

# ATHENA PROJECT



## Occasional Paper No 4

### UK ASSETs 2003 and 2004

A review of the career progression, experiences, and perceptions of 6,500 plus scientists working in higher education and research, who took part in the 2003 and 2004 Athena Surveys of Science Engineering and Technology (ASSET)

Based on papers delivered by Caroline Fox (Programme Manager Athena Project) at the annual meeting of the American Association for the Advancements of Science in Washington in February 2005 and by Caroline Fox and Jan Anderson (University of East Anglia Survey Office) at the Fourth European Conference on Gender Equality in Higher Education in Oxford August 2005.

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## **UK ASSETs 2003 and 2004**

### **THE CAREER PROGRESSION EXPERIENCES AND PERCEPTIONS OF 6,500 PLUS SCIENTISTS**

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#### **INTRODUCTION**

Over 6,500 UK scientists in forty five higher education and public sector research organisations took part in Athena's surveys of science, engineering and technology (ASSET) in 2003 and 2004.

This paper brings together some key findings from ASSET<sup>1</sup> and makes some comparisons between the experiences and views of those in higher education and in research council employment. There are differences, as shown by the perceptions and realities of career progression for the men and women who took part in ASSET. However, the differences between men and women are more important than the differences between the two sectors. The results from the 2003 and 2004 surveys are being used locally, and at national level, to raise awareness of the issues of career progression for women in SET, and as the basis for informed debate and action planning.

The findings from ASSET highlight the differences between women's and men's progress in, and enjoyment of, their careers and their rewards. The problem is not the women scientists, the problem is why science and research, the way they are organised, and their work ethos and culture fail to retain, and or actively deter the women who were initially attracted to them as a career. However, women scientists cannot be excluded from the solution; they must be engaged in its planning and its implementation. The issues flagged by ASSET are not unique to the UK. Throughout Europe for women in SET 'the higher the fewer and the more lonely' is the norm, but it is one that science and UKplc cannot afford to continue. ASSET findings:

- are evidence of the existence of barriers, both structural and individual, to women's career progression
- help in the identification of priorities for action
- provide benchmarks against which organisations can measure their progress

The findings point up the organisational processes and practices, changes to which could make a difference to women's career progression, to women's visibility and to ensure that the satisfaction, recognition and rewards that women receive match their contributions. They also suggest that much still needs to be done before women perceive themselves to have the same level of support, encouragement, development opportunities, and recognition as their male colleagues.

From ASSET it is clear that increasing the supply of well-qualified graduates, PhDs and post-docs will not, on its own, solve the problem, if many of the women then 'languish' on fixed term contracts at the bottom of the career ladder with little chance of progressing, while their male colleagues are encouraged to 'go for it'. It is not surprising if many, and perhaps some of the brightest and best output of UK science faculties, are not content at such a career prospect and

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<sup>1</sup> Detailed findings from the ASSET 2003 and 2004 surveys can be found in Athena Reports 26 and 27 and their supporting statistical annexes on [www.athenaproject.org.uk](http://www.athenaproject.org.uk)

vote with their feet. The women in the survey were as academically active as their male colleagues, but they did not make it to the top in the numbers that reflect their contributions to science. And those who get to the top still feel they are less valued than their male peers do, and they feel that women in general are disadvantaged in terms of salary, promotion and access to career development.

Many of the changes that SET departments have successfully introduced were not expensive, but required understanding and planning. In retrospect, and to those who made them, the changes now seem simple and just common sense, they are 'how we do things round here' but, for them 'the really big problems still need to be tackled'.

## **THE ASSET SURVEY**

The survey was hosted by the Institute of Learning and Research Technology at Bristol University, and the survey questionnaire was developed and analysed by the Survey Office at the University of East Anglia.

The ASSET web survey was the first of its kind in the UK. It offered a way to check the evidence from Athena's previous work against the perceptions and experiences of the wider UK SET academic and research community and to make sure that Athena continues to address today's not yesterday's issues.

6,726 scientists (over 60% male) gave twenty minutes of their time to complete the survey. They were asked about their:

career pathways – how they got to where they are now, length of time with their current employer, interview panel composition, promotion achieved within organisation or by external application, encouragement to apply for senior posts, career breaks and difficulties returning

responsibilities and participation – their roles beyond teaching and research; committee memberships at institution/company and departmental levels; external activities and contributions to professional societies

aspirations and expectations – their ambitions; the extent to which these had changed, critical career success factors and knowledge of promotion criteria and procedures

perceptions – the value departments place on an individual's contributions; equality of opportunity on promotion, salary, access to career development, to departmental funds, office and lab space, administrative and office support

The universities and research councils who participated in ASSET made a commitment to use the results of ASSET to work towards the achievements of Athena's aims, and to:

measure their progress and compare their position against others

contribute to the development of their action agenda

raise awareness of career progression issues for women and men in science

inform the science community, heads of research groups and departments

report to senior managers, governing bodies and equal opportunities committees and recommend action for improvement

## RESPONDENTS PROFILE

The distribution across grades differed between higher education (HE) and research council institutions (RI), with a much greater concentration amongst the lower grades within RIs.

Respondents included:

130 female professors (16% of all professors)

11 female research directors (19% of all research directors)

Response rates ranged from 5% to 56%

The majority of respondents were British (79%) 7% European and 6% the 'rest of the world'

In HE 6% of respondents came from ethnic minorities RI 7%

### Higher Education (HE)

The survey questionnaire was completed by 4,282 academics, 1,535 women (36%) and 2,747 men (64%) working in 40 Universities:

Aberystwyth, Bath, Birkbeck, Birmingham, Bolton, Bristol, Cambridge, Cardiff, Coventry, Cranfield, City, East Anglia, Edinburgh, Glasgow, Heriot-Watt, Hertfordshire, Kingston, Imperial College London, Leeds Metropolitan, Leicester, Loughborough, Luton, Napier, Nottingham, Open University, Oxford, Oxford Brookes, Plymouth, Queen Mary London, Reading, Royal Holloway, St Andrews, Sheffield, Stirling, Southampton, Strathclyde, Sunderland, Sussex, University College London, Wolverhampton

### Research Council Institutes (RI)

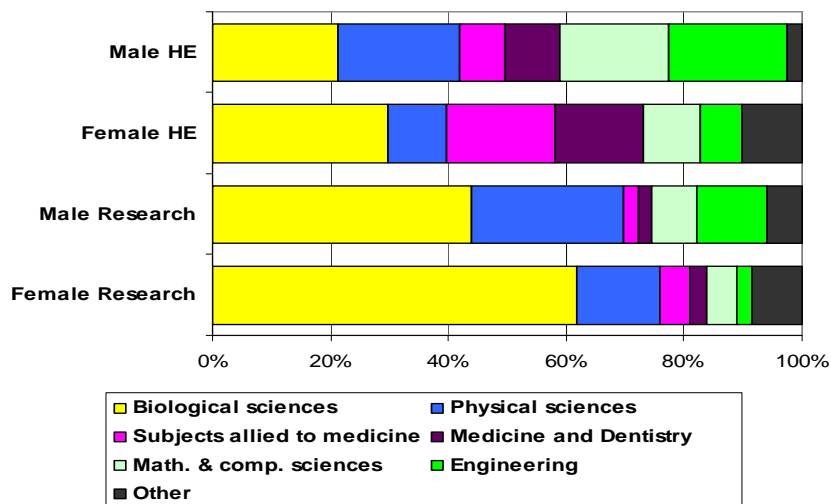
The questionnaire was completed by 2,422 research staff, 970 women (40%) and 1,474 men (60%) working for:

Biotechnology and Biological Sciences Research Council (BBSRC)  
Council for the Central Laboratory of the Research Councils (CCLRC)  
Medical Research Council (MRC)  
Natural Environment Research Council (NERC)  
Sanger Institute- Wellcome Trust

## RESPONDENTS - SUBJECT AREAS

Participants were asked to give the subject of their highest degree or qualification. The biological scientists were 49% of all respondents, and had the highest proportion of women. The other disciplines were dominated by men:

Biological sciences	1196 RI respondents, women 48%
	1050 HE respondents, women 46%
Physical sciences	496 RI respondents, women 26%
	709 HE respondents, women 23%
Engineering	191 RI respondents, women 12%
	650 HE respondents, women 18%
Mathematical and computer sciences	159 RI respondents, women 30%
	645 HE respondents, women 25%



## RESPONDENTS - LEVEL OF APPOINTMENT

HE respondents were classified into four main career levels:

Professor	800	(19%)	670 men	130 women
Senior Lecturer/Reader	1,388	(32%)	956 men	432 women
Lecturer	1,158	(27%)	688 men	470 women
Post doctoral	648	(15%)	295 men	353 women

In RI the equivalent levels were

Research Director	59	(3%)	48 men	11 women
Principal Scientist	328	(13%)	263 men	65 women
Senior Scientist	633	(26%)	478 men	155 women
Scientist	1,380	(56%)	651 men	729 women

Respondents who did not fit into these main grades were categorised 'Other'

HE	288	(7%)	138 men	150 women
RI	44	(2%)	34 men	10 women

The representation varied across the career levels:

### Professors and Research Directors

The 59 directors represented 2.4% of the RI survey respondents  
 The 800 professors " 19% of the HE survey respondents  
 The 11 RI women (19% of the directors) were 1% of female respondents  
 The 130 HE women (16% of the professors) were 9% of female respondents  
 The 48 RI men were 3% of male respondents.  
 The 670 HE men were 24% of male respondents

### Senior Lecturers/Readers and Principal Scientists

The 328 principal scientists represented 13% of the RI survey respondents  
 The 1,388 sen lecturers/readers " 32% of the HE survey respondents  
 The 65 RI women (7% of the principal scientists) were 18% of female RI respondents  
 The 432 HE women (31% of the senior lecturers) were 28% of female respondents  
 The 263 RI men were 18% of male respondents  
 The 956 HE men were 35% of male respondents

**Lecturers and Senior Scientists**

The 633 senior scientists represented 26% of the RI survey respondents  
 The 1,158 lecturers “ 27% of the HE survey respondents  
 The 155 RI women (16% of the senior scientists) were 7% of female RI respondents  
 The 470 HE women (41% of the lecturers) were 31% of female HE respondents  
 The 478 RI men were 32% of male respondents  
 The 688 HE men were 25% of male respondents

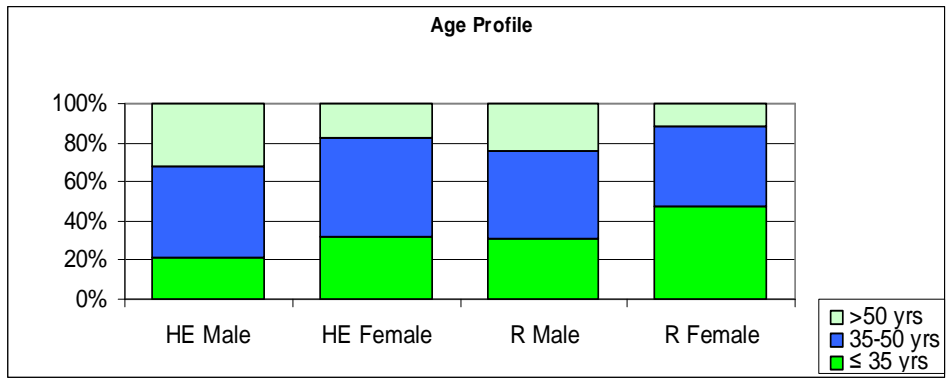
**Post-docs and Scientists**

The 1380 scientists represented 57 % of the RI survey respondents  
 The 648 post docs “ 15%of the HE survey respondents  
 The 729 RI women (53% of the scientists) were 75% of female RI respondents  
 The 353 HE women (54% of the post docs) were 23% of female respondents  
 The 652 RI men were 44% of male respondents  
 The 295 HE men were 11% of male respondents

**RESPONDENTS - AGE PROFILE**

At all four main career levels the women in the survey were younger than the men. In RI, by comparison with HE, there were lower percentages of women in the 35 to 50 and 50 plus age bands:

<b>age 35 or younger</b>	48% of RI women (men 31%) 32% of HE women (men 21%)
<b>age 35 to 50</b>	40% of RI women (men 45%) 51% of HE women (men 47%)
<b>50 plus age group</b>	12% of RI women (men 24%) 17% of HE women (men 32%)



**RESPONDENTS - AVERAGE SALARIES**

Respondents were asked about their pay on a FTE basis. For the combined HE and RI survey population there was a 6% differential between men’s and women’s pay, after regression runs controlling for age, grade and subject area. This compares with a UK overall difference of 19% between men’s and women’s pay.

In RI in all the age bands men’s average salaries were higher than women’s. In the 26 to 30 age band women’s average salaries were 95% of men’s. The difference became more marked between ages 30 to 50. In the 46 to 50 age band women’s average salaries were 81% of men’s average, falling to 74% in the 56 to 60 age band.

In Russell Group and pre '92 universities in all age bands men's average salaries were higher than women's. The difference was more marked in the Russell group. In the post '92 universities women's salaries were higher than men in the below 26 to 35 age bands and were the same in the 61 to 65 age band.

## CHOOSING A CAREER – HE OR RI?

Academic freedom was clearly the lead reason for men choosing to work in HE. It is ranked highest by HE women, but by a smaller percentage. The ranking by men and women in each sector is the same and other percentages are similar, but the sectors differ, most sharply on 'more flexible hours' ranked fourth in HE, where uniquely men and women agree, but ranked tenth by scientists in research.

	HE	M	F		RI	M	F
Academic freedom	43%	29%		Research area	27%	23%	
Research area	28%	21%		Academic freedom	18%	14%	
Enjoy teaching	26%	18%		Better facilities/funding for research	18%	13%	
More flexible hours	21%	21%		Better working conditions	16%	13%	
Better work/life balance	17%	13%		Better prospects for career progression	16%	12%	
Better working conditions	10%	8%		Wanted permanent contract	14%	11%	
Better prospects for career progression	8%	10%		Better work/life balance	12%	11%	
Wanted permanent contract	9%	6%		More resources	13%	9%	
Experience good for CV	6%	9%		Experience good for CV	11%	9%	
Better facilities/funding for research	7%	6%		More flexible hours	9%	9%	
More security	8%	5%		More security	10%	8%	

## HE AND RI CAREER PATHWAYS

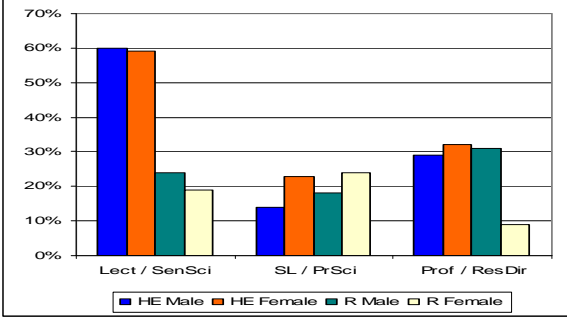
There were differences between HE and RI. In HE, the transition from a post-doc/contract research post to a lectureship was one of the key stages in an academic career, bringing with it, for the majority, a transition from fixed term appointments to a permanent/indefinite contract. Among ASSET respondents working at lecturer level, 60% of those aged 30 or under had a permanent/indefinite contract, rising to 70% amongst the 31 to 35 age group.

The situation was different in RI where the majority (62%) of respondents working at scientist level (equivalent to post-doc) were on permanent contracts.

In HE it was common to move for a first appointment at lecturer level (60% did so) – and there was no variation between the experience of men and women here. However, in RI a lower percentage moved to obtain a senior scientist position (equivalent to lecturer level), but disproportionately fewer women did so – 18% compared with 27% of men.



**Moved to new employer for a first post at a higher level**



## CAREER BREAKS

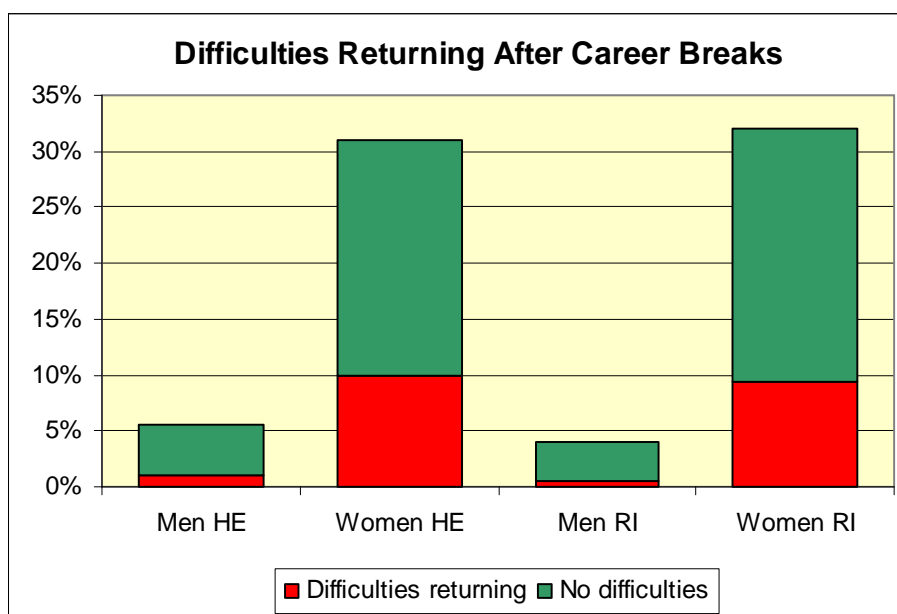
Overall, around 46% of respondents were parents, and 36% had children aged 16 or under. The male/female percentages with children aged  $\leq 16$  were 40:36 within HE and 35:28 within the RIs. More women than men take career breaks and higher proportions of women reported difficulties when returning to work. This was the case in both HE and RIs.

### Career breaks and difficulties in returning

Taken career breaks	HE	Research
Men	6%	4%
Women	31%	32%
All	15%	15%

Difficulty when returning to work	HE	Research
Men	19%	14%
Women	32%	29%
All	28%	25%



The columns represent the proportions that had taken career breaks and show the division between those who had difficulties after returning and those who did not.

Responses to the question 'what would help the transition back to work?' varied according to organisation type and sex. It is interesting to see the importance given to mentoring in this context by both men and women in the RI.

**What would help the transition back to work?  
(respondents who had taken career breaks)**

<b>HE Men</b>	<b>N=144</b>	<b>RI Men</b>	<b>N=61</b>
Contact with dept	49%	Peer networks	44%
Flexible working	31%	Mentoring	31%
Peer networks	30%	Contact with dept	26%
Childcare	25%	Training	25%
P/t building up to f/t	25%	P/t building to f/t	23%
Mentoring	18%	Shorter hours	23%
Training	17%	Flexible working	21%
Shorter hours	13%	Childcare	8%
<b>HE Women</b>	<b>N=457</b>	<b>RI Women</b>	<b>N=312</b>
Flexible working	81%	Mentoring	84%
Childcare	77%	Contact with dept	78%
P/t building up to f/t	59%	Shorter hours	66%
Contact with dept	56%	Peer networks	57%
Shorter hours	38%	Childcare	33%
Mentoring	30%	Training	22%
Peer networks	28%	P/t building to f/t	19%
Training	18%	Flexible working	16%

Reading the free text comments suggests problems caused by lack of work load cover while away, difficulties with the attitude of colleagues/managers, and lack of flexibility in choosing the number of hours worked. Some respondents had been unable to find full time work and had settle for part time, while others would have liked to work part time but were unable to do so. Protected research time was suggested by some HE respondents as beneficial to aiding the transition back to work.

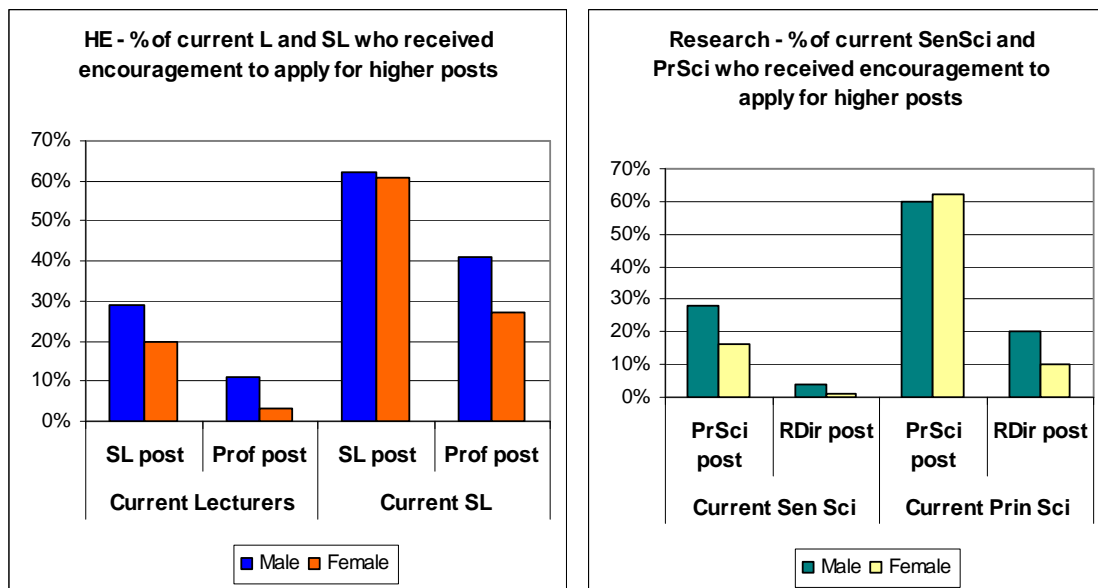
### **GETTING ON - WHAT COUNTS?**

Promotion, support and encouragement, and 'visibility' all play a part in contributing to successful career progression and equality of opportunity. ASSET results, however, indicated that the experience and perceptions of men and women differed.

### **ENCOURAGEMENT**

There were notable differences in the proportions of men and women who had received invitations or encouragement to apply for promotion to lecturer or equivalent.

However, looking at those who had got there, the successful men and women reported the receipt of similar levels of encouragement. The correlation between encouragement and success was high and suggested that for those who were successful there was no difficulty in recognising encouragement (it has been suggested that men's and women's perceptions of encouragement are different). This leads to the question- is it that women don't recognise the tap on the shoulder, hear the words of encouragement or notice the positive vibes? or is this encouragement absent?



### Junior scientists lack of awareness of promotion

If women were not encouraged to go for more senior positions, how much do they know at the start of their careers about promotion? It is a concern so many junior women, and to a slightly lesser extent men, know nothing about the procedure or the criteria for promotion. On this basis how well are they able to prepare themselves for progression or to decide if they are in the right career and how does this reflect on those who carry the responsibility for the career development of junior colleagues?

#### Percentages of junior scientists with no knowledge of promotion criteria/procedure

Postdoc/Scientist	Criteria	Procedure
Male HE	35%	43%
Female HE	39%	50%
Male RI	27%	30%
Female RI	31%	36%

Lecturer/Senior scientist	Criteria	Procedure
Male HE	8%	18%
Female HE	11%	21%
Male RI	9%	10%
Female RI	10%	13%

### VISIBILITY AND ACTIVITY

There was evidence to suggest that activities and experience identified by senior academics as contributing to success were undertaken by junior men in higher proportions and earlier in their careers than by their female colleagues.

Male and female senior scientists had similar views on what was important for career progression. Research publications topped the lists, not surprisingly; but after this there were differences between respondents from HE and the RI. In HE the high profile/visible individual activities featured, whereas RI encompassed a wider and more 'collaborative' range of activities.

**Contributing factors to career progression, the view of senior scientists**

In HE		In Research Institutes	
Research publications	90%	Research publications	81%
Obtaining ext research funding	77%	Working on high profile projects	73%
		Obtaining ext research funding	63%
		Initiating/contributing new projects	55%
		Collaborative working – externally	45%
Attracting new PhD students	41%	Collaborative working – internally	41%
Conference keynote speaker	41%	International experience	41%
		Coordination of research projects	40%
		Meeting targets/delivering on time	37%
		Networking outside Res Centre	36%
Editor of academic journal	27%	Project management experience	34%
Member of editorial board	22%	Conference keynote speaker	33%
Innovative teaching	21%	Networking within Res Centre	33%

Conference keynote speaker featured fairly high on the HE list, but it was evident that more junior men in HE had higher conference participation.

**HE Conference participation**

**Keynote – plenary speaker**

	Lecturer	Sen. Lect./ Reader	Professor
<b>Women</b>	16%	30%	78%
<b>Men</b>	20%	35%	74%

**Sessional Chair**

	Lecturer	Sen. Lect./ Reader	Professor
<b>Women</b>	29%	44%	89%
<b>Men</b>	34%	51%	82%

Professional consultancy, which did not rate highly in terms of career progression, shows a similar male/ female difference in HE:

**Undertake professional consultancy**

	<b>Prof</b>	<b>SL</b>	<b>Lect</b>	<b>Post-doc</b>
Male	71%	61%	46%	33%
Female	55%	47%	32%	16%

	<b>ResDir</b>	<b>PrSci</b>	<b>SenSci</b>	<b>Sci</b>
Male	54%	44%	28%	10%
Female	36%	42%	25%	5%

In HE a greater proportion of male senior lecturers/readers and lecturers were members of department research groups, undertook professional consultancy, and were research council assessors. Men and women however appear to be equally ambitious, but men may set their sights high earlier on, for example similar percentages of male and female senior lecturers and readers hoped to achieve professorial status, but at lecturer level a much higher percentage of men aspired to become professors (63% (m) 47% (f)). Female professors had higher activity rates for conference chairing, membership of grant giving panels and appointments committees.

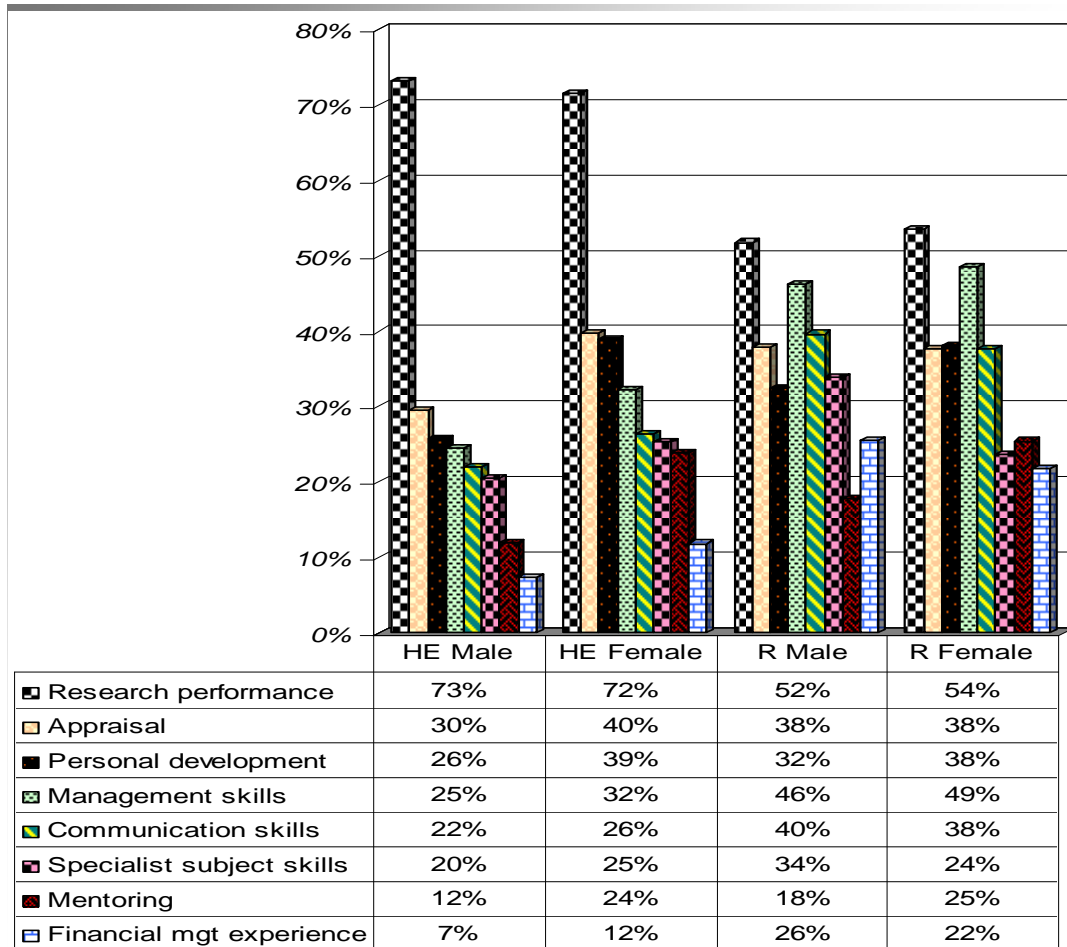
In RI higher proportions of men at principal and senior scientist level represented their centre/council at specialist meetings, were selected to manage special projects and had responsibility for sign offs. Among senior scientists, higher percentages of women were involved with staff supervision and training, project management and external research collaboration. In relation to stated ambition, the story was similar to that in HE, with men identifying their aims at an earlier stage.

**VISIBILITY AND ACTIVITY - WHAT WOULD HELP RESPONDENTS OWN CAREER PROGRESSION?**

As well as asking respondents what was important to career progression in their organisation, they were also asked what would help their own career progression. Here the views are those of lecturers and senior lecturers/readers and their research equivalents –groups who are ‘committed’ to a career in science and possibly thinking about their next career step. As the potential leaders of science in say 2020 it is interesting to see what they feel is important.

In terms of the future leaders of science, it is interesting to look at the different perceptions of the groups. Men and women in HE rate management and communication skills more highly than mentoring but see little need for financial management experience, whereas men and women in research rate management skills a close second to research performance.

Responses to 'What will help you progress to your 'ideal level'?'



### PERCEPTIONS OF EQUALITY

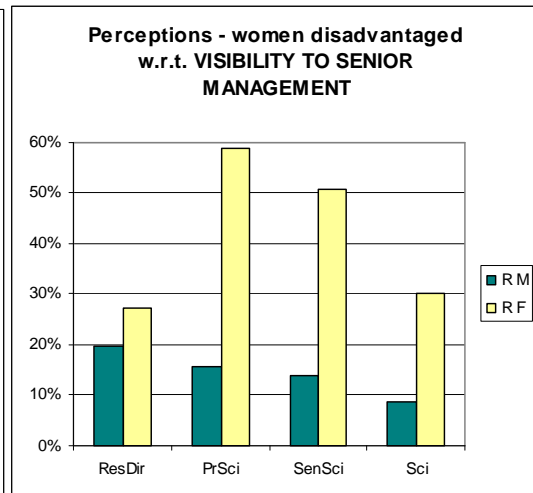
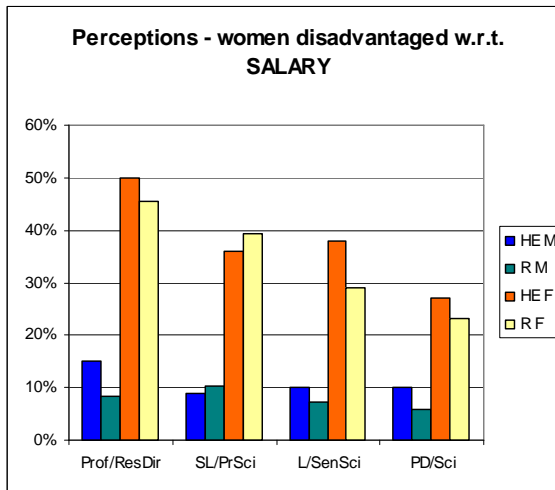
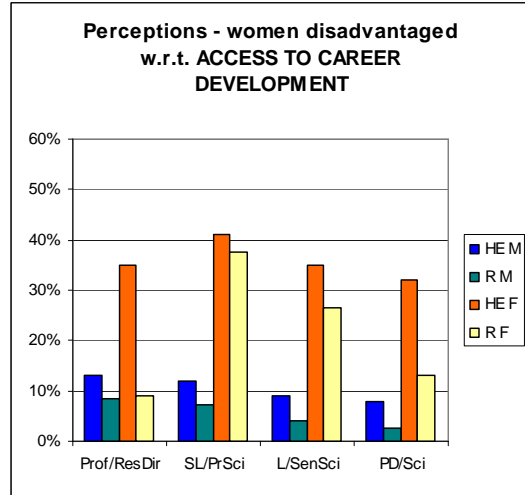
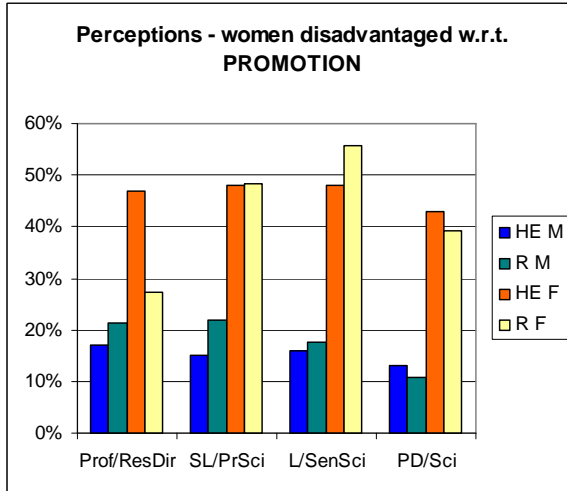
Women's perceptions of equality were startlingly different from those of their male colleagues. In both HE and RI, notably higher percentages of women at all levels stated they perceived women to be disadvantaged in the equality of treatment within their departments in relation to promotion, career development, salary (and visibility to senior management – question asked only in RI).

Perceptions of equality of treatment in your department:  
percentages responding "women disadvantaged or significantly disadvantaged"

	HE male	RI male	HE female	RI female
Promotion	16%	15%	46%	42%
Access to Career Development	12%	4%	36%	17%
Salary	11%	7%	36%	26%
Visibility to Senior Management	-	12%	-	36%

The above gives the aggregate figures. However, the differences were more pronounced when disaggregated by grade/level, the table below gives information for each of the four career levels. It is useful to focus on the senior lecturer/reader and lecturer levels and RI equivalents.

If these women feel as disadvantaged as this suggests in terms of promotion, career development, pay and visibility, what are the chances of their staying in science?



The question of pay was interesting. For survey respondents overall there was a 6% differential, which compares with overall UK EOC figures for the banking sector (a 43% difference) and a UK overall difference of 19%. So perception and reality may be adrift, but it may be difficult to persuade women of this when they feel so generally disadvantaged.



## THE WORKPLACE CULTURE - A SENSE OF BELONGING

Finally, respondents were asked how they saw themselves and their contribution being valued. What is shown below are the views of the 35-50 year group - the potential leaders of science, if they stay the course.

In HE, the number of areas where there were significant male/female response differences increases with seniority. In all cases significantly fewer women were in agreement with the statements on how their contributions were valued.

The charts divide the responses to the nine statements into two groups – (i) four areas where the majority of both men and women agreed that they were valued or supported, and (ii) five areas where <50% of women agreed that they were valued or supported.

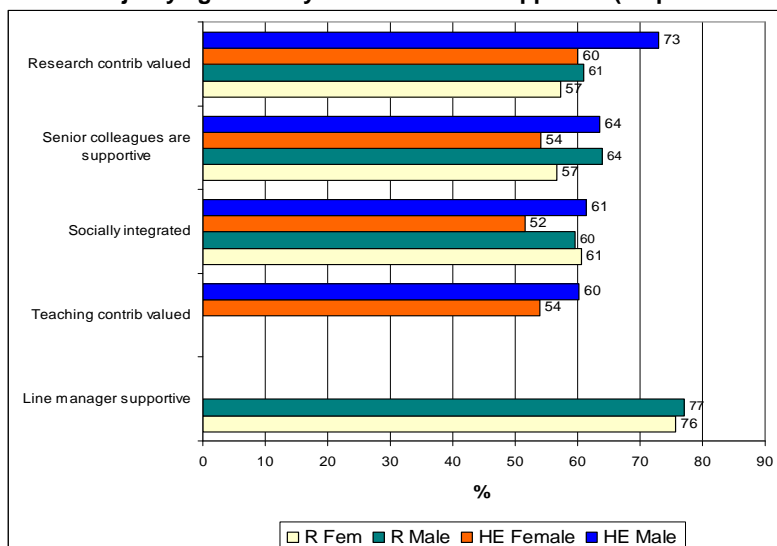
In the first chart the most striking difference is between the male/female responses in agreement with 'my research contribution to the department is valued'. At all levels in HE, including professorial, significantly lower percentages of women feel their contributions to their department are valued. These differences are reflected in most areas in the responses from RI.

In the second chart the largest discrepancy in male/female responses is to the statement 'I have the opportunity to serve on important departmental committees', where just 41% of women agree. These perceptions by women respondents clearly link to the data which shows that men have greater participation in departmental and institutional committees.

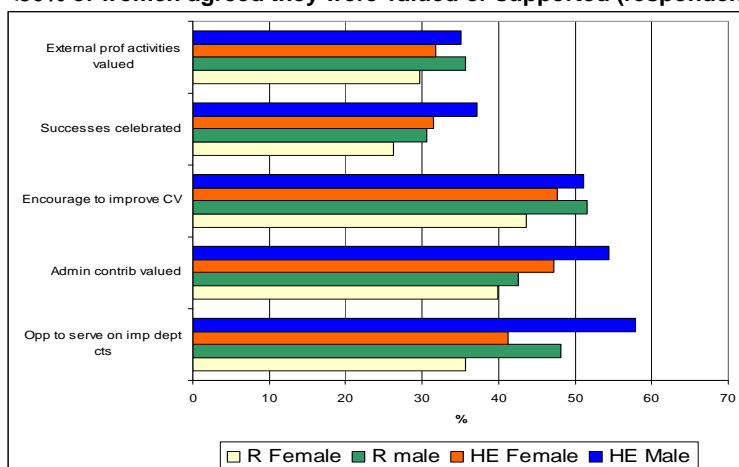
Similar (low) proportions of men and women perceive their successes to be celebrated.

RI respondents had just two areas where male/female respondents differed significantly: opportunity to serve on important departmental committees, m (48%), f (38%) and encouragement to develop CV, m (52%), f (44)

**Areas where the majority agreed they were valued or supported (respondents aged 35-50)**



### Areas where <50% of women agreed they were valued or supported (respondents aged 35-50)



### ASSET ACHIEVEMENTS

What has ASSET achieved so far? - the 6,500 plus scientists (over 60% of whom were men) who completed the questionnaire, now know something about Athena, they may have an increased awareness of the career barriers facing women, and may expect their employers to take action. Forty-five major public sector employers, who have made a commitment to use ASSET results, are able to see where they stand. ASSET has provided a wealth of information for use at a variety of levels: by science policy makers, social scientists, head of institutions, faculty deans, heads of departments, principal investigators and individual scientists.

### THE WAY FORWARD

Starting with the Government's vision for science - *The UK knowledge driven economy benefits from the inclusion of the talents of the whole population and women and men shall equally benefit from the opportunities afforded by it* – at national level the challenge is to enable the government, policy makers, the HE funding and research councils to:

- better understand the career paths of scientists working in higher education and research
- make more effective use of the science skills of the country's graduate and postgraduate output
- develop strategies to attract into and retain more women (and men) in scientific careers

For universities and the research councils at organisational and departmental levels the task is to:

- open up discussion of the key questions identified by ASSET findings
- identify practical steps to ensure equality of treatment, encouragement and progression and to fulfil each scientist's potential and maximise their contribution
- introduce develop and disseminate good practice so that they can promote SET employment as an attractive and sustainable career option for women

For individuals it is important to emphasise the responsibility of scientists at all levels to:

- take their management skills seriously
- take responsibility for their own careers and the careers of their supporting staff
- support those early in their careers in making informed career decisions be it to go or to stay
- to value the contribution of all to the success of their departments science

## **ACTION FOR ORGANISATIONS**

Using the findings from ASSET, and the questions they raise, as the basis for an informed discussion of the issues with senior managers and scientists and women at all career stages, is a first step towards the definition of workable, practical strategies to remove the structural and individual barriers to equitable career progression. To move their agenda forward universities and research councils might consider adopting Athena's targets:

Short term: the percentage of female applicants for posts to reflect the percentage of women at the level immediately below (in their own institution and/or the 'pool' of institutions where they usually recruit)

Medium term: the percentage of newly appointed / newly promoted women in posts to reflect the percentages at the level below

Long term: the percentage of women at each career level to reflect the percentage at the level below (including the organisation's graduate or equivalent intake)

## **ACTION FOR ATHENA**

ASSET 2006 which will be open to all career scientist and engineers based in the UK runs from 5 September to 20 October

In June 2005 the Athena SWAN Charter recognition scheme for UK universities was launched. Charter membership, with its bronze, silver and gold SWAN awards, will enable universities to identify themselves as employers of choice. Twenty-four universities have now joined the Charter. The first recognition awards (nine bronze and two silver SWANs) were presented in March 2006.

In December 2005 the Royal Society and Equality Challenge Unit Athena Conference '*Maximising UK ASSETs- Developing an Action Agenda to tackle the key issues identified by ASSET- the Athena Survey of Science Engineering and Technology*' took place. Presentations made at the conference will be published in Athena's Occasional Paper 5. The conference at the Royal Society in November 2006 will focus on research careers <sup>2</sup>

Use of the findings from ASSET underpins Athena's work programme to the end of 2007. By when, Athena working with its partner universities and the Institute of Physics and the Royal Society of Chemistry will have published:

- a framework women and science strategic plan for HE and research institutions
- national targets, performance measures and benchmarks
- guidelines on SET statistics to be monitored and reported by UK universities
- further good practice guidance, checklists, examples, and case studies

It is hoped that by December 2007, the stakeholders (the science professional and learned societies and, importantly, the universities and research councils who as employers of the scientific workforce carry the responsibility for good practice) will have the understanding, the informed commitment and the tools with which they can work towards Athena's long term target - when the percentage of women at each career level reflects the percentage at the level below (including the undergraduate intake).

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<sup>2</sup> Among the presentations will be one on work recently funded at UEA by ESRC on the factors associated with successful careers, how the experiences of men and women differ and what can be learnt from the contrasting experiences across different employers. The analysis of the factors influencing pay and promotion will involve an attempt to identify the extent to which men and women scientists receive different financial rewards or follow different career tracks. The findings will include a qualitative analysis of what scientists report about their employment conditions, their work environment and how in their opinion this had had an impact on their careers.