appraisees feedback included in documentation |
| 4.12 | Feedback and user provided ratings for training courses to be made available to view to all staff in the school, via a dedicated webpage | Web Content Developer | Sept 2014 | Ongoing | Monitoring feedback and ratings on training courses | Staff using feedback to inform training choices |
| 4.13 | Formal monitoring of data (e.g. gender) regarding nominations /recommendations made by the School for professional, representative, management roles and for prizes, awards and marks of esteem, and regularly reviewing of this data | School Manager | Jan 2014 | Ongoing | Regular monitoring of gender data for nominations | Females making up $40 \%$ of nominations |
| 4.14 | Networking/mentoring/reviewing activities to be counted towards workload allocation models | HoDs | Sept 2014 | 1 year | Date when these activities become part of the workload model | These activities become part of the model |
| 4.15 | Greater sharing of administrative roles that enable networking, e.g. Isaac Newton Institute representative | HoDs | Sept 2014 | 3 years | Identifying these roles and monitoring of how these roles are shared | A range of such roles actively shared. |


| 4.16 | Yearly Day for women PhD students with talks on careers and <br> funding etc. | SDPGRS | June <br> 2014 | Annually | Event happening annually | Increased engagement <br> with female students to <br> encourage research <br> careers |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 4.17 | Further effort to ensure that promotions criteria are clearly <br> explained and understood by all to improve confidence in the <br> process. | HoS | Spring <br> 2014 | Ongoing | Dates of workshops to <br> ensure promotions criteria <br> are understood | Staff perception of <br> understanding of <br> promotions increases <br> as measured by QCAT |
| 4.18 | Ensure women are encouraged to apply for promotion in a <br> timely fashion | HoDs | Spring <br> 2014 | Ongoing | Number of women <br> applying for promotion |  |
| 4.19 | Raise visibility of those working part time or flexibly who are <br> promoted <br> increases by 50\% | HoS/ | Jan 2014 | Ongoing | Monitoring numbers being <br> promoted who work part <br> time | Numbers working part <br> time applying for <br> promotion and being <br> successful to increase |


|  | Description of action | Responsibility | Start <br> date | Time Scales | Progress Log | Success Measure |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Ensuring students are aware of department's focus on equality |  |  |  |  |  |
| 5.1 | Clearer information to be included in course handbooks to ensure clarity on expectations on equality and diversity | School Manager | $\begin{aligned} & \text { June } \\ & 2014 \end{aligned}$ | 3 months | Dates on which course handbooks are updated | Information included |
| 5.2 | Make use of Refreshers Week to reiterate the Department's commitment to equality, explain the various mechanisms and policies for promoting and enforcing equality and to readvertise the various services around the institution | Admission <br> Tutor/ <br> DT\&L | $\begin{aligned} & \text { Jan } \\ & 2015 \end{aligned}$ | Ongoing | Dates on which E\&D information reiterated to students | Refreshers week used to reinforce E\&D messages |
| 5.3 | Undertake a review of visual image on web-pages to ensure no gender bias; and changes if required | Web Content Developer | $\begin{aligned} & \text { April } \\ & 2014 \end{aligned}$ | 1 month | Dates when changes are made and monitoring of numbers of images | Images are totally gender balanced |

School of Mathematical and Physical Sciences, University of Reading, Silver Renewal, November 2013.

|  | Description of action | Responsibility | Start date | Time Scales | Progress Log | Success Measure |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Culture, Visibility and Workload |  |  |  |  |  |
| 6.1 | Remind all Pls to discuss the role of staff on committees etc in the appraisal (SDR) process (already on the RSDP form) | School <br> Manager | April 2014 | 1 month | Appraisers asked if they are discussing committee membership | Appraisers report asking about committee membership |
| 6.2 | Make public the Terms of Reference and membership of each committee on school website | HoS | Feb 2014 | 3 months | Date when ToR and membership on website | ToR and committee membership on website |
| 6.3 | Advertise committee membership opportunities for applications from staff | HoDs | Oct 2014 | Ongoing | Dates when committee membership advertised | Committee membership advertised |
| 6.4 | Target to have $30 \%$ female minimum on all committees | HoS | Oct 2015 | 2 years | Monitor gender balance on committees | $30 \%$ female/male on every committee |
| 6.5 | Focus group to identify ways of formal succession planning - bench warming - including through mentoring | School <br> Manager | June 2014 | 2 months | Meetings to brainstorm ideas for benchwarming | Ideas identified and enacted |
| 6.6 | Monitor roll out of revised workload model recognising teaching, research, administration and outreach/other external activities | HoDs | $\begin{aligned} & \text { Summer } \\ & 2013 \end{aligned}$ | Ongoing | Date when workload model changes made | Workload model perceived as including all activities as measured through QCAT |
| 6.7 | Make all academic admin roles fixed term posts, though with the possibility of renewal, and advertise their availability | HoDs | Oct 2014 | Ongoing | Dates when posts advertised | All posts made fixed term and advertised |


|  | Description of action | Responsibility | Start date | Time Scales | Progress Log | Success Measure |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6.8 | Change when information collected so data on staff activities from past and current year used in PDRs (appraisals). Feed PDR discussion on career development into plans for workload allocation. | HoDs | Jan 2015 | Ongoing | Monitoring dates when this change is made | Planning for teaching, admin and other activities takes into account PDR data. |
| 6.9 | Ensure that training opportunities are accessible to those on part time contracts | School <br> Manager | March 2014 | 6 months | Monitoring accessibility of training to those on part time contracts | All training available to all part time colleagues |
| 6.10 | Ensure that improvements due to Athena SWAN (AS) are recognised as due to this scheme | HoS/ HoDs | Jan 2014 | Ongoing | Monitor how AS is acknowledged as the source of changes | Greater visibility of AS as source of culture change |
| 6.11 | Encourage change in language in all meeting documents and train all meeting chairs etc to refer to "parental leave" and "caring responsibilities", "colleagues", "chair", rather than more gender specific terms of reference | HoS/ HoDs | May 2014 | 2 years | Monitor all documents for language | All MPS documents use gender neutral language |
| 6.12 | Investigate differences in male and female perception of acceptable behaviour and increase awareness of MPS's stance on this. | School <br> Manager | Feb 2014 | $\begin{aligned} & \text { June } \\ & 2014 \end{aligned}$ | Outcomes of investigations of attitudes | Information used to increase awareness of MPS stance on acceptable behaviour |
| 6.13 | Celebrate female success alongside other success | HoDs | Ongoing | Ongoing | Monitor examples of female success celebrated | Examples of female success visible |
| 6.14 | Provide profiles of diverse range of academics and other staff on website | Web Content Developer | Feb 2014 | 1 year | Monitor numbers of profiles on websites | Diversity of profiles matches that of general population |


|  | Description of action | Respon- <br> sibility | Start date | Time <br> Scales | Progress Log | Success Measure |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 6.15 | Review and monitor seminar speakers and make <br> further efforts to hit the 30\% female speaker target | School <br> Manager | Ongoing | Ongoing | Monitor seminar <br> speakers | $30 \%$ female seminar <br> speakers |
| 6.16 | Collect outreach participants' gender on feedback <br> forms to discern which sessions are more effective at <br> inspiring women into STEMM | School <br> Manager | Nov 2014 | Ongoing | Dates when data <br> collected | Data reviewed and <br> changes made based upon <br> outcomes |


|  | Description of action | Respon- <br> sibility | Start <br> date | Time <br> Scales | Progress Log | Success Measure |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 7.1 | Flexible working | Promote Keeping in Touch Days (KITD) further by <br> adding examples to the parental leave document on <br> what KITD can be used for and how these have helped <br> staff on parental leave in the past, including Case <br> Studies on the website | School <br> Manager | May 2014 | Ongoing | Monitor KITD uptake <br> and PI understanding <br> of KITD | Uptake of KITD by all those <br> taking leave |
| 7.2 | Develop parental leave form to support staff and line <br> managers to carry out required actions to manage the <br> break | School <br> Manager | May 2014 | 6 months | Monitor visibility of <br> information on <br> parental and flexible <br> working | Greater perception of how <br> parental leave and flexible <br> working works, measured <br> by QCAT |  |
| 7.3 | The guarantee of a return to full-time working after a <br> period working part-time - if people want to! | HoS | Jan 2015 | Ongoing | Monitor uptake of <br> part time working | Greater uptake of part time <br> working |  |
| 7.4 | Mentoring staff who return from parental leave | School <br> Manager | Jan 2015 | Ongoing | Monitoring mentoring <br> of returners | All those who return have <br> mentors |  |
| 7.5 | Put 'flexible working' document onto web as profiles to <br> make flexible working more visible | Web <br> Content <br> Developer | Feb 2014 | 1 month | Date when flexible <br> working document in <br> on web | Document on website |  |


| 7.6 | Encourage people to add "availability statements" to emails | HoS/ HoDs | Jan 2014 | Ongoing | Monitor availability statements on e-mail signatures | All staff put availability statements |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 7.7 | Make public an expectation that it is ok not to read emails in evenings and weekends. | HoS | Jan 2014 | Ongoing | Monitor whether people feel happy not responding to email out of hours | All staff are happy not to respond to e-mails out of hours |
| 7.8 | Advertise when academics are on leave to make this more acceptable. Lots of people don't take their holiday entitlement increasing the tendency to the 'long hours culture' | HoS/ HoDs | Jan 2014 | Ongoing | Monitor academics on leave | Advertise those who are on leave - especially those in management roles |
| 7.9 | Establish a survey to research perception of working hours followed by discussion at Women in Academia network, and a report for School and university | School <br> Manager | Jan 2016 | 3 months | Date of survey | Research outcomes based upon survey |
| 7.10 | Establish means for paying for automatic sabbatical for term after parental leave with teaching cover paid for | HoS | Jan 2015 | Ongoing | Monitor sabbaticals following leave and cover for teaching paid centrally | All returners to have sabbaticals with paid teaching cover |
| 7.11 | Explore funding options to provide PDRA cover during and for year after return from leave | HoS/ HoDs | Jan 2014 | Ongoing | Monitor availability of PDRAs | All returners have PDRA during and after leave |
| 7.12 | Ensure members of the Institute of Physics are aware of the 'Carers' Fund' which offers grants to cover additional child care for those attending conferences (male and female) and investigate options for providing similar support for others. | School Manager | Jan 2014 | Ongoing | Monitor information availability and awareness of parents of this fund | Parents take up this opportunity |

## Case study: impacting on individuals - 1024 words /1000 allowed

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

## Professor Ellie Highwood, Head of Meteorology.

Ellie joined the Met in 1993 to complete a PhD, and progressed to postdoctoral researcher, research fellowship holder, lecturer and senior lecturer, being promoted to Professor in October 2011. She has had two 9 month periods of parental leave (November 07 - June 08, and September 09May 10) and has worked 0.8FTE since returning to work in June 2008. Ellie links a step change in support between her two periods of parental leave directly to the Athena Swan process. Since the last award she has felt the benefit of an increasing number of researchers and faculty staff taking parental leave, and the visible support for these from MPS, in particular the "parents discussion group". The check-list for managers has also aided her in supporting staff on parental leave.

The development of MPS support for flexible working has been key for Ellie during the past 5 years. Her experience is that in 2008 it was still relatively unusual for faculty staff to be part-time, and attitudes were negative towards those who were amongst the majority of staff. The strong support from her line-manager and subsequently the HoS, allowed her to go ahead, but she was only completely convinced that part-time working was accepted at higher levels within MPS when she was asked to take on the role of Head of Department in April 2012. The original request was to take on one third of the total HoD responsibility however Ellie felt that taking this on whilst working 0.8 FTE would mean spending a disproportionate amount of her time doing this role compared to someone on a full-time contract. She proposed splitting the role differently such that she took on $1 / 4$ of the total load. She felt supported in this decision by the incumbent HoD and the HoS. She feels that a female HoD who is visibly part-time is a step-change for MPS, as is the recognition of the extent to which part-time and flexible working is a part of the ethos.

Ellie feels that she continues to benefit from the improvements in the promotion process and self-development support within MPS. She felt supported by her HoD through her own promotion application in 2010-11. In her HoD role she has been able to support several candidates for promotion who might otherwise not have come forward themselves (both male and female), and this has allowed her to recognise and reward key staff. The increased awareness of gender issues across MPS as a result of the award has led to several opportunities for Ellie, including standing in for the HoS at the Faculty Management Board, and serving on the Faculty Personal Titles committee as one of only 2 women. Although she has not decided what the future holds after her tenure as HoD, she feels confident that MPS will support her. She does however feel there is still work to be done in supporting future
leaders, and specifically women, at the University level and hopes that MPS will continue to extend its influence to this level.
501 words

## Dr Danica Vukadinović Greetham, Lecturer in Mathematics and Statistics

I joined Department of Mathematics and Statistics in Nov 2010 on a postdoctoral research assistant (PDRA) position funded by an EPSRC digital economy related grant. Previously, I have worked in industry (Unilever R\&D) for five years.

As I have three children - the youngest were 3 years old at that time, I asked for a 0.8 FTE position and flexible time which was granted without any problems.

When I joined, my line manager was extremely supportive, scheduling all important meetings with industrial partners when I am around, coaching me how to write grant applications in UK academic environment (my previous academic experience was as post-graduate student in Switzerland) and supporting me to apply for Lecturer position.

After a year as PDRA, I obtained Lecturer position in Oct 2011. For a year, I continued to work for 4 days a week. In 2012, my twins started school, so I switched to full-time in October, but am still working from home one day a week. The teaching staff from junior colleagues to the HoD was really encouraging to help me to adapt to teaching in UK HEA system and inspired me to use my industrial experience as a benefit and not a hindrance for a future academic career.

We are all aware that working parents have to balance their home and work life, and often in harsher conditions than academics. However, I think that there is an additional difficulty in "academic partnerships". For highly specialised individuals, finding two fulfilling jobs in the same geographic area can be remarkably challenging. Moreover, when children enter the equation, jobs in science are normally long hours, and solving problems in mathematics does not happen necessarily in designated working hours, but thinking about problems spill over easily into evenings and weekends.

Adding the commuting time to the long hours for five days a week with three children under ten and my husband's job (not very flexible as managing science facility) would make my position unsustainable, so the flexible working time was a deal breaker. I feel that my working hours do not isolate me of departmental affairs - most of the meetings and seminars are scheduled on the days when I am on campus.

I have studied for my degree in Eastern Europe where gender gap in STEM was not so profound, so was quite surprised being often the only woman or one of few during meetings or on courses in Switzerland and in UK.

Thus in Reading, I enjoy being surrounded with quite a few remarkable women in the department and across University. As my research is interdisciplinary, I collaborate with School of Economics and Psychology. Some of my collaborators are in similar life-stage as me, thus juggling child care, research and teaching and trying to squeeze in choral practice or an hour of fitness. There are several successful female Professors in later stages of their careers which I find very supportive. A mathematical conference organized last year for the celebration of Professor Nancy Nicholls' 70th birthday was particularly inspiring showing Nancy's exceptional achievements, many PhDs trained by Nancy, many of them women, and a wide circle of collaborators who are among most relevant scientists in their respective research areas, but also showing us how time changed, and how many more girls these days are on different stages of a research career.
553 words

## Silver Progress Record Form for 2010 Action plan

University of Reading - SCHOOL OF MATHEMATICS, METEOROLOGY AND PHYSICS (SMMP)
Key Assessment Area 1: A picture of the department

| What data and other evidence has been collected? | What issues have been identified through data gathering and consultation? | What actions are proposed to address these issues? | What will success look like? | Who will be responsible for taking the action? | What is the timesca le for the activitie s? | How will these actions be communicat ed to staff? | Completion |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Student Data |  |  |  |  |  |  |  |
| 1.1 Numbers of males and females on access or foundation courses | Small numbers so probably not representative. | - All students progress to their chosen course, so no particular actions to take. |  |  |  |  | N/A |
| 1.2 <br> Undergraduate male and female numbers | Need to maintain and increase numbers of female students on SMMP courses. | - Increased visibility of senior female staff in publicity material and visit days. <br> - Assess publicity material to ensure good gender balance. | Sustained numbers of females recruited to UG courses | School Director of Teaching and Learning (SDTL) | 2 years | Heads of Department | Excellent <br> Excellent |
| 1.3 <br> Postgraduate male and female numbers completing taught courses | No issues identified. |  |  |  |  |  |  |
| 1.4 <br> Postgraduate male and female numbers on research degrees | High number of students on research degrees two years ago, and high number of students going on to PhDs in 2008. | - Investigate reasons for this high intake by questioning students about their reasons for choosing Reading. | Sustained increase in female student applications. | SDTL | 3 years | Heads of Department | Limited |


| 1.5 Ratio of course applications to offers and acceptances by gender for (i), (ii) and (iv) above | Fewer female students accepting and enrolling on PG courses than would like | - Increased visibility of senior female staff in publicity material and visit days. <br> - Assess publicity material to ensure good gender balance. <br> - Highlight Athena SWAN award as sign of good practise | Sustained numbers of females recruited to PG courses | SDTL | 2 years | Heads of Department | Excellent <br> Limited <br> Limited |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1.6 Degree classifications by gender | Small trend for gender imbalance of first to second in Meteorology UG programmes | - Draw to the attention of the MUMPS meetings and monitor trends. | Improved balance | School T\&L Administrator | 3 years | Through the MUMPS meetings and Heads of Departments | Completed \& ongoing |
| 1.7 Length of time for postgraduate completion by gender | Part time female students' completion time is longer than males | - Improved support to part time students (pastoral and technical). <br> - Arrange training for Teaching and Learning staff (Counselling, Harrassment, etc) <br> - Encourage use of the access grid for meetings with PhD students. | Similar completion time across male and female students | SDoTL and T\&L Administrator | 2 years | School's Teaching and Learning Office | Zero <br> Limited \& ongoing <br> Limited |
| Staff Data |  |  |  |  |  |  |  |
| 1.8 Number of male and female staff academic and research) at each grade | Drop in number of female staff reaching grade 7 . Senior staff more predominantly male. | - See section 2.1 of action plan | Increase in female staff on Grade 7 and above. | School <br> Management office, School Director of Research and Centre for staff | 3 years | Through the School Director of Research and School Management |  |


|  |  |  |  | training and Development |  | office |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1.9 Job application and success rates by gender and grade | Males outnumber females in job applications and success rates. | - See section 2.5 of action plan | Increase in female applicants to jobs, and improve success rates | School <br> Administrator, Head of School and Department, Athena SWAN steering group. | 3 years | School <br> Administrator , Heads of Department and Head of School. |  |
| 1.10 Turnover by grade and gender | Difference in destinations for female leavers - this is not really an issue. | - Continue to monitor leavers' destinations and take action if necessary. | Ensure that female leavers don't leave STEM | School <br> Administrator, with feedback to Head of School | Annuall y | School <br> Management office through Heads of Department | Completed |
| 1.11 Maternity return rate | Most staff taking maternity leave have returned to work, some on part time basis. | - See section 2.8 of action plan | Ensure that staff have sufficient support at this potentially difficult time. | School <br> Administrator, line managers and HoDs | 1 year | School <br> Administrator , Heads of Departments and line managers |  |
| 1.12 Paternity, adoption and parental leave uptake | Records do not show a large uptake of paternity, adoption and parental leave. | - Improve information on this matter and ensure it is publicised to School staff. <br> - Discussion at SDR with line managers. | Improve uptake of paternity and adoption leave. | School <br> Administrator / HR / line managers | 1 year | School <br> Administrator with line managers | Completed <br> Completed \& ongoing |
| 1.13 Promotion application and success rates by gender and grade | At senior level, success rates for females are good. At post-doc and grade 6 level, few female staff are promoted to Grade 7 | - See section 2.1 of action plan | Improvement in success rate of promotion of female staff, particularly in research grades. | School <br> Management office, Head of School and Heads of Department. | 3 years | Heads of School / Department |  |
| 1.14 Male and female representation on committees | Mostly gender balanced | - See section 2.6 of action plan | Gender representation on all committees. | Head of School and School Director of Teaching and Learning | Ongoin $\mathrm{g}$ | Head of School |  |


| 1.15 Number of applications and success rates for flexible working by gender and grade | Requests for flexible working are informally arranged and widely used. | - See section 2.3 of action plan | All staff to be aware of flexible working policies. | University HR department, Centre for Staff Training and Development (CSTD), School Director of Research, IT department | 2 years <br> 1 year | University HR department, Centre for Staff <br> Training and Development (CSTD), School Director of Research |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1.16 Female:male ratio of academic staff on fixed-term contracts and openended (permanent) contracts | Slightly larger proportion of females than males on fixed term contracts. | - Set up a uniform policy for the School to manage fixed term/permanent contracts | Implementation of policy for all fixed term contract. | Head of School / HR/ School Administrator | Ongoin g | HR <br> Department and Head of School | Limited (at university level) |

Key Assessment Area 2: Initiatives to advance and support women in the department

| What data has been collected? | What other evidence is available? | What issues have been identified through data gathering and consultation? | What actions are proposed to address these issues? | What will success look like? | Who will be responsible for taking the action? | What is the timescale for the activities? | Completion |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2.1 <br> Promotion and career development | Data sheet and promotion history information | Career progression of female staff from Grade 6 to 7 needs to be addressed. | 1. Hold a workshop for Grade 6 staff to explain how to prepare for promotion at the Grade 6/7 boundary, encourage women particularly to attend, and follow the workshop up with female staff individually <br> 2. Enrolment of female staff into the Henley Business School Research leaders programme for Grade 6 staff. <br> 3. Raise awareness of impact of flexible working on research staff outputs. <br> 4. Ensure that promotions are discussed during Staff Development Reviews, and give training to reviewers. <br> 5. Work with the University to refine the promotion criteria so that they do not favour lone scholars at early stage in careers. <br> 6. Appoint an Equal Opportunities ambassador to sit on Steering committee and raise awareness of Athena SWAN principles. <br> 7. Identify staff nearing promotion to give them good mentoring. | Improvement of career progression for Grade 6 staff. Increase in Grade 7 female staff. | School Management office for items 1, 3, 4 Head of School for items 5 and 6 Line Managers and Heads of Department for item 2 and 7. | October 2010 for 1 , and ongoing for all others | 1. Excellent and ongoing <br> 2. Limited <br> 3. Excellent <br> 4. Completed and ongoing <br> 5. Excellent <br> 6. Completed <br> 7. Excellent and ongoing |
| 2.2 <br> Support for staff at key career transition | Data sheet and forum discussions | 1)Management of Contract Research Staff to help them to find alternative | - Continue to ensure that the SDR and Research Staff Development Prompter are used by all research staff. Ensure that results and disseminated to managing staff and | Contract Research Staff will find other research | School Management office | Ongoing | - Completed and ongoing |


| points |  | employment at the end of their contracts | training requests to CSTD. <br> - Encourage researchers to use the Centre for Staff Training and Development (CSTD) training for career management. | projects to work on. |  |  | - Excellent |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Data sheet and forum discussions | 2) Mentoring of staff nearing the time when they might seek promotion. | - Allocate good reviewers to those staff nearing the top of their scale. <br> - Send out promotion criteria with SDR for discussion. <br> - Ensure that all staff are assessed in a uniform way. | All staff to be successfully mentored. | School <br> Administrator with assistance from Head of Department | 2 years | - Completed and ongoing <br> - Completed and ongoing <br> - Limited |
|  | Data sheet and forum discussions | 3) Female staff returning from maternity leave | 1. Circulate the School's maternity guidelines to relevant staff going on maternity leave. <br> 2. Publicise the University nursery and childcare voucher scheme. <br> 3. Encourage women on maternity leave to use "keeping in touch days" <br> 4. Set up mentoring for staff returning from maternity leave (SDR). <br> 5. Invite staff who have left the university after maternity leave to attend particular events eg. Monitoring committees and seminars. <br> 6. Set up a support group for returning mothers. | Adequate support for staff returning from maternity leave. Ensuring that staff will stay on after they have returned from maternity leave. | School <br> Management Office (for 1, <br> 2, 3, 4 and <br> 6), Heads of Department and Line managers (for 4 and 5) | 1 year | 1. Completed and ongoing <br> 2. Completed <br> 3. Completed <br> 4. Completed <br> 5. Limited <br> 6. Completed and ongoing |
| $2.3$ <br> Flexible working | Data sheet and forum discussions | Flexible work arranged both formally and informally | 1. Ensure that the possibility for flexible work is well publicised to staff using existing HR form and Health and Well-being policy. <br> 2. Encourage staff working flexibly or part time to attend Time Management courses. <br> 3. Improve technical support for working from home (remote access and software packages). | Staff are aware of the possibilities available to them and make arrangements for flexible working as appropriate. | School Administrator (for 1), IT department (for 3) and Line managers (for 2) | 3 years | 1. Completed <br> 2. Zero <br> 3. Completed |
| 2.4 Culture |  | Culture | 1. Ensure that the Athena SWAN issues | Awareness of | The School's | Ongoing | 1. Limited |


|  |  | supportive of female staff. | are well known in the school by publicising events for women, posters up in the coffee room of relevant events, selecting female staff to invite them to RCUK networking events. <br> 2. Put links to policy on Blackboard portal <br> 3. Advertise 'harassment officers' and EO officer, also on portal and via email <br> 4. Specify a School Policy regarding EO and appoint an Athena SWAN ambassador. <br> 5. Celebrate Athena SWAN success | Athena SWAN agenda and support from the whole school. Staff and student awareness of the policy and availability of help if needed, as well as generally raising awareness about women in the Sciences | Athena SWAN committee (for 4), The whole school (for 1 and 5), the School teaching and learning Administrator (for 2 and 3 ). |  | 2. Completed <br> 3. Limited <br> 4. Limited <br> 5. Completed |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $2.5$ <br> Recruitment of staff | Data sheet and forum discussions | Proportion of female staff applying for posts needs to be improved. | 1. Assessment of job adverts to ensure gender balance. <br> 2. Arrange training courses for department staff in recruitment practice, particularly new staff and those on panels. <br> 3. Include a paragraph on all job advert on flexible working possibilities in the School with link to HR's flexible working policies on all job adverts. <br> 4. Advertise posts on Daphnet to encourage women applicants <br> 5. Seek out potential female applicants to posts and invite them to apply. <br> 6. Link to Athena SWAN award on all job adverts. <br> 7. Monitor trends using the TRENT HR systems. <br> 8. Investigate statistics and share good practice with 1994 group universities. | All job adverts to reflect gender balance and publicise University's flexible working policies. Improvement in female applicants for research and academic jobs. | School <br> Administrator <br> (for 2, 3, 4, 6) <br> Head of <br> School (for 8 <br> and 9) <br> Heads of <br> Department <br> (for 1,5) <br> Athena <br> SWAN <br> steering <br> group (for 7 <br> and 8) | 3 years | 1. Excellent <br> 2. Limited <br> 3. Excellent <br> 4. Limited <br> 5. Excellent <br> 6. Excellent <br> 7. Excellent <br> 8. Limited |


|  |  |  | 9. Ask HR to include a section in job application forms to enable applicants to include this on their applications. |  |  |  | 9. Zero |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2.6 <br> Representation on decisionmaking committees | No issues identified. | Female representation is in line with female staff numbers. | - Monitor female representation on committees. <br> - Head of School to send email highlighting Athena SWAN issues to all staff, and asking for good gender balance for all committees. <br> - Set up a list of potential issues concerning female staff / students, to be distributed to all committee members. | Good gender balance on all committees | Head of School | Immediate and ongoing | - Excellent <br> - Excellent <br> - Zero |
| 2.7 Workload Model |  | Lack of transparency of the model. | - Improve transparency of the workload model. | Accessible workload model. | Head of Department | 1 year | - Limited |
| 2.8 Cover for maternity and adoption leave and support on return |  | Monitoring work and staying in touch during maternity leave. <br> Managing workload on return from maternity leave. | 1. Improve the management of work load during and after maternity leave (set up "Job Chats" with line manager before and after maternity leave). <br> 2. Set up informal support groups of returning mothers. <br> 3. Selecting female reviewer for staff member returning from maternity leave. <br> 4. Consider part-time fellowships for staff returning from maternity leave to allow them to start research again without the immediate pressure of external deadlines <br> 5. Encourage staff members not returning to work to participate in committees/seminars. <br> 6. Circulate the Schools maternity leave helpsheet to all staff going on maternity leave. | Satisfactory post return report. | Head of Department (for 1, 3, 4 and 5) and School Administrator (for 1, 2 and 6) | 1 year | 1. Excellent <br> 2. Completed and ongoing <br> 3. Completed <br> 4. Zero <br> 5. Zero <br> 6. Completed and ongoing |
| 2.9 Timing of |  | Some | - Encourage research staff to be | Time | Head of | Start of | - Completed |


| departmental meetings and social gatherings | research meetings are timed at difficult times | aware of members timing constraints and to consult when agreeing times. <br> - Head of School to send out email to ensure that all meetings are set at time when all can attend. | meetings when most staff are able to attend | Department and Head of School | Autumn term | - Completed |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2.10 Outreach activities | There is a good gender balance in these activities. | - Ensure female staff visibility at outreach activities. <br> - Ensure that outreach activities are recognised in cases for promotion. | Female staff are available for these activities. | Head of Department | 1 year | - Excellent <br> - Excellent |
| 2.11 Induction and training | Teaching and administrative induction to be improved. | - Continue in-house training for staff and researchers, as well as mentoring. <br> - Offer female mentors to female staff. | All new staff and staff new to roles to have adequate induction | School Administrator | 2 years | - Completed <br> - Limited |
| 2.12 Support for female students | Increased support for female students who might be lacking in confidence at crucial times during their studies | 1. Smaller group sessions in Freshers week from next year. <br> 2. Visibility of senior female staff members on monitoring committees and admissions events. <br> 3. Arrange SMMP female student forums to discuss issues. <br> 4. Training for T\&L staff ("A shoulder to cry on", counselling and harassment training) <br> 5. Contact RUSU diversity officer to discuss specific support that could be offered for female students in the sciences <br> 6. Work with STEM NET officers for advice regarding supporting studies and advice regarding opportunities for women in science | Sufficient support for all female students in SMMP | School <br> Director of <br> Teaching and Learning (for 2, 5 \&6), School <br> Teaching and Learning Administrator (for items 1, 3 and 4) | 2 years | 1. Excellent <br> 2. Excellent <br> 3. Zero <br> 4. Completed and ongoing <br> 5. Zero (completed but no response from RUSU) <br> 6. Limited (STEMNET funding was cut) |

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Key Assessment Area 3: Case Study: Impacting on individuals

| What data has been <br> collected? | What other evidence <br> is available? | What issues have <br> been identified <br> through data <br> gathering and <br> consultation? | What actions are <br> proposed to address <br> these issues? | What will success <br> look like? | Who will be <br> responsible for taking <br> the action? | What is the timescale <br> for the activities? |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 3.0 Case Study: <br> impacting on <br> individuals | See individual case <br> studies in appendix 2 |  |  |  |  |  |

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