



Athena SWAN Bronze university award application

Name of university: Liverpool School of Tropical Medicine

Date of application: 28/9/2013

Contact for application: Prof Janet Hemingway

An Athena SWAN Bronze university award recognises that the university overall has a solid foundation (the policies, practices, systems and arrangements) for eliminating gender bias and developing an inclusive culture that values all staff.

At Bronze university level the focus is on:

- The action already taken and planned which demonstrates the university's commitment at a senior level to the six Athena SWAN principles
- The journey to which the university has committed itself in order to achieve a significant improvement in women's representation and career progression in STEMM, with:
 - An identified starting point
 - The resources needed
 - People to lead and support
 - The means to monitor its progress (e.g. the Action Plan)

Sections to be included

At the end of each section state the number of words used. Click [here](#) for additional guidance on completing the template.

1. Letter of endorsement from vice-chancellor: maximum 500 words

An accompanying letter of endorsement from the vice-chancellor (or equivalent) should explain how the university's SWAN Action Plan and activities in SET contribute to the overall university strategy and academic mission.

**Janet Hemingway, CBE, FRS, DSc, PhD, BSc, NAS (Foreign Associate), FMedSci
FRCP (Hon), FRES (Hon), FAAM
Director and Professor of Insect Molecular Biology**

To Whom it May Concern

The Liverpool School of Tropical Medicine (LSTM) fully endorses the Athena SWAN charter. We were the first institution in the world dedicated to addressing tropical disease and are one of only a handful of Higher Educational Institutions (HEI) in the UK to be led by a woman. We are proud of the achievements of our women scientists, and have strong institutional female leadership.

We aim to extend our position as a globally important post-graduate teaching and research centre and our SET Faculties have been substantially restructured to achieve this goal. Launched in 2012, our Strategic Plan seeks to double the size of our institution by building a critical mass of world class academics who will be well placed to compete for the increased funding available in our key areas of strength. The identification and fostering of a diverse skills base is central to this strategy and we are committed to addressing the AS principles, in recognition of the critical need to optimise the development and retention of female academic talent if our goals are to be met.

This Bronze Award Application directly supports LSTM's strategy and builds on our existing commitment to gender equality. In line with this commitment, significant action has already been taken to address the AS principles at senior management level. As the Director of this Institution, I chair our Athena SWAN Self Assessment Team demonstrates our engagement at the highest level. Progress of the AS Action Plan is a standing agenda at LSTM's monthly Management Committee meetings and key areas for development have already been identified and endorsed.

For example, although we have several high profile women scientists, we recognize that overall women are under-represented at and beyond senior lecturer level. The AS Action Plan provides a platform for us to identify barriers to progress targets support at PDRA and lecture level and chart a clear processes for female progression and recruitment to senior levels. Similarly, whilst we already have more generous maternity and parental leave policies than the HEI sector generally, our AS Action Planning will seek to address the challenges we face in appropriately covering/redistributing roles during this essential leave and optimising subsequent retention. We have established links with other AS institutions to facilitate the development of creative solutions to the challenges produced by the HEI business model that necessitates a high proportion of externally funded short-term contracts. We will work with these partners to address the barriers created by this model for women scientists with family commitments at key transition points in their careers.

We recognise that we still have some way to go on our path to AS Gold, but we trust that this application shows how far we have already travelled since 2002 when LSTM had no senior academics, clearly details the way forward and demonstrates the commitment and imagination of the team that we have assembled to guide our way.

Yours faithfully



Professor Janet Hemingway CBE, FRS, DSc, PhD, BSc, NAS (Foreign Assoc)
Director

[493 words]

2. The self-assessment process: maximum 1000 words

Describe the self-assessment process.

After our initial unsuccessful application for an Athena Swan Bronze in October 2013 we have re-organized our structures and systems, and LSTM no longer has separate Institutional Self-Assessment and steering groups. Both functions are now vested in one Institutional Self-Assessment Team (SAT), which has a remit to consult widely with the whole School, which we believe is reasonable given the size of the organisation. In addition each Faculty has recently established a SAT to prepare for their AS applications in April 2014. In preparing this revised application we have consulted closely with the London School of Hygiene and Tropical Medicine and the University of Warwick Medical School.

The three Athena Swan SATs within LSTM, an overarching Institutional SAT and two Faculty SATs, have:

- memberships which are representative of all cadres of staff,
- represent the breadth of activity across LSTM
- have some commonality of membership between groups.
- have a mandate to catalyse change endorsed by senior management.

Membership was finalised after extensive consultation with staff. The Institutional SAT is chaired by LSTM's Director, emphasizing LSTM's commitment to gender equity and advancing careers for women in Science, Engineering and Technology (SET). We have also increased the level of junior representation, decreased senior representation and reduced the prominence of the LSTM gender and equity group on this institutional SAT in line with the guidance from our original Athena SWAN submission.

Table 1: Athena SWAN Institutional SAT Constitution, Roles and Work –Life Balance

Name	LSTM position
Janet Hemingway	LSTM Director
Angela Obasi	Senior Clinician/Senior Lecturer
Mike Coleman	Tenure Track non-clinical Research Fellow
Alastair Craig	Biological Sciences Dean
Rachel Tolhurst	Part time Social Science Lecturer
Edward Roome	Senior Post-Doctoral Research Assistant (Social Science)
Chris Greenway	Director HR

Kris Subramaniam	Post-Doctoral Research Assistant (Laboratory Science)
Kathleen Carroll	Executive Assistant to the Director

This group brings the perspective of staff from across the staff grades and departments and collectively has experience of being a student at the School, working part-time, flexible working, maternity leave, paternity leave, working from home and balancing home and family life with an academic career. The members of this team have actively contributed to this application, conduct constructive dialogue with colleagues and are able to ensure buy-in of the institution to implement the Action Plan.

The terms of reference for the group are:

- To widely consult with LSTM staff on their experiences and concerns relating to the advancement of women in SET;
- To identify institutional barriers to progress for women scientists and in consultation with LSTM staff, develop an Action Plan to address these.
- To collate all information required for a bronze application and to develop case studies where appropriate;
- To update LSTM staff on Athena SWAN progress and recommendations;
- To work with the LSTM Faculties to prepare their Athena SWAN applications;
- To monitor progress against the Action Plan and prepare application for a silver award.

a) An account of the self assessment process: details of the self assessment team meetings, including any consultation with staff or individuals outside of the university, and how these have fed into the submission.

The institutional group constituted in January 2013 meets quarterly. Activities to date include:

- Consultative meetings open to all staff. These involved a presentation on the Athena SWAN process, overview of LSTM data and small group consultation and feedback of discussions to the plenary;
- Consultative workshop with all PDRAs led by the SAT PDRA representative, followed by a School wide questionnaire.
- Regular presentations and dialogue at the School Staff Forum (these are LSTM-wide monthly meetings open to all staff);
- Development and piloting of a mentorship scheme for PDRAs;
- Presentation at LSTM Management Committee – where Athena SWAN is a standing agenda item;
- Private one-to-one meetings and dialogues by email;
- Web-based activities and advocacy on international women’s day (March 8th);
- Publication of progressive iterations of our application form and Action Plan on the staff intranet to enable further staff feedback and comments.
- Consultation with two undergraduate University SATs (Liverpool and Warwick) and one Post-Graduate HEI SAT (LSHTM) to share initiatives and best practice.

b) Plans for the future of the self-assessment team, such as how often the team will continue to meet, any reporting mechanisms, and how the team will engage with SET departments to encourage them to apply for awards.

The group will continue to meet quarterly to review progress against the SMART indicators outlined in our bronze application form. We will also report to the School Staff Forum and Management Committee on a quarterly basis, to ensure ownership and action across the whole staff body and within the senior

management team. The institutional SAT will proactively work with the Faculty SATs as they progress their Athena SWAN applications. [850 words]

Description of the School (university): maximum 1000 words

- a) Provide a summary of the university, including information on its teaching, and its research focus, the number of students and staff (academic and support staff separately), association with university mission groups (e.g. 1994 group, Russell Group, Million+), the size of the SET departments (academic and support staff separately), and any other relevant contextual information.

LSTM is an independent Institution, committed to research and teaching in Tropical Medicine. Although it has never been part of the University of Liverpool, its degrees are awarded by the University and until 2012, LSTM was indirectly funded by HEFCE. LSTM was formally given independent HEI status by the Department of Business Innovation and Skills in 2013. This change in status has not impacted on LSTM’s structure, committees, funding, management functions, student numbers, curricula, course content or estates, as it already operated these activities/functions fully independently.

The organisational structure of LSTM was revised in 2011. There have been no changes to the structure with HEI status.

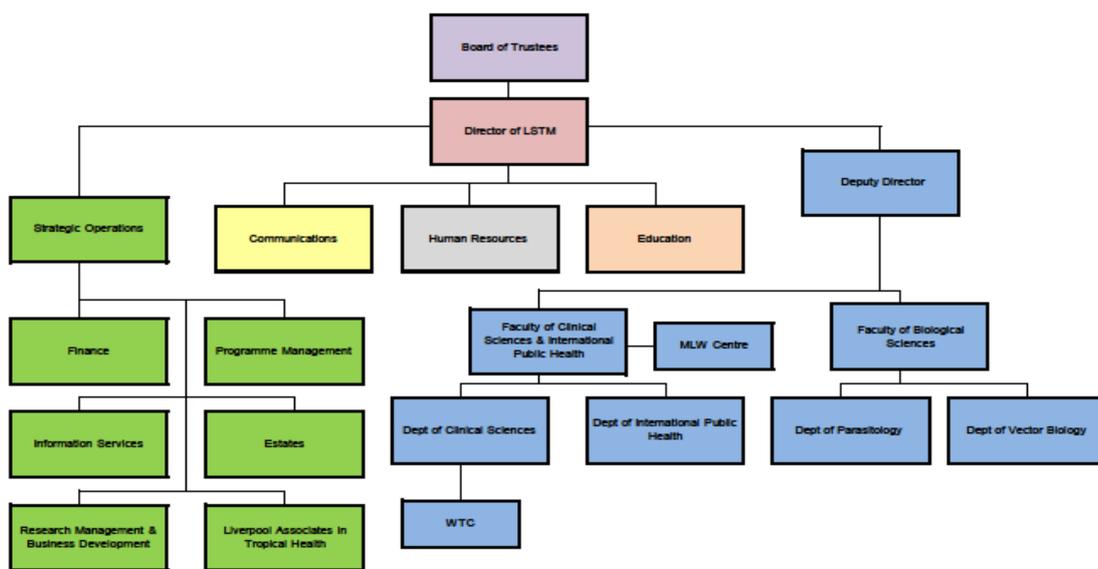


Figure 1. LSTM organogram 2011 to date

LSTM has 366 UK-based staff (see Table 2). In 2012 LSTM had 112 PhD students and 288 higher degree students.

LSTM’s environment is a rich multi-cultural one, with activities in 65 countries, ethnically diverse staff and over 50% of our students coming from non-European countries. It has grown over the last decade at ~15% per year. LSTM operates a broad multi-disciplinary programme with experts from clinical, non-clinical laboratory science, public health, social science and industrial backgrounds.

(I & ii) List of SET/University departments

LSTM has two Faculties: ‘Biological Sciences’ and ‘Clinical Sciences and International Public Health’ (CSIPH) each with two departments (Figure 1 and Table 2).

Table 2: Distribution of Academic and Support Staff

Area		Academic	Support Staff
CSIPH (Faculty)	<i>International Public Health</i>	43	25
	<i>Clinical Sciences</i>	43	30
Biological Sciences (Faculty)	<i>Vector Biology</i>	40	21
	<i>Parasitology</i>	51	10
Strategic Operations	Strategic Operations	0	4
	Information Services	0	14
	Programme Management	0	6
	Finance	0	21
	Research Management	1	9
	Estates	0	10
HR	HR	0	12
Education	<i>Education</i>	5	21
TOTAL		183	183

- b) Provide data for the past three years (where possible with clearly labelled graphical illustrations) on the following with commentary on trends and significant issues, in particular anything relating to gender equality.**

Due to the legal requirements to split our HR reporting functions previously with the University of Liverpool to facilitate HEFCE funding, LSTM has not had an integrated HRMIS. With HEI status we can now operate an appropriate HRMIS which will facilitate data assessment and progress towards improved targets. Our Action Plan addresses this (1.1; 1.2 – 1.4).

- (i) Female: male ratio of academic staff and research staff – researcher, lecturer, senior lecturer, Reader, Professor (or equivalent) – across the whole university and in SET departments. Comment on the main areas of concern on gender balance and plans to address them. For example, is there evidence that women and men are appropriately represented at all levels of the workforce? Are there differences in SET departments?**

LSTM has a reasonable gender balance across all grades, with 49% female and 51% male staff (Figure 2). There are small differences between clinical and non-clinical departments, but as the denominators are small these differences are not material. The proportions broadly mirror those seen nationally across Clinical and Biological Sciences departments; Clinical - 51.5% female ; Biological Sciences - 43% female (Source: Equality Challenge Unit Statistical Report 2012).

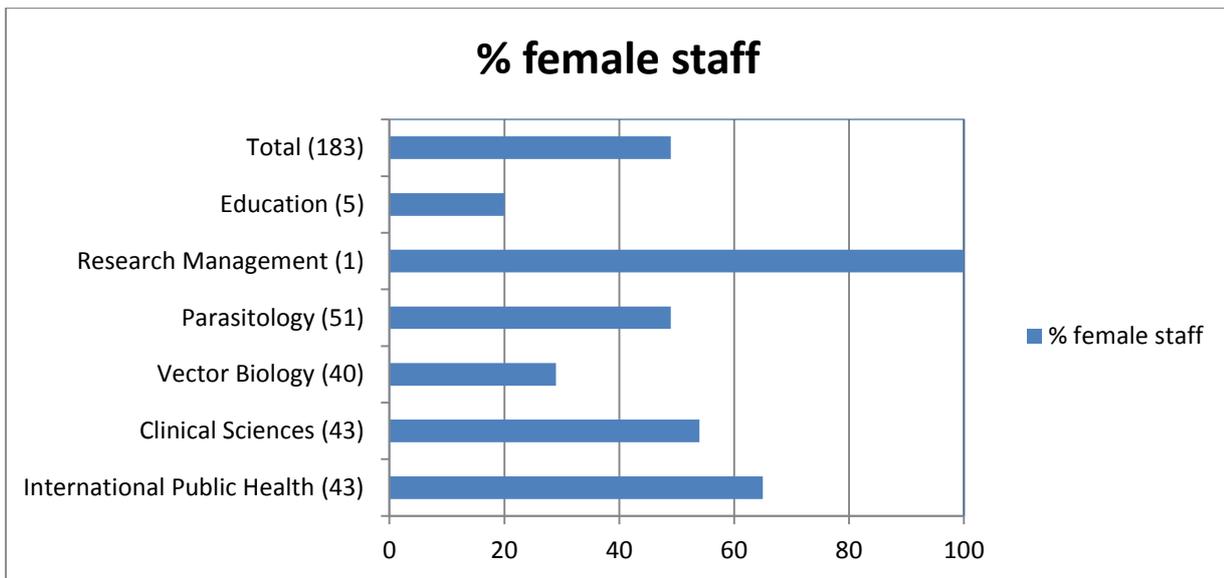
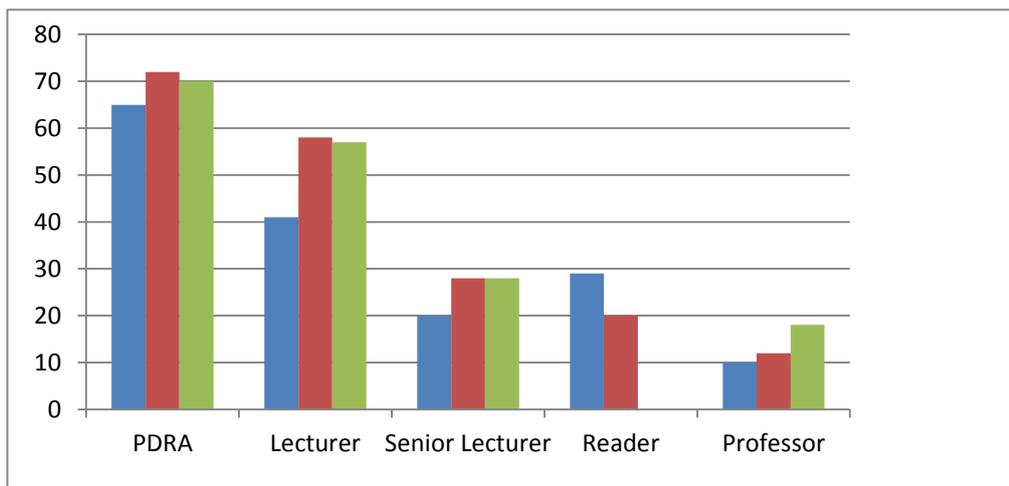


Figure 2. The percentage of female staff in all LSTM departments employing Academic staff (total FTEs are given in parenthesis).

LSTM's pool of women academics has grown over the last decade. The proportion of female representation has increased between 2010 and 2012 in all but one cadre (see Figure 3); including the number of women professors.

Figure 3 and Table 3 show that until 2010 the majority of academic staff at lecturer grade and above were male, while the majority of PDRAs were female. By 2011 the majority of staff up to and including lecturer grade were female. From senior lecturer to professor there are still fewer females with 17% of professors currently being female (denominator = 23). Although not yet good enough, the trend is increasing, moving to one that was below the sector average of 14.5% in 2010, to one that is above the sector average of 15.1% in 2012.

Figure 3: Percentage women by academic grade from 2010 – 2012 (years represented left to right within each cadre). (Blue – 2010; Red – 2011; Green – 2012)



Grade	Number of Females	Number of Males	Percentage of Females (%)	Percentage of Males (%)
2009-2010				
Researcher	55	40	57.9	42.1
Lecturer	9	16	36.0	64.0
Senior Lecturer	3	12	20.0	80.0
Reader	2	5	28.6	71.4
Professor	2	18	10.0	90.0
2010-2011				
Researcher	64	33	66.0	34.0
Lecturer	13	13	50.0	50.0
Senior Lecturer	4	11	26.7	73.3
Reader	1	4	20.0	80.0
Professor	3	20	13.0	87.0
2011-2012				
Researcher	57	32	64.0	36.0
Lecturer	16	13	55.2	44.8
Senior Lecturer	4	11	26.7	73.3
Reader	0	4	0.0	100.0
Professor	4	19	17.4	82.6

Table 3. Numbers of individuals at different academic grades in LSTM 2010 – 2012.

- (ii) **Female: male academic staff turnover rates by grade – across the whole university and in SET departments and any differences between them. What are the issues for the university and how is it planned to address them? For example, are women and men equally likely to leave the university (distinguish between those leaving at the end of a fixed term contract and any other leavers)? Are the reasons for leaving picked up in exit interviews?**

Due to the small numbers, data on staff turnover is presented across the whole HEI (Figures 4 - 7). In total, 19 (12.8%), 24 (15.8%) and 30 (19.7%) academic staff left in 2010, 2011 and 2012 respectively. Information from exit interviews shows that the vast majority (>90%) were staff who left took up positions at undergraduate teaching universities, health related NGOs or with industry, with a smaller percentage leaving at the end of fixed term contracts. No senior female academics have left LSTM since 2010.

Overall, turnover is low given the high proportion of staff funded by research grants and the majority of staff leaving of both genders is competitive in comparison to other organisations, as judged from exit questionnaires.

Systematic gender specific collation of exit interview data is prioritised in our Action Plan (1.3).

Figure 4: Female staff turnover at LSTM 2010 – 2012.

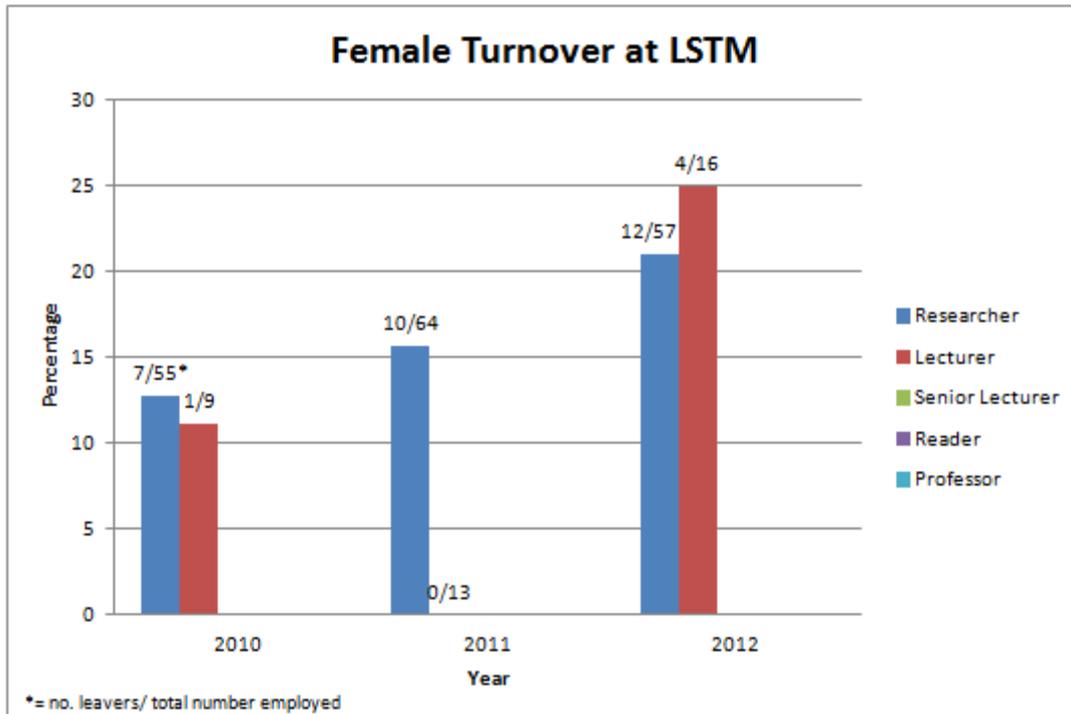


Figure 5: Male staff turnover at LSTM 2010 - 2012

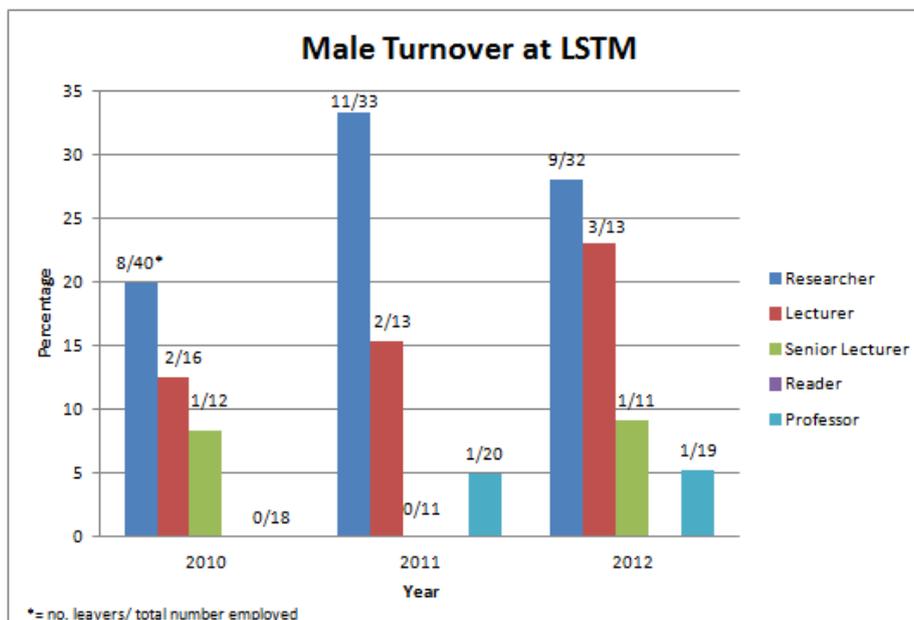


Figure 6: Turnover of Researcher level scientists by year and sex (2010- 2012)

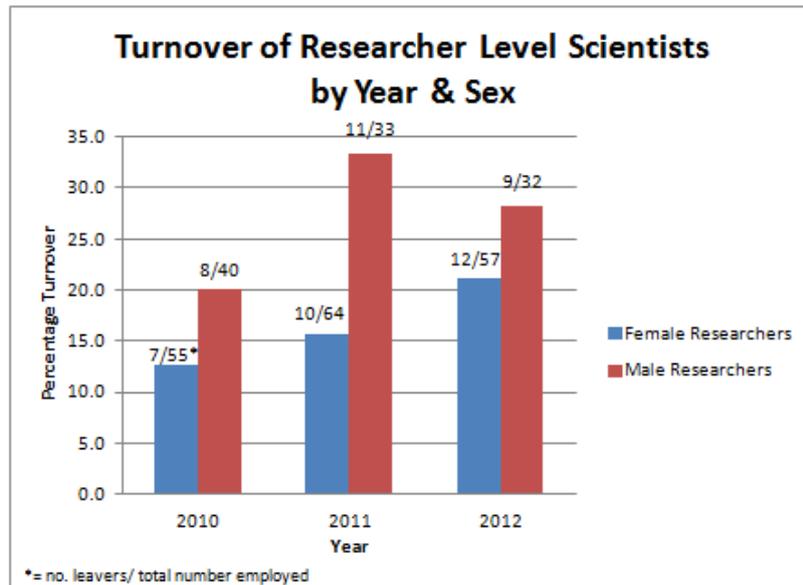
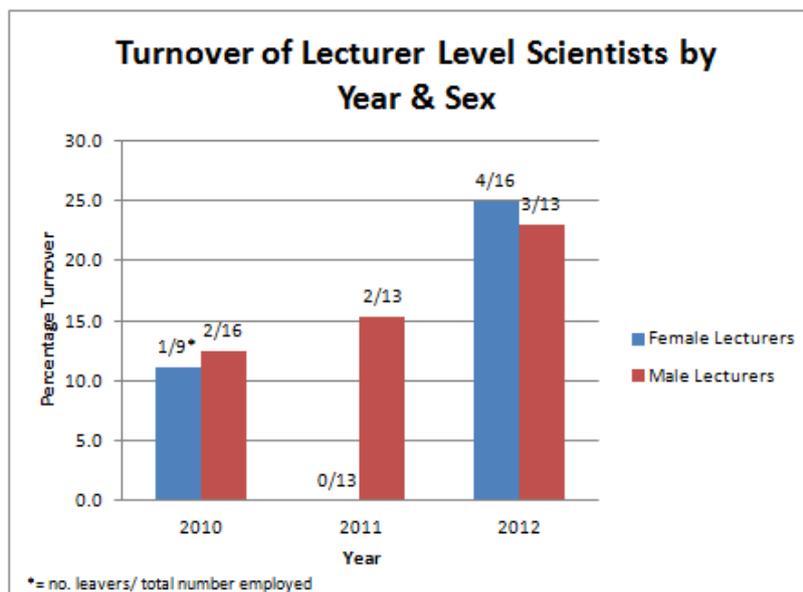


Figure 7: Turnover of Lecturer level scientists by year and sex (2010- 2012)



We have no evidence that women are more likely to leave than men and there is no trend from exit interviews.

As our turnover rates are highest in PDRA grades, we invited them to complete an anonymous survey in 2013. 50% completed the questionnaire, 60% of whom were female. The majority (93%) would like a formal mentoring system, from a senior faculty position (74%). LSTM already has informal mentorship arrangements but in response to this survey we have established a formal mentorship scheme.

(iii) Female: male ratio of academic and research staff on fixed-term contracts vs. open-ended (permanent) contracts – across the whole university and in SET departments. Comment on the implications of the gender balance for the university and for women’s career development. For example, is there evidence that women are overrepresented on fixed-term contracts? Are there differences in SET departments

Research funding is 80% of the School income, resulting in many on fixed term contracts. After 2006 all employees with 4 or more years' service were given permanent contracts in accordance with the fixed term (Prevention of Less Favourable Treatment) Regulations (2002). (Figures 8 and 9)

Figure 8: Percentage of Women on open ended contracts by year and academic cadre (2010- 2012)

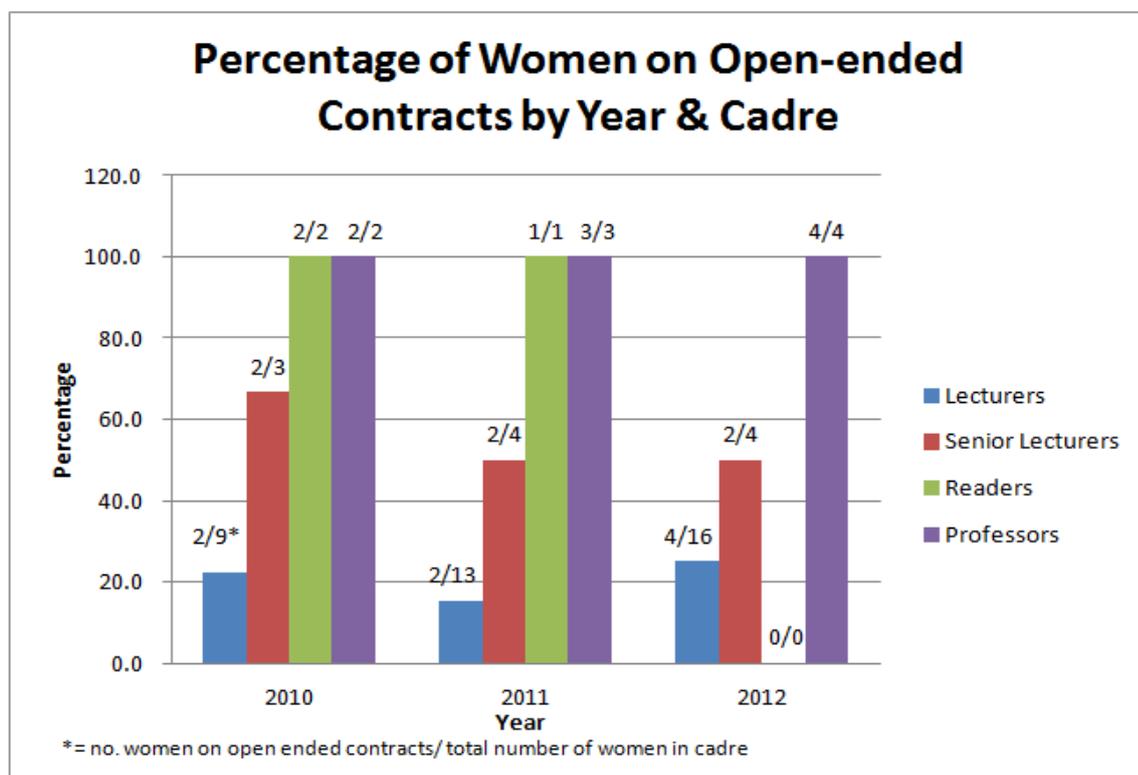
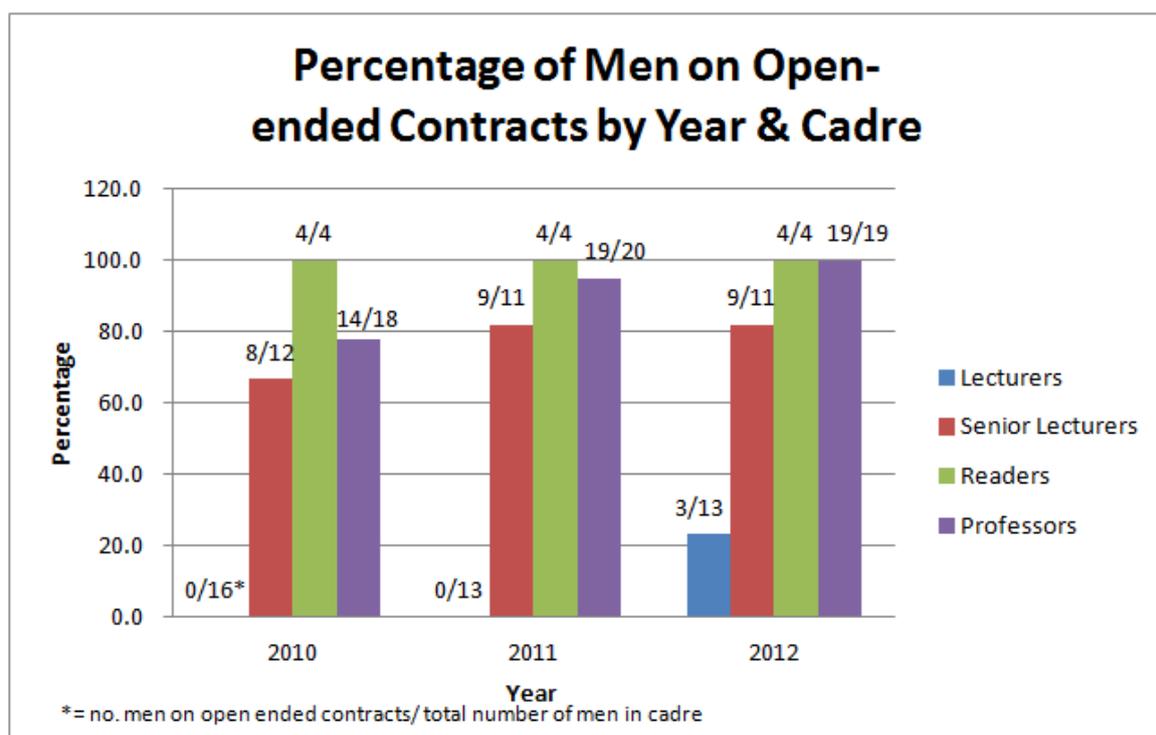


Figure 9: Percentage of Men on open ended contracts by year and academic cadre (2010- 2012)



Strategies to support transition for women and men to open ended contracts are discussed in section 3 and addressed in the Action Plan (actions 2.2, 3.1, 3.2, 3.3, and 4.1).

(iv) Evidence from equal pay audits/reviews. Comment on the findings from the most recent equal pay audit and plans to address any disparities.

Pay in LSTM is governed under a number of National Framework and Governance protocols:

Pay for the **majority of posts** falls within the National HERA grading system, with rates and pay awards negotiated between UCEA and the trade unions. **Clinical Staff** pay for individuals with Honorary Consultant Contracts is determined through standard NHS equal pay reviews.

A small number of staff are above the national pay scales, including **Professorial staff and Senior Professional Corporate Leaders**. In January 2011 the Director of HR was asked to periodically review the balance of pay from a gender perspective for the LSTM remuneration committee. This revealed no discrepancy between women and men.

LSTM’s salary and grading structure (Figure 10) is generally delivering equal pay for work of equal value irrespective of gender. The greatest gender discrepancy is in professorial pay where the average female salary is higher, but has a non-discriminatory explanation based on uneven clinical staff distribution.

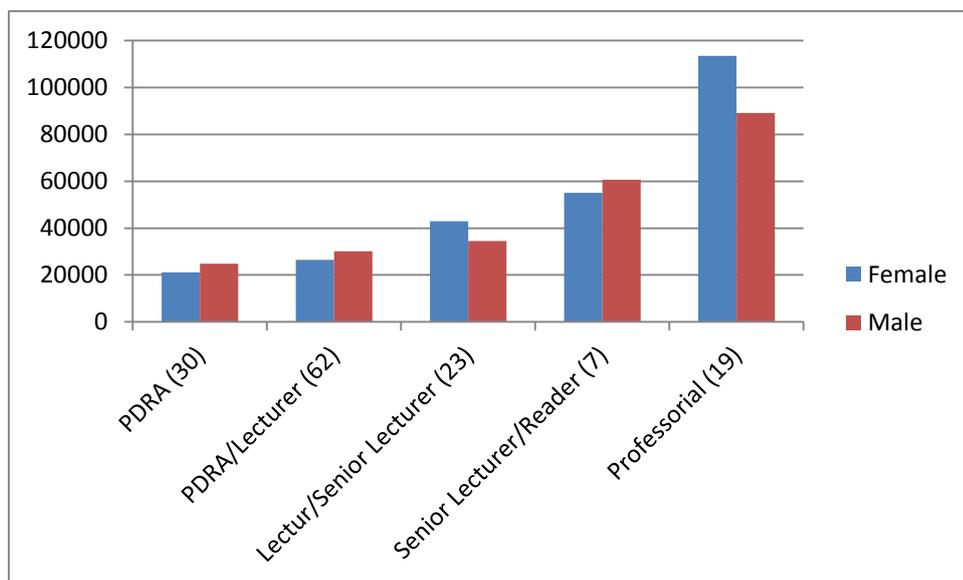


Figure 10. Average male and female salaries in each pay grade in LSTM in 2012-13. (Numbers in parenthesis are the total numbers of staff in each grade).

LSTM will agree and publish an Equal Pay Policy in 2014 and will continue to undertake routine (biannual) audits to ensure that we operate equitably.

Female: male ratio of staff in the Research Assessment Exercise (RAE) 2008 – across the whole university and in SET departments. Comment on any implications of this. For example, does the gender balance of staff included in the RAE 2008 broadly reflect the gender balance across the institution? Are there any differences in SET departments?

In the RAE 2008 we submitted 34 staff (28 male and 6 female), which reflected the gender profile of senior staff. LSTM was returned with the University of Liverpool. For REF2014 we submitted 37 staff (30 male and 7 female) in two joint returns with Liverpool and Warwick universities. An equality impact assessment conducted for REF showed no gender imbalance in our submissions. [1065 words]

3. Supporting and advancing women’s careers: 4500 words in total

Key career transition points

- a) **Provide data for the past three years (where possible with clearly labelled graphical illustrations) on the following with commentary on trends and significant issues, in particular anything relating to gender equality.**
- (i) **Female: male ratio of academic staff job application and appointment success rates – across the whole university and in SET departments. Comment on any implications of this and plans to address any disparities. For example, are women and men equally successful at all stages of the job application process? Are there differences in SET departments?**

LSTM institutional systems enable disaggregation of application and appointment for academic jobs by gender and these data are presented below. A different classification system is used in figures 11 -13 and Table 4 due to the historical information available and the way in which job application information has been previously stored (i.e. by academic, research and research related). Research posts include Pre- and Post-Doctoral Researchers. Academic posts include Lecturers and above.

We do not have data on all stages of the application process and this will be addressed through improved monitoring of staff appointment processes in the Action Plan (1.2). The available data also do not allow us to identify women’s success rate in applying for senior positions. This will also addressed through the new HRMIS module scheduled to be implemented in mid 2014.

Figure 11: Appointments to Advertised Substantive Academic Posts by Year and Sex 2010-2012

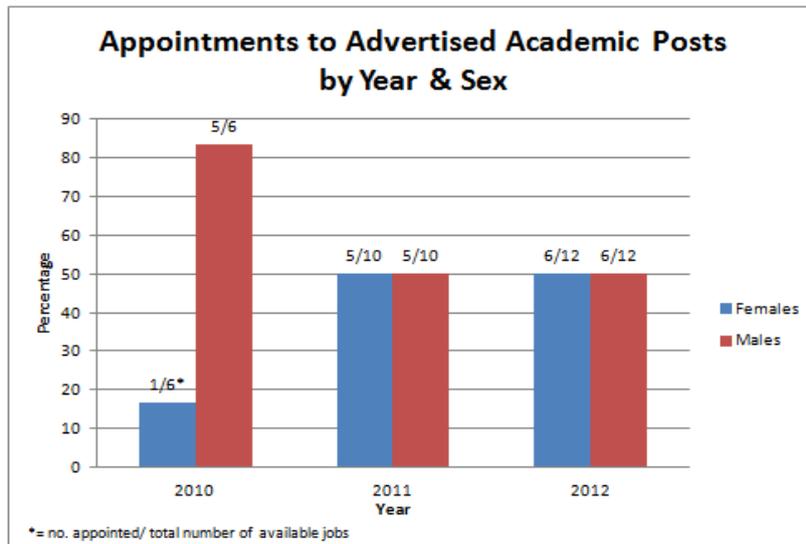


Figure 12: Appointments to Advertised Fixed Term Research Posts by Year and Sex 2010-2012

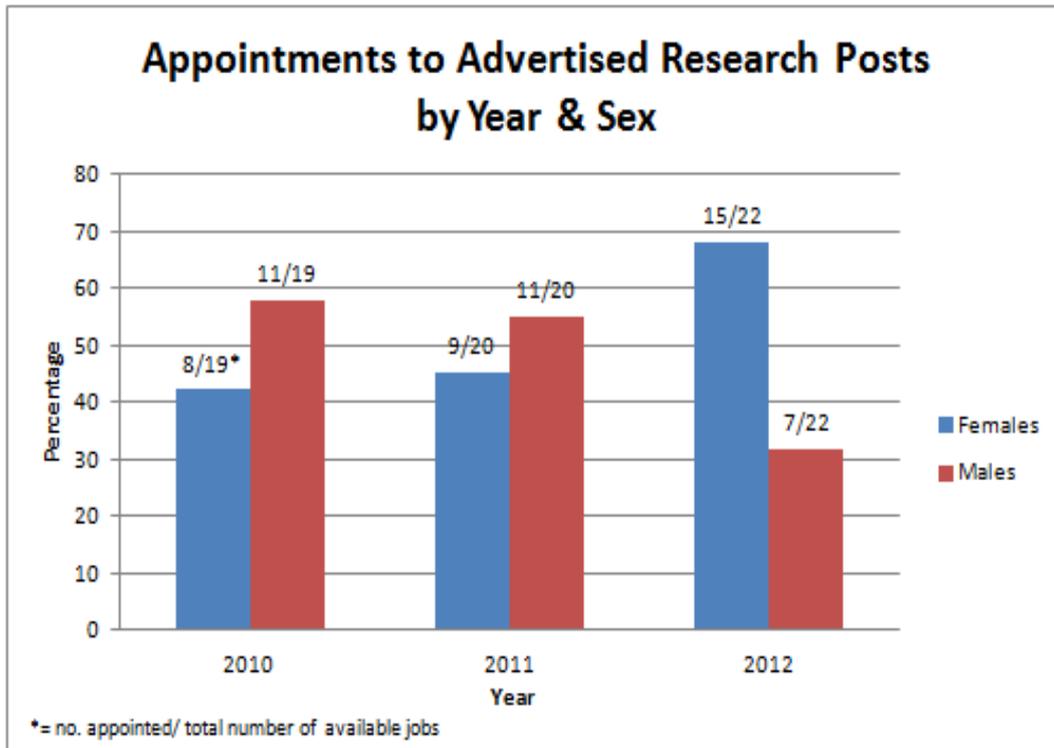


Figure 13: Percentage of Females Appointed to Available Academic and Research Jobs 2010-2012

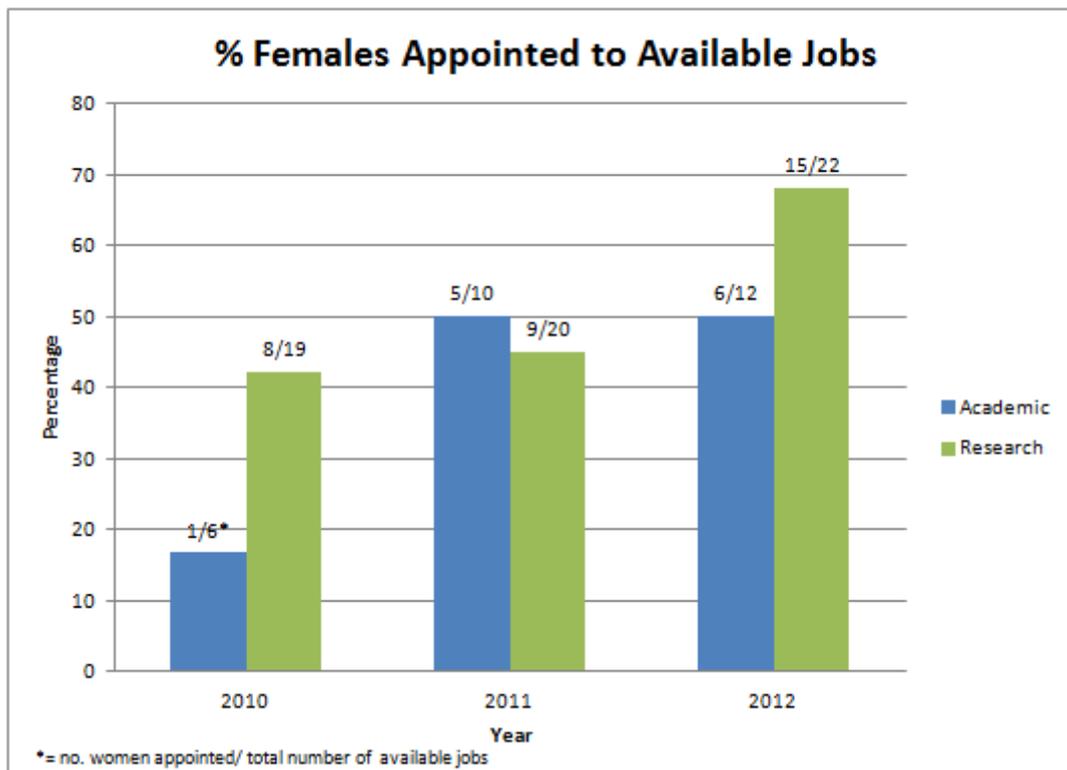


Table 4: Applications and appointments for academic and academic related posts by sex

2010						
Job Type	Vacant Posts	Female		Male		% Female appointed against available jobs
		Applied	Appointed	Applied	Appointed	
Academic	6	22	1	57	5	16.67
Academic Related	10	81	4	78	6	40.00
Research	19	156	8	147	11	42.11
2011						
Job Type	Vacant Posts	Female		Male		% Female appointed against available jobs
		Applied	Appointed	Applied	Appointed	
Academic	10	32	5	36	5	50.0
Academic Related	9	97	8	85	1	88.9
Research	20	48	9	50	11	45.0
2012						
Job Type	Vacant Posts	Female		Male		% Female appointed against available jobs
		Applied	Appointed	Applied	Appointed	
Academic	12	60	6	42	6	50.0
Academic Related	6	11	3	62	3	50.0
Research	22	190	15	108	7	68.2

Figures 11 - 13 and Table 4 show that over the last three years there has been an increase in the number of women applying for new positions within LSTM, and this has been reflected in the number of women appointed to new posts. In particular, there has been a rise in the number of women appointed to research positions at early stages of their careers. Their progression through the system is something the organisation hopes to foster as part of its talent management strategy over the course of the next three to five years. We already have an excellent track record of doing this with existing female staff who can act as role models for progression.

- (ii) **Female: male ratio of academic staff promotion rates – across the university and in SET departments. Comment on any implications of this for the university and plans to address any disparities. For example, are men and women equally likely to be put forward for promotion? Are male and female applicants for promotion equally successful at all levels? Are there differences in SET departments?**

LSTM operates an annual promotion system. All staff are invited to discuss with their line managers whether they should apply for promotion several months before applications need to be made. Staff are able to apply for an incremental jump in salary, a change in grade, or promotion into a different academic cadre. The criteria on which all promotion applications are judged are transparent and published on the LSTM intranet. All staff are able to apply for promotion on an annual basis if they wish to do so. The LSTM promotions panel is made up of senior staff from LSTM, the University of Liverpool and the University of Manchester. Staff who apply for promotion to a different cadre are able to nominate external referees who will be asked to comment on their academic standing. Staff applying for promotion to Reader or Professor submit a written application (as for other promotions) and are also invited to a promotion panel interview. LSTM promotes on merit and does not operate any quota system.

Table 5 overleaf shows the number of women and men applying for promotion and their success rates.

Table 5: Breakdown of applicant pool and success rates by Year, Cadre and Sex

2010							
Starting Cadre	Male				Female		
	Pool	Applied for Promotion	Successful	Pool	Applied for Promotion	Successful	
Lecturer	16	2	12.5%	1	9	1	11.1%
Senior Lecturer	12	0	0.0%	0	3	0	0.0%
Reader	5	0	0.0%	0	2	1	50.0%

2011							
Starting Cadre	Male				Female		
	Pool	Applied for Promotion	Successful	Pool	Applied for Promotion	Successful	
Lecturer	13	1	7.7%	1	13	0	0.0%
Senior Lecturer	11	3	27.3%	3	4	0	0.0%
Reader	4	2	50.0%	2	2	1	50.0%

2012							
Starting Cadre	Male				Female		
	Pool	Applied for Promotion	Successful	Pool	Applied for Promotion	Successful	
Lecturer	13	1	7.7%	1	16	1	6.3%
Senior Lecturer	11	0	0.0%	0	4	0	0.0%
Reader	4	1	25.0%	1	1	1	100.0%

Our data show that most women and men applying for promotion since 2009/10 are successful; and applications of women: men as a proportion of the numbers of academic staff are comparable. Given the current representation of women at senior levels, it may be necessary to take more pro-active steps to encourage eligible staff to pursue promotion, and our Action Plan (2.2) identifies the steps that we will take including clarifying benchmarks for promotion and making a discussion about promotion a core part of the appraisal process.

- b) Describe the policies and activities at the university that support women’s career progression in SET departments in particular at key transition points – describe any additional support given to women at the key career transition points across the university, and in SET departments, such as support for new lecturers or routes for promotion through teaching and learning.

The promotion process identifies two possible promotion tracks as shown in Table 6:

Table 6: Promotion tracks within LSTM

Teaching and Scholarship	Teaching and Research
Lecturer	Lecturer
Senior Lecturer	Senior Lecturer
Reader	Reader
Professor	Professor

These promotion tracks aim to recognise the diversity of potential contributions to LSTM’s mission, including a Teaching and Scholarship focus, and therefore offer different pathways to promotion.

In 2005 LSTM introduced a tenure track system to support and retain excellent staff. This system ensures that those able to contribute to LSTM's mission at the highest level are able to remain at LSTM. Tenure track is available both to new staff entering the institution on a specific tenure track post within LSTM, as approved prior to appointment, and to existing staff by recommendation through the Tenure Track panel of Senior Academic Managers.

Support is given by line managers and senior academics to prepare academic staff for tenure track. This is provided through formal (appraisal/ training needs analysis) and informal methods (on-going discussions/mentorship). On entering the tenure track process, candidates are supported by their line manager and two other senior academics over a 3 year period. Regular meetings take place with the tenure track panel, to support candidates in meeting their objectives. In recognition of gendered caring responsibilities, there is an allowance for an extension of the time period against which tenure track candidates are required to meet their objectives e.g. for maternity/adoption leave, or for caring for a relative with a terminal illness. Achievement criteria are transparent, published internally for teaching, clinical, academic laboratory and non-laboratory staff wishing to follow this career track and guarantee individuals within LSTM an open ended contract on successful completion.

Staff consultation highlights some uncertainty among the PDRA cadre about the process of applying for entry to the tenure track. We will establish a pre-tenure process and review the tenure track system to clarify access routes (this is addressed in the Action Plan see 3.1).

LSTM has a number of policies and support structures to enable staff to progress through these key transition points, which are equally open to women and men. Examples of current support include HEI funds available that target younger staff to develop their research area through seed funding (e.g. Jean Clayton fund). In addition the Research Development Fund aims to support individuals in the pursuit of larger grants, the attainment of which enables them to progress through the tenure track system.

However, it is recognised that additional action may be needed to ensure that suitably qualified candidates are pro-actively identified and encouraged to apply for promotion. Our Action Plan identifies several areas for improvement to maximise opportunities for women and men to navigate the key transition points (see 3.2, and 4.1).

Career development

- a) **Describe the policies and activities at the university that support women's career development in SET departments.**
- (i) **Researcher career support and training – describe any additional support provided for researchers at the early stages of their careers, such as networks and training.**

LSTM recognises that appropriate training and development is an essential part of the on-going success of the organisation. There are two types of training:

1. Training of all staff to meet legal obligations with specific respect to the Health and Safety at Work Act (1974);
2. Staff-specific training and development available to all staff. Training needs are formally identified on an annual basis through the appraisal process. A core training and development budget can be applied for by all staff to maintain standards of performance and to enhance their career potential and personal development. Training resources are also identified and utilised from large scale grants for activities directly related to the delivery of these programmes.

LSTM is committed to equality of opportunity regardless of gender, and positively supports access to training for all staff. However, consultation has shown that further information on prioritising funding allocation for training would be welcomed by staff and this would contribute towards ensuring that more junior cadres of staff, amongst whom women are over-represented, improve access to training in line with the requirements of their post and career development needs (see Action Plan 3.3).

In 2012 LSTM invested in a programme of one to one and group management development training for both academic and administrative managers, which aims to foster further strategic and creative thinking and prepare staff for more senior management roles. To date, 16 males and 18 females have received training.

LSTM has an active PDRA association, with representation on our AS SAT. This association is used to disseminate information to and from the PDRA cadre and to develop specific activities aimed at improving the career prospects of this group.

The multi-country, multi-institutional collaborative nature of our work has led to the development of a cadre of project managers who have both research and high level administrative expertise. This group, who are almost exclusively women, will play a key role in the next phase LSTM's development. However the hybrid nature of their activities and experience mean that they do not fit neatly into the current tenure track process. Clarification of their path for career progression is addressed in Action Plan 2.1.

(ii) Mentoring and networking – describe any mentoring programmes, including any SET-specific mentoring programmes, and opportunities for networking. Comment on their uptake and effectiveness. Are women encouraged to participate in networking opportunities?

Several formal and informal mentoring systems exist in LSTM. For example, LSTM delivers a Professional Certificate in Supporting Learning, recognised by the Staff and Educational Development Association, in which all participants are assigned an academic mentor to advise on their professional development in L&T. This is mandatory for all new staff with formal teaching assignments in LSTM. Many of these mentoring relationships continue informally beyond the lifetime of the course.

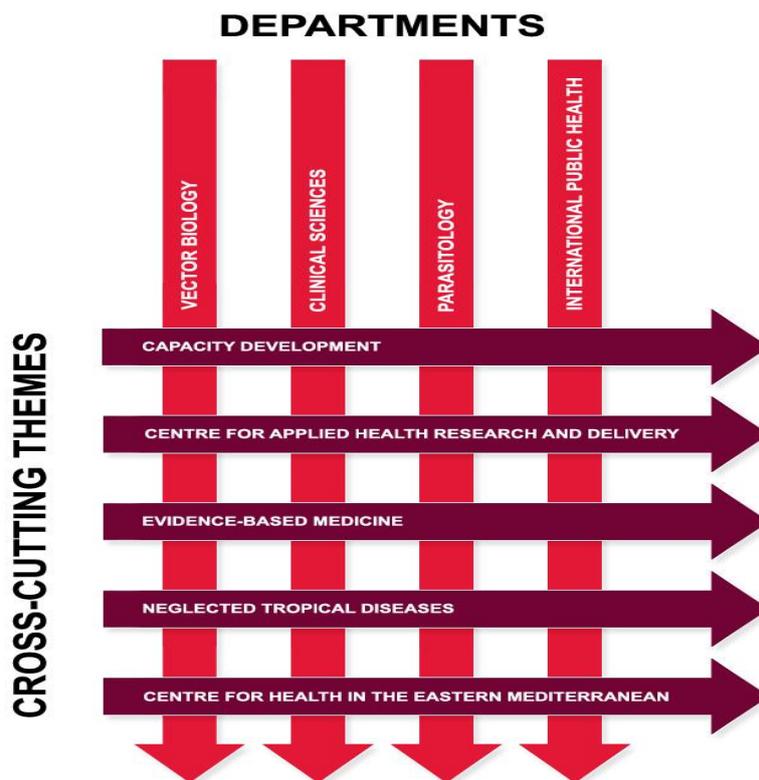
In 2013 LSTM established a pilot mentorship scheme for PDRA staff in one department. This pairs a PDRA with a senior member of staff, who is not their line manager. The scheme was established after a formal consultation through the PDRA association. After a 9 month trial period the scheme will be modified in line with findings from the pilot and good practice from other organisations, and extended to all departments. We note in the interim that the informal mentorship scheme that has operated for some time within LSTM will continue and individuals from any department specifically requesting a mentor will be accommodated.

Developing, implementing and assessing an HEI wide mentoring process aimed at PDRAs is an area of development (see Action Plan 4.1). Given our relatively small number of senior women, we will explore possibilities to also identify mentors external to LSTM to avoid over-burdening senior women, although our consultation with the PDRA cadre suggested that the vast majority (>80%) felt that the gender of the mentor was irrelevant and interest in mentoring, international networks and ability to advise on work life balance were more essential criteria.

Both female and male academic staff and PhD students are encouraged to participate in networking within LSTM. Research Committee, a LSTM wide committee, aims to foster further multidisciplinary and cross Faculty working. Through the consultation process research staff have requested further opportunities for networking including further cross departmental seminars and support on “hot tips” for writing grants for particular funders from colleagues who hold active grants with the funder (e.g. Wellcome Trust, Medical Research Council) which Research Committee will deliver (see Action Plan 3.2). Other initiatives which the Research Committee has instituted to facilitate networking across cadres and disciplines include “multidisciplinary research speed-dating” events, allowing early career male and female researchers to meet a number of established researchers for 10 minute one-to-one exchanges. The success of these is currently being monitored and early feedback has been very positive.

In addition our 5 cross cutting theme areas (shown in figure 14) promote active engagement of staff from across the different Faculties and SET departments, supporting networking, multidisciplinary approaches and joint grant horizon scanning. For example the Centre for Applied Health Research Delivery (CAHRD) works as a virtual centre bringing together individuals and disciplines to work together across the full range of applied health research encompassing operational, implementation, and health systems research.

Figure 14: Cross cutting themes support networking and cross Faculty working within LSTM



There are many external opportunities for networking and these are described in section (b) below.

Senior Staff as Role Models: As the panel noted in our original application, LSTM’s reputation in terms of women experts is excellent, but they would like to know how we are making the most of this and the support these women have received to get to these positions. The volume, quality and approachability of senior LSTM female staff inherently acts as a role model for others and many of these senior staff already act as formal and informal mentors to other staff both inside and outside LSTM. They engage in activities that range from working with schools highlighting career choices; to engaging and mentoring younger staff particularly at PDRA and tenure track level and through supporting and encouraging staff to apply for higher level promotions. An obvious example of how well this has worked is with Professor Hilary Ranson, who joined LSTM 12 years ago as a tenure track lecturer (her first substantive appointment) and is now one of LSTM’s 4 Heads of Department with an international reputation recognised in 2013 by a Wolfson/Royal Society staff retention award.

While female role models are important, the overall culture in LSTM is one of collaboration, mutual support and multi-disciplinary working to solve major problems that are critical to improving health. This is not standard in HEIs and the impact should not be under-estimated, being a major factor in staff satisfaction and retention. This ethos is gender independent and provides a supportive environment to underpin research excellence. This has allowed senior female staff to successfully raise families, deal with individual critical illness and family issues and still retain their reputation and that of the institution with support from staff of all cadres and both genders.

b) **Describe any activities at the university that raise the profile of women in SET generally and also help female staff to raise their own profile such as:**

(i) **Conferences, seminars, lectures, exhibitions and other events.**

All staff are expected to take part in conferences, seminars, lectures and other relevant events. As a global research institution it is important that all staff have visibility and are able to present their activities and

network at the highest levels. We aim to ensure this by instilling in all staff a culture of routine quality presentation from the PhD level and above. Our research groups have routine laboratory meeting where all individuals are encouraged to present their findings. PhD students have to formally present their work on an annual basis at an external venue attended by the majority of LSTM academic staff and associated with a social event to encourage participation and networking. While these efforts are not gender specific it ensures that all staff independent of gender or their predilection for self-promotion are encouraged to raise their profiles.

We have regular departmental and LSTM wide seminar series and women are well represented as speakers. We also have external seminar series, organised through LSTM that include both internal and external high profile women speakers. For example: LSTM's Economic and Social Research Council Seminar Series on Gender Mainstreaming in International Health, showcased women academic and policy makers from a number of countries. We will showcase women's high profile activities in the Faculties through our Athena SWAN webpage, which is under development (see Action Plan 5.3).

LSTM supports individuals to present their work at conferences and regularly provides female speakers at high profile events. Collation of indicators of esteem for the recent REF provide numerous examples of key note addresses at major international conferences given by all LSTM senior female staff.

(ii) Providing spokeswomen for internal and external media opportunities.

Women are actively encouraged to speak with internal and external media. For example Prof Hemingway was interviewed on Radio Merseyside and Women's hour on Radio 4 as part of International Women's Day 2013 about her achievements as a scientist and a mother. Prof Hilary Ranson was interviewed in April 2013 on what her recent Wolfson Award would mean for LSTM's work on malaria. Dr Penny Phillips-Howard was interviewed by journalists interested in her research testing strategies and technologies to support menstruation (e.g. moon cup) to enable rural Kenyan girls to stay at school during their periods, generating web-based communications through Bill and Melinda Gates Foundation, and other online web-sites.

(iii) Nominations to public bodies, professional bodies and for external prizes.

LSTM is proud of the achievements of its women scientists. For example Prof Hemingway has a CBE for services to the Control of Tropical Disease Vectors, was nominated as one of the 100 top most influential women in the UK, is a Fellow of The Royal Society, the UK Academy of Medical Sciences and has received international recognition by being elected to the American National Academy of Sciences. Prof Hilary Ranson is an invited member on advisory panels for international consortia on malaria control including Roll Back Malaria, Multilateral Initiative on Malaria, Tropical Disease Research, Epicentre and VectorBase, and the Infection and Immunity Board of the Medical Research Council. Prof Imelda Bates is Vice-Chair of the International Committee of the Royal College of Pathologists, a member of British Medical Association, the British Society for Haematology, the Royal Society of Tropical Medicine and Hygiene, the International Society for Blood Transfusion, and the African Society for Blood. Professor Nynke Van Der Broek is the Director of the Royal College of Obstetrics and Gynaecology international office in Liverpool. Dr Sue Assinder won the 2010 Peter Wildy Prize for Microbiology Education and has served on the Education Division of the Society for General Microbiology (Chair), the American Society for Microbiology International Education Committee, the Advisory Board of the Higher Education Academy UK Centre for Bioscience, the Society of Biology Education, Training & Policy Committee and the BBSRC Bioscience Skills and Careers Panel. Dr Sally Theobald is an invited member on the Commission of the Social Determinants of Health Gender and Women's Health Knowledge Network.

Female staff frequently advise the World Health Organisation for example on blood transfusion and anaemia, and capacity strengthening (Imelda Bates); maternal death audits and M&E of maternal health (Nynke Van Der Broek); developing guidance on Antiretroviral therapy and HIV counselling and testing (Miriam Taegtmeier); implementation research (Sally Theobald); gender and health (Sally Theobald and Rachel Tolhurst) adolescent reproductive health (Angela Obasi).

Organisation and culture

- a) Provide data for the past three years (where possible with clearly labelled graphical illustrations) on the following with commentary on trends and significant issues, in particular anything relating to gender equality.
- (i) Female:male ratio of Heads of School/Faculty/Department – across the whole institution and in SET departments. Comment on the main concerns and achievements and how the Action Plan will address them. For example, are women and men appropriately represented at this level? Are there any differences in SET departments?

Within the directorate LSTM has a Director (female) and a Deputy Director (male). We have two Faculties both headed by men and within these are four SET departments: two are headed by men and two by women. Within this scenario women are well represented at the senior level i.e. five senior men and three senior women.

- (ii) Gender balance on the senior management team at university level. Comment on the numbers of men and women in senior management and plans to address any disparity.

LSTM has a senior management group (SMG) and a management committee. The gender balance in LSTM's senior management team is good.

The Senior Management Group (2 women, 4 men) is comprised of:

Prof Janet Hemingway	Director of LSTM
Prof Stephen Ward	Deputy Director of LSTM
Prof Alister Craig	Dean of Biological Sciences
Prof David Laloo	Dean of Clinical Sciences and International Public Health
Mrs Chris Greenway	Director of HR
Mr Einion Holland	Director of Strategic Operations

Table 7: Constitution of Management Committee (7 women and 7 men)

Director (Chair)	Professor Janet Hemingway
Deputy Director (Deputy Chair)	Professor Stephen Ward
Director of Strategic Operations	Mr Einion Holland
Director of Education	Dr Susan Assinder
Director of Human Resources	Ms Christine Greenway
Dean of Clinical Sciences and International Public Health	Professor David Laloo
Dean of Biological Sciences	Professor Alister Craig
The Research Co-ordinator	Dr Sally Theobald
Head of International Public Health Department	Professor Imelda Bates
Head of Clinical Sciences Department	Professor Stephen Gordon
Head of Parasitology Department	Professor Mark Taylor
Head of Vector Biology Department	Professor Hilary Ranson
Elected by SSF	Mr Daniel Bennett
Elected by SSF	Dr Angela Obasi

- (iii) Gender balance on influential committees at university level. Comment on the main areas of concern and plans to address them. For example, are women and men appropriately represented on senior decision-making committees? How do you avoid committee overload where numbers of women are small? How are vacancies filled and women encouraged onto committees, especially where turnover is low? Are the positions advertised?

As shown in Table 8 overleaf: there are 11 key HEI wide committees at LSTM. The majority of these are chaired by women (see Figure 15). Committee membership represents a balance between individuals who have to be there due to their role and a balance across different areas. Overall there is fair representation of women and men in committees although women are over-represented in chairing positions, against levels of seniority (see section below on allocation of roles).

Table 8: Influential committees: Chair and membership by sex

Committee	Chair	Membership
Senior Management Group	Prof Janet Hemingway	(2 women and 4 men)
Management Committee	Prof Janet Hemingway	(7 women and 7 men)
Learning and Teaching Committee	Dr Susan Assinder	(5 women and 6 men)
Research Committee	Dr Sally Theobald	(4 women and 8 men)
Ethics Committee	Dr Angela Obasi	(7 women and 10 men)
Equal Opportunities Committee	Mrs Christine Greenway & Prof Stephen Ward	(4 women and 4 men)
Health, Safety and Environment Management Committee	Mr Daniel Bennett	(4 women and 9 men)
Information and Communication Technology Committee	Ms Julia Martin	(3 women and 5 men)
Governance Oversight Committee	Prof Feiko ter Kuile	(7 women and 9 men)
Well Travelled Clinics Board	Prof David Laloo	(2 women and 2 men)
Animal Welfare and Ethical Review Board	Prof Janet Hemingway	(2 women and 8 men)

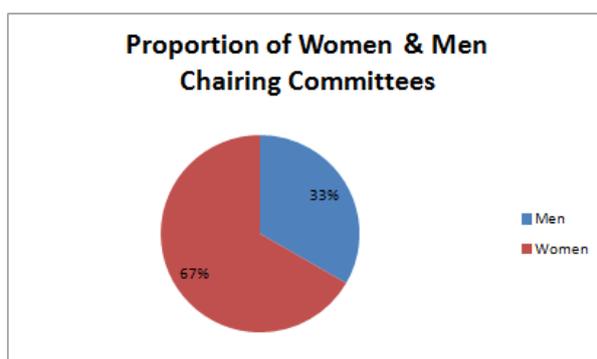


Figure 15: Proportion of Men and Women Chairing Significant Committees

on and culture

- (i) Transparent workload models – 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 taken into account at appraisal and in promotion criteria. Comment on the rotation of responsibilities e.g. responsibilities with a heavy workload and those that are seen as good for an individual’s career.**

Allocation of core tasks, such as chairing committees is overseen by the Director and Senior Management Group. Currently senior staff are able to assess balance of workload and review this regularly and make adjustments where necessary and our Action Plan commits to regular review of this (Action Plan, 5.2). If someone is required to take over a new role, their other roles are reviewed and where necessary adjusted. For example when Prof Alister Craig became a Dean, he stepped down from chairing Research Committee which was taken over by Dr Sally Theobald who was no longer required to act as Director of Masters of International Public Health.

Equality and Diversity Training: We have an Equal Opportunities (EO) Committee, policies and process and will improve awareness of equality and diversity amongst staff through encouraging uptake of EO e-learning modules and through active communication across all staff (Action Plan, 5.1). Twelve of LSTM’s senior academic staff on Clinical HCC contracts have mandatory annual EO training and certification. All staff are actively encouraged to undertake the online Learning Equality and Diversity course (<http://elearning.acac.org>). We are currently focusing on ensuring that all staff who line manage or interview have had training to help reduce bias. Formal EO training for interview chairs was last provided three years ago through mandatory management training sessions. These need to be repeated as younger staff are promoted to more senior post and start to take on this role.

- (ii) Publicity materials, including the university’s website and images used.**

LSTM is currently upgrading and improving its website, under the direction of the new Director of Communications, Diderik Van Halsema. Diderik has met with the SAT and will review the website from an Athena SWAN perspective and establish an Athena SWAN webpage, which will highlight experiences and achievements of women scientists (Action Plan, 5.3).

Flexibility and managing career breaks

- a) **Describe the policies and activities at the university that support flexibility and managing career breaks in SET departments.**

- (i) Flexible working – describe how eligibility for flexible and part-time working is advertised to staff and the overall uptake across the university. What training is provided for managers? How is the policy monitored and how successful it has been?**

LSTM has a Flexible Working Policy to request flexible working which allows staff members to formally request a change to their contractual hours (either to work part time, or load their hours in a different way across the week to meet their need to care for dependants).

Line managers and HR managers work closely to assess the viability of part time working, and how to accommodate any requests made; over the last 5 years the vast majority of these requests have been accommodated. Recommendations are then passed to the Senior Management Team for approval. Uptake and success rates of this policy are not formally collated and monitored and this is addressed in the Action Plan (6.1). Consultation has shown that flexible working is appreciated by staff at LSTM, but that researchers and managers would like more information on the part-time working policy, which is reflected in the Action Plan (6.1).

- (ii) Parental leave (including maternity, paternity, and adoption leave) – how many women have returned full-time and part-time? How is teaching and research covered during parental leave?**

What support is given after returning from parental leave or a career break? What funding is provided to departments to support returning staff?

Clear policies and procedures are in place for maternity, paternity and adoption leave and this is appreciated by staff. There is a policy enabling staff to work Keep in Touch (KIT) days for payment or holiday in lieu during their leave without bringing the leave to an end. Most staff report feeling well supported in preparing and going on maternity/paternity/adoption leave. Some staff have been granted unpaid parental leave to cover child care for young children in the summer holidays supporting work-life balance. Over the last 3 years >95% of staff have returned to work after maternity leave.

However the following issues have emerged with respect to maternity/adoption leave cover.

- Most cover is funded from research grants in line with legal requirements and the funder's policies, with core funding providing support where applicable. While maternity leave and pay for all staff are standardised LSTM's business model inevitably means that there are differences in the way that maternity leave replacement staffing is covered.
- There is a need to better document how cover, if provided, is funded and organised. In our Action Plan we will do an analysis of this over the past 3 years and continue to assess arrangements for on-going leaves and assess the options for risk sharing for costs.
- As there is very limited core funding available to support cover, we will have on-going dialogue with LSTM's major funders to better understand their policies and procedures, and where appropriate advocate for additional cover.
- In contexts where staff are not replaced, there is a need to ensure that there is a clear and transparent process for allocating responsibilities for their work and have this agreed and approved at a senior level.
- There is also a need to establish a clear process for funding KIT days

These important issues are addressed in the Action Plan (6.3).

(iii) Provision to support childcare and how it is communicated to staff. What is the take up? How will any shortfalls in provision be addressed?

LSTM provides staff with the opportunity to purchase childcare vouchers through a salary sacrifice scheme, which is communicated to staff at induction. This scheme allows for working parents to gain tax relief on the vouchers they purchase, making childcare more affordable to them.

Forty employees (26 female and 14 male) currently use the childcare voucher scheme. Liverpool is relatively well provided for in nursery placements with > 15 nurseries operating within a mile of LSTM. As Liverpool is a small city, many staff commute in to the city and use nursery places closer to their home.

Staff report that international travel poses a number of caring challenges for both young children and elderly relatives. Where possible LSTM adjusts individuals work schedules to accommodate reduced travel. However, as an institution dedicated to research and training in tropical medicine it is not always possible to eliminate the need for travel. Mentoring on strategies for dealing with these challenges takes place through pre-existing networks (for example staff may share intelligence on health and security risks for staff travelling with children in a particular country context). This works well given the extensive travelling undertaken by many LSTM staff. However, there is a need to improve and extend access to these informal networks, particularly for new staff (Action Plan 5.4).

On the whole there is a feeling that LSTM provides both a breast feeding and child friendly working environment. For example staff report flexibility in enabling parents to attend meetings occasionally accompanied by children, and a flexible approach to illness of dependents and the need to take time off at short notice.

(iv) Work-life balance – describe the measures taken by the university to ensure that meetings and other events are held during core hours and to discourage a long hours culture.

Meetings are arranged between 9am-5pm in recognition of the need to promote work-life balance. Occasionally research meetings with international research partners (by Skype) are held outside these hours due to time zone differences. However, amongst academics, as in most universities, there is a culture of working long hours due to performance expectations and consequent heavy workloads. Currently some academic staff access informal mentors to discuss strategies to support prioritisation and workload management. Plans to extend this mentoring are covered in the Action Plan (4.1). [4076 words]

4. 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 that have not been covered in the previous sections. Include any other relevant data (e.g. results from staff surveys), provide a commentary on it and indicate how it is planned to address any gender disparities identified.

A major benefit of LSTM recently obtaining HEI status will be our ability to install and operate a comprehensive Human Resources Management Information System in a purpose built format that meets the needs of LSTM. This is not a minor undertaking. We have spent the last two years developing the specification for this system, selecting the operating system (Midland Trent) and putting in place a schedule of module introductions. This system over the next two years will allow us move over to an entirely electronic system, incorporating payroll, training, leave authorisation and monitoring, sickness, overseas travel, promotion, job applications and processing etc. The first of these modules, payroll, went live in September 2013. Further modules will follow in the first quarter of 2014. The system will allow accurate monitoring and reporting of a raft of indicators that will allow us to assess our current position and monitor improvements over time, highlighting key issues to female recruitment, progression and retention. There is support for this process at the highest level within the organisation and that is signalled by the LSTM Director chairing the AS steering group, membership of the group drawn from all LSTM departments and cadres and reporting of the AS group directly into LSTM's Management Committee, the main decision making centre of LSTM. [214 words]

5. Action Plan

Provide an Action Plan as an appendix. An Action Plan template is available on the Athena SWAN website.

The Action Plan should be a table or a spreadsheet comprising actions to address the priorities identified by the analysis of relevant data presented in this application, success/outcome measures, the post holder responsible for each action and a timeline for completion. Also include in the Plan how the university will encourage SET departments to apply for awards.

The Plan should cover current initiatives and the university's aspirations for the next three years.

We note here that our ability to undertake a number of the actions that require us to track information in order to identify issues and monitor progress will be dramatically improved as we develop, validate and roll out sequential modules of LSTM's new Midland Trent Human Resources Management Information System. We are already 24 months into the planning cycle for implementing this system and the first (payroll) module was fully implemented in September 2013. The rate at which we can implement a number of our actions within the AS Action Plan is inherently linked to the module roll out programme which has already been agreed internally. As we anticipate having all modules of this system fully operational within the next 20 – 24 months this accounts for a significant amount of the apparent 'front loading' of our actions for the three year period.

The move from a mixed paper and externally hosted electronic information management system to an in house electronic system will also trigger a major re-structuring of LSTM's HR department, as we streamline process and undertake more strategic business support. This will involve a minor net increase in staff. This

will happen in the first half of 2014, when direct support for the AS process will be incorporated into the job description of the new Deputy Director of HR. Until this time LSTM's Director of HR (Chris Greenway) will fulfil this role with support from her junior departmental staff. Staff operating the HRMIS system, which will integrate seamlessly with our finance, research and student database systems will sit within the HR team, hence many of the AS actions by necessity sit within this expanded HR team.