Athena SWAN Bronze department award application

Name of university: University of Cambridge
Department: Department of Chemical Engineering and Biotechnology
Date of application: April 2016
Date of university Silver SWAN award: September 2014
Contact for application: Prof John S Dennis
Email: jsd3@cam.ac.uk
Telephone: 01223 334787
Departmental website address: www.ceb.cam.ac.uk
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>ACE</td>
<td>Advanced Chemical Engineering</td>
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<tr>
<td>AP</td>
<td>Action Plan</td>
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<tr>
<td>AS</td>
<td>Athena SWAN</td>
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<tr>
<td>ASWG</td>
<td>Athena SWAN Working Group</td>
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<tr>
<td>BA</td>
<td>Bachelor of Arts</td>
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<tr>
<td>CE</td>
<td>Chemical Engineering</td>
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<td>CEB</td>
<td>Chemical Engineering and Biotechnology</td>
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<td>CET</td>
<td>Chemical Engineering Tripos</td>
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<td>CPD</td>
<td>Continuing Professional Development</td>
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<td>CRS</td>
<td>Contribution Reward Scheme</td>
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<td>E&amp;D</td>
<td>Equality &amp; Diversity</td>
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<td>GEC</td>
<td>Gender Equality Champion</td>
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<tr>
<td>HESA</td>
<td>Higher Education Statistics Agency</td>
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<td>HR</td>
<td>Human Resources</td>
</tr>
<tr>
<td>HoD</td>
<td>Head of Department</td>
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<td>IChemE</td>
<td>Institution of Chemical Engineers</td>
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<td>MBE</td>
<td>MPhil in Bioscience Enterprise</td>
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<tr>
<td>MEng</td>
<td>Master of Engineering</td>
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<tr>
<td>MPhil</td>
<td>Master of Philosophy</td>
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<tr>
<td>OpdA</td>
<td>Office of Postdoctoral Affairs</td>
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<tr>
<td>PCB</td>
<td>Postdocs of Chemical Engineering &amp; Biotechnology</td>
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<tr>
<td>PdRA</td>
<td>Postdoctoral Research Associate</td>
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<tr>
<td>PGT</td>
<td>Post Graduate Taught</td>
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<td>PGR</td>
<td>Post Graduate by Research</td>
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<tr>
<td>P/G</td>
<td>Postgraduates</td>
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<tr>
<td>PhD</td>
<td>Doctor of Philosophy</td>
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<tr>
<td>PI</td>
<td>Principal Investigator</td>
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<tr>
<td>PPD</td>
<td>Personal and Professional Development</td>
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<tr>
<td>RA</td>
<td>Research Associate</td>
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<tr>
<td>SAP</td>
<td>Senior Academic Promotions</td>
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<tr>
<td>SMART</td>
<td>Specific, Measurable, Attainable, Realistic and Timely</td>
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<td>SMB</td>
<td>Senior Management Board</td>
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<td>SoT</td>
<td>School of Technology</td>
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<td>SRA</td>
<td>Senior Research Associate</td>
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<tr>
<td>SRD</td>
<td>Staff Review and Development (Appraisal)</td>
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<td>UCAS</td>
<td>Universities and Colleges Admissions Service</td>
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<td>U/G</td>
<td>Undergraduates</td>
</tr>
<tr>
<td>UL</td>
<td>University Lecturer</td>
</tr>
<tr>
<td>USL</td>
<td>University Senior Lecturer</td>
</tr>
<tr>
<td>UTOC</td>
<td>University Teaching Officers’ Committee</td>
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</tbody>
</table>
1. Letter of endorsement from the head of department:

An accompanying letter of endorsement from the head of department should explain how the SWAN action plan and activities in the department contribute to the overall department strategy and academic mission. The letter is an opportunity for the head of department to confirm their support for the application and to endorse and commend any women and STEMM activities that have made a significant contribution to the achievement of the departmental mission.
Dear Sarah,

As Head of Department, I write to express my whole-hearted support for the Department’s resubmission for an Athena SWAN Bronze Award.

All the feedback from the Panel on our previous submission has been addressed, particularly the lack of specific information. The Panel identified a lack of clarity regarding specific actions for improvement in our Action Plan (AP), which has been completely revised so that it is clearer and SMARTer.

As Chair of the ASWG, I have overseen the resubmission and shall continue to lead the implementation of the Department’s practices in this respect. I am grateful to members of the Department, particularly the ASWG, for enthusiastic commitment to Athena SWAN. An important aspect, raised in the feedback, was external consultation: I am grateful to Mrs Gina Warren (University E&D Consultant) and Prof. Sabine Bahn (Gender Equality Champion for the University’s School of Technology) for their insights into how other Departments have approached Athena SWAN. I have also consulted colleagues on the IChemE’s Heads of Departments Committee. The process of resubmission has improved working practices, e.g. our recent appointment of three female University Lecturers stems partly from ensuring the recruiting process was free of unconscious bias.

The results from the 2015 Staff Survey (92% participation rate of all staff) have been reviewed and a Staff Committee has been formed. The Survey highlighted the need for greater information and education about HR and E&D issues. As an immediate outcome, we expect all academic staff and section leaders to have undertaken the University’s E&D training by the end of 2016. Such targets now form standing items in staff appraisals. Furthermore, E&D is firmly enshrined in our mission statement and has been explained carefully to all members of CEB through internal seminars.

Whilst the proportion of female undergraduates at CEB (31.3%) exceeds the national average (26% - UCAS), there is no cause for complacency. Both students and staff must be able to see that CEB can provide exciting and rewarding careers as well as examples of achievement by inspirational...
women. A number of CEB’s female academics, e.g. Professors Lynn Gladden, Lisa Hall and Sabine Bahn lead prestigious research groups and so provide visible female leadership.

The move of CEB to new premises (December, 2016) will provide a valuable opportunity to improve working practices and to challenge the status quo. The governance of CEB has been changed, with strategy and operations being overseen by the Senior Management Board (SMB), the transactions of which are transparent to, and informed by, all staff. A standing agenda item at the SMB will be ongoing monitoring and progression of the AP. We have also created a HR Adviser position to provide additional resource to deliver our strategic initiatives to improve the wellbeing of all staff.

I am convinced that embedding the principles of Athena SWAN in the Department’s culture will improve the working environment for women at all levels, support their professional development and will be critical to the continued success of the Department.

Yours sincerely,

J. S. Dennis

(Section 1, 498 words / maximum 500)
2. The self-assessment process

Describe the self-assessment process. This should include:

\textit{(a) A description of the self-assessment team: members’ roles (both within the department and as part of the team) and their experiences of work-life balance.}

2(a) The self-assessment team

Staff volunteers were sought and selected to reflect a good gender balance, whilst also ensuring a balanced representation of different staff groups (Table 1).

\textbf{Table 1. Members of the Department’s Athena SWAN Working Group (ASWG)}

<table>
<thead>
<tr>
<th>Name</th>
<th>Role on ASWG</th>
<th>Role in Department</th>
<th>Experience of work / life balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prof John Dennis (M)</td>
<td>Chair</td>
<td>HoD / Professor Chemical Engineering</td>
<td>John is married; his wife is a full-time veterinary surgeon. He has been an academic in the Department since 2002 and is a Fellow of Selwyn College. He became HoD in October 2015.</td>
</tr>
<tr>
<td>Mrs Kal Sandhu (F)</td>
<td>Athena SWAN Coordinator (left March 2016)</td>
<td>Support staff - HR Administrator</td>
<td>Kal is responsible for staff matters and liaises with visitors, students and staff on all HR related matters. She uses flexible working to help balance the care of her three school age children with her working responsibilities.</td>
</tr>
<tr>
<td>Prof Sabine Bahn (F)</td>
<td>Gender Equality Champion</td>
<td>Professor of Neurotechnology</td>
<td>Sabine is a practising psychiatrist as well as an academic. She is one of two Gender Equality Champions for the SoT in the University, and is a fellow of Lucy Cavendish College, a women's College.</td>
</tr>
<tr>
<td>Dr Patrick Barrie (M)</td>
<td>Member</td>
<td>Deputy HoD (Teaching)</td>
<td>Patrick has been an academic since 1995. He is married with one child for whom he has childcare responsibility. He is a Fellow of Emmanuel College and Director of Studies for Murray Edwards College, a women's College.</td>
</tr>
<tr>
<td>Ms Catherine King (F)</td>
<td>Member</td>
<td>Support staff – MBE Programme Administrator</td>
<td>Catherine has been Programme Administrator for the MBE course since 2011. As a single parent of three children, she has experience of the challenges of combining work with bringing up a family.</td>
</tr>
<tr>
<td>Dr Krishnna Mahbubani (F)</td>
<td>Member</td>
<td>Research Associate</td>
<td>Krishnna is a PDRA and Chair of the Departments Postdoc Committee. She is Director of Studies for two Colleges (Lucy Cavendish and Pembroke).</td>
</tr>
<tr>
<td>Name</td>
<td>Position</td>
<td>Details</td>
<td></td>
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</tr>
<tr>
<td>Dr Tom Matthams (M)</td>
<td>Member Academic Secretary</td>
<td>Tom is married with three children of primary/ nursery school age. He balances his daily work routine with childcare responsibilities that he shares with his wife.</td>
<td></td>
</tr>
<tr>
<td>Dr Claire Michel (F)</td>
<td>Member Research Associate</td>
<td>Claire is a PDRA and was the founding chair of CEB's Postdoc Committee. She actively engages with the University's postdoctoral affairs committees which have been working to improve the experience of PDRA's.</td>
<td></td>
</tr>
<tr>
<td>Dr Sarah Rough (F)</td>
<td>Chair (2013-14) Senior Lecturer</td>
<td>Sarah is the Programme Manager of ACE Programme. She is Director of Studies for several Colleges, and is a College Tutor at Hughes Hall.</td>
<td></td>
</tr>
<tr>
<td>Miss Joanna Starkie (F)</td>
<td>Student member PhD Student</td>
<td>Joanna is a second year PhD student who has a keen interest in gender equality issues and the promotion of women in STEM careers.</td>
<td></td>
</tr>
<tr>
<td>Mrs Gina Warren (F)</td>
<td>Non - CEB member Support staff - University E&amp;D Consultant</td>
<td>Gina recently returned from maternity leave after the birth of her second child and works part time. She shares childcare duties with her husband.</td>
<td></td>
</tr>
</tbody>
</table>
(b) 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.

2(b) The self-assessment process

The main objective of the ASWG (set up to re-submit the AS application) was to embed an E&D culture [AP 02] and to ensure that a clear AP could be agreed. To develop the AP, and ensure that fundamental issues were being addressed, the Department conducted a Staff Survey in March 2015, to understand staff views and opinions. The results have been analysed and considered by various Committees, including the ASWG, in the formulation of a new strategy for the Department. Based on results from the survey, a new AP has been developed, described in this submission.

The ASWG meets monthly and a noticeboard in the Department and a webpage [AP 02] has been assembled (http://www.ceb.cam.ac.uk/about/awards/athenaswan) to make staff aware of the AS Charter, and to provide information regarding the membership and duties of the ASWG, giving details of:

(i) events and meetings concerned with AS and E&D staged by the Department/University
(ii) links to further sources of information.

The draft application has been reviewed by a ‘mock panel’ arranged by the University’s Equality and Diversity Section, and their input has been incorporated into the final submission and AP.

(c) Plans for the future of the self-assessment team, such as how often the team will continue to meet, any reporting mechanism and in particular how the self-assessment team intends to monitor implementation of the action plan.

2(c) Plans for the ASWG

The ASWG will continue to meet monthly to monitor the progress and development of the AS application. Owing to the turnover of research staff and students, the membership of the ASWG will be reviewed annually [AP 03]. This will provide opportunities for the inclusion of new members with fresh ideas. Permanent staff members, including the HoD and HR representation will provide continuity.

The ASWG will report progress to the Senior Management Board which oversees the main activities within CEB, with responsibility for key areas being shared by the senior management team. HR and E&D activity fall within the remit of Professor Sabine Bahn, who is one of the two Gender Equality Champions (GEC) for the School of Technology. The AP is and will continue to be a standing agenda item at such meetings in order to ensure its effective implementation and for driving forward the strategies for improvement.

Progress will be shared and discussed with all staff through various communication channels, including the CEB Bulletin, Section Heads meetings and the AS webpage [AP 02].

CEB HR staff will continue to monitor data for review and discussion by the ASWG [AP 16] and continue developing / updating the AP. The HoD, HR and GEC will remain actively involved in the University’s AS network [AP 03] and liaise with other University Departments to share best
practice [AP 06]. The aim will be to embed the tenets of AS, E&D, CEB’s mission and core values firmly within the Department’s culture [AP 01].

(Section 2, 930 words / maximum 1000)

(N.B. References to numbered specific actions in the AP are inserted as [AP 01] etc.)
3. A picture of the department

(a) Provide a pen-picture of the department to set the context for the application, outlining in particular any significant and relevant features.

3(a) Picture of the Department

CEB Mission Statement
To be world-leading in research, education and impact in chemical engineering and biotechnology and its application to industry and healthcare.

Background
The Department is part of the School of Technology, one of six Schools making up the University. At July 2015, the Department had a total of 138 staff, 27 being academic (22% female) and 48 research staff (42% female).

The Department’s research strategy addresses the need for novel Chemical Engineering and Biotechnological approaches, particularly in healthcare and sustainability. CEB came top of Unit of Assessment 12, returning 32.3 FTE staff (19% female) in the recent Research Excellence Framework (REF 2014) with a research profile of 47% 4* (world-leading) and 45% 3* (internationally excellent). The vast majority of the Department’s research students are on PhD programmes. A handful take the M.Phil research degree by dissertation.

The Department teaches an U/G course in Chemical Engineering. This is taught in years 2, 3 and 4 of a student’s time in Cambridge; students study either Natural Sciences or Engineering in Year 1. Students may graduate with the BA degree after year 3, or with BA and M.Eng degrees after year 4. The U/G course, accredited by the IChemE, aims at producing graduates of the highest calibre for employment in the process industries.

CEB offers two taught masters (PGT) courses. The M.Phil in Advanced Chemical Engineering (ACE) teaches advanced technical skills, gives a grounding in relevant business skills, and provides training in research. The M.Phil in Bioscience Enterprise (MBE) course combines teaching of aspects of biotechnology such as drug discovery with the teaching of business skills and entrepreneurship.

Last year, a new M.Res course in Sensor Technologies was set up. Students on these courses are classified under the heading “PGR” (Post Graduate by research) in this submission.

CEB is committed to equality of opportunity and aims to ensure student admissions and staff appointments are made regardless of socio-economic background, gender, race, nationality, faith, disability or sexual orientation. As an example, there is no quota or target for the number of overseas students on our courses.

The courses offered are summarised in Table 2.
Table 2. A summary of the courses available in the Department with current student numbers.

<table>
<thead>
<tr>
<th>Classification</th>
<th>Course</th>
<th>Number of students (2014-15)</th>
<th>% female students</th>
</tr>
</thead>
<tbody>
<tr>
<td>U/G</td>
<td>Year 1: not taught in Department</td>
<td>–</td>
<td>-</td>
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<tr>
<td></td>
<td>Year 2: Chemical Engineering</td>
<td>70</td>
<td>27%</td>
</tr>
<tr>
<td></td>
<td>Year 3: Chemical Engineering</td>
<td>67</td>
<td>34%</td>
</tr>
<tr>
<td></td>
<td>Year 4: Chemical Engineering</td>
<td>58</td>
<td>33%</td>
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<tr>
<td>U/G Total</td>
<td></td>
<td>195</td>
<td>31%</td>
</tr>
<tr>
<td>PGT</td>
<td>MPhil in Advanced Chemical Engineering</td>
<td>30</td>
<td>27%</td>
</tr>
<tr>
<td></td>
<td>MPhil in Bioscience Enterprise</td>
<td>24</td>
<td>29%</td>
</tr>
<tr>
<td>PGT Total</td>
<td></td>
<td>54</td>
<td>28%</td>
</tr>
<tr>
<td>PGR</td>
<td>PhD</td>
<td>145</td>
<td>30%</td>
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<td></td>
<td>MPhil by research dissertation</td>
<td>4</td>
<td>75%</td>
</tr>
<tr>
<td></td>
<td>MRes in Sensor Technologies</td>
<td>11</td>
<td>36%</td>
</tr>
<tr>
<td>PGR Total</td>
<td></td>
<td>160</td>
<td>32%</td>
</tr>
</tbody>
</table>

(N.B. All our students are full time)

Location

The Department is currently located across three sites, but will move to one site (shown below) in a new building in West Cambridge in December, 2016.

![New CEB Building](image-url)
(b) Provide data for the past three years (where possible with clearly labelled graphical illustrations) on the following with commentary on their significance and how they have affected action planning.

**Student data**

(i) **Numbers of males and females on access or foundation courses** – comment on the data and describe any initiatives taken to attract women to the courses.

3(b)(i) **Student data: access and foundation courses**

CEB does not offer access or foundation courses.

(ii) **Undergraduate male and female numbers** – full and part-time – comment on the female: male ratio compared with the national picture for the discipline. Describe any initiatives taken to address any imbalance and the impact to date. Comment upon any plans for the future.

3(b)(ii) **Student data: undergraduate numbers**

The proportion of female undergraduates on the CE course is shown in Figure 1.

![Figure 1](image)

**Figure 1.** Proportion of female students on the U/G course (total of years 2,3 and 4) over time.
The numbers in the boxes indicate the actual number of female students.
The benchmark line shown is the national average for CE undergraduates (26.2%, HESA 2013-14).

Over the last five years, the proportion has averaged 35.4%, significantly higher than the national figure for CE undergraduates (26.2%, HESA 2013-14). This may be due to the unusual structure of our U/G course. Students study General Science or General Engineering in their first year. We believe that women have found entering CE via this route to be an attractive option not available at other Universities.

Figure 1 indicates that the proportion of female U/Gs in CEB has recently decreased (to 31.3% in 2014-15). Whilst the current figure is still significantly above the national benchmark, we cannot be complacent and so a number of recruitment practices form an important part of our AP, [AP 14], supported by training, e.g. on unconscious bias, for those involved in such decisions [AP 05].
(iii) Postgraduate male and female numbers completing taught courses – full and part-time – comment on the female: male ratio compared with the national picture for the discipline. Describe any initiatives taken to address any imbalance and the effect to date. Comment upon any plans for the future.

3(b)(iii) Student data: Postgraduate taught (PGT) numbers

The proportion of female students on PGT courses is shown in Figure 2.

![Figure 2](image_url)

**Figure 2.** Proportion of female students on PGT courses over time.
The numbers in the boxes indicate the actual number of female students.
Benchmark 1 is the national average for chemical engineering PGT courses (26.9%, HESA 2013-14).
Benchmark 2 is the national average for business students PGT courses (40.9%, HESA 2013-14).

The Department’s two PGT courses are quite different in character. The proportion averaged over five years for the Department’s course on Advanced Chemical Engineering is 35% (above benchmark 1 which is appropriate for a chemical engineering PGT course). The proportion averaged over five years for the Department’s course on Bioscience Enterprise is 40% (close to benchmark 2, chosen because the course is similar to a business skills qualification). However, there is an apparent reduction in the proportion of female students in 2014-15. While not statistically significant, it is a concern, hence forms part of our action plan [AP 15].
(iv) Postgraduate male and female numbers on research degrees – full and part-time – comment on the female: male ratio compared with the national picture for the discipline. Describe any initiatives taken to address any imbalance and the effect to date. Comment upon any plans for the future.

3(b)(iv) Student data: Postgraduate research (PGR) numbers

The proportion of female students on PGR courses is shown in Figure 3.

![Figure 3](image)

**Figure 3.** Proportion of female students on PGR courses over time. The numbers in the boxes indicate the actual number of female students. Benchmark 1 is the national average for chemical engineering PGR courses (32.8%, HESA 2013-14); Benchmark 2 is the national average for biotechnology PGR courses (44.4%, HESA 2013-14).

The average proportion over five years is 34.4%.

CEB’s research interests vary from mathematical modelling of chemical processes to biotechnological innovation. For that reason, two benchmarks are shown in Figure 3: one for chemical engineering, the other for biotechnology.

A worrying trend is that the proportion of female PGR students in CEB has recently decreased (to 31.3% in 2014-15), and is now below benchmark 1. The actual number of female students has remained constant at about 50 students per year. However, it is clear that we cannot be complacent on the issue of the number of female P/G students. As a result action on recruitment related to P/Gs forms a significant part of the AP [AP 15].
(v) Ratio of course applications to offers and acceptances by gender for undergraduate, postgraduate taught and postgraduate research degrees – comment on the differences between male and female application and success rates and describe any initiatives taken to address any imbalance and their effect to date. Comment upon any plans for the future.

3(b)(v) Student data: Applications data

Undergraduate applications

At Cambridge, the Colleges rather than the Departments have responsibility for U/G admissions. All Colleges admit CE U/Gs. Each College has a Director of Studies in CE who is normally a member of CEB, allowing the Department to influence the admissions process.

Information on U/G applications for the CE course is shown in Figure 4:

![Figure 4](image)

**Figure 4.** Proportion of female applicants for the undergraduate course over time.

The numbers in the boxes indicate the actual number of female applicants.

The benchmark is the national average for chemical engineering undergraduate applications (26%, UCAS 2014).

The proportion of female applicants varies slightly each year, averaging 31.8% over the last five years; this is comparable with the proportion for U/Gs on our course, as discussed earlier, and significantly higher than the national benchmark (26%, UCAS 2014). However, we shall continue to monitor the situation [AP 14].

To explore possible differences between male and female success rates, the proportion of applicants being made offers is analysed in Figure 5.
This figure shows a gradual reduction in the proportion of applicants receiving offers. This reflects the fact that there has been a large increase in the number of applicants, while the number of offers made has been relatively constant. It can be seen that there has been negligible difference in the chances of success between male and female applicants in the last four years, suggesting no sign of unconscious bias affecting admissions.

We have also investigated any imbalance between offers and acceptances. For our undergraduate course, 92% of offer-holders are admitted. This means that the acceptances data (not shown) correspond closely with the data on offers.
**PGT applications**

Information on the Department’s PGT courses is shown in Figure 6.

![Figure 6](image)

**Figure 6.** Proportion of female applicants for PGT courses over time.
The numbers in the boxes indicate the actual number of female applicants.
Benchmark 1 is the national average for chemical engineering PGT courses (26.9%, HESA 2013-14).
Benchmark 2 is the national average for business students PGT courses (40.9%, HESA 2013-14).

The proportion of female applicants for the Department’s PGT course on Advanced Chemical Engineering averages over five years 34%, which is above benchmark 1 (chemical engineering). The proportion of female applicants for the Department’s PGT course on Bioscience Enterprise averaged over the same period 44%, above benchmark 2 (business skills). However, the number of female applicants for this course has been decreasing in recent years and is a cause for concern to be addressed [AP 15].

To explore possible differences between male and female success rates, the proportion of PGT applicants being made offers is analysed in Figure 7.
Figure 7. Proportion of applicants for PGT courses being made offers over time: (a) for MPhil in Advanced Chemical Engineering; (b) for MPhil in Bioscience Enterprise.

For the PGT Advanced Chemical Engineering course, over five years, 47% of female applicants and 46% of male applicants have been made offers. For the PGT Bioscience Enterprise course, over a five-year period, 30% of female applicants and 30% of male applicants have been made offers. These values suggest no evidence of any gender imbalance in admissions.

We have also investigated any gender imbalance between the offer and admissions stages on our course. Over the five-year period, 71% of female offer-holders started the PGT course, while 73% of male offer-holders started the PGT course. The similarity between these values again indicates that gender is not an issue.
Applications for the Department’s PGR courses are analysed in Figure 8.

![Figure 8. Proportion of female applicants for PGR courses over time.](chart)

The numbers in the boxes indicate the actual number of female applicants. Benchmark 1 is the national average for students on Chemical Engineering PGR courses (32.8%, HESA 2013-14); Benchmark 2 is the national average for students on Biotechnology PGR courses (44.4%, HESA 2013-14).

While there is some year-by-year variation, the average proportion of female applicants for the PGR courses is 32.6%, corresponding to the expected value for CE (benchmark 1). The majority of PGR applicants are for Chemical Engineering research places rather than Biotechnology, but it is hard to quantify the proportion – some applicants do not specify a particular area, and some projects are at the interface between the two disciplines. From the data, we believe there is scope to increase the proportion of female applicants [AP 15].

A number of actions were identified and implemented at the time of our original AS submission to encourage female PGR applications. We hope to see the benefit of these initiatives in future years, supplemented by further, well-defined actions on advertising successful women in CEB [AP 12, 13] and encouraging inclusivity [AP 28], and gauging actively the outcome of these actions [AP 15].
To explore possible differences between male and female success rates, information on the proportion of PGR applicants being made offers is shown in Figure 9.

Figure 9. Proportion of applicants for PGR courses being made offers over time.

The average over the five-year period shows that 64% for female applicants, and 61% for male applicants, have been made offers. The similarity between these values shows no evidence of a gender imbalance in the admissions decisions.

We investigated any gender imbalance between the offer stage and the admissions stage on our course. Over the period analysed, 54% of female offer-holders started the PGR course, compared to 54% of male offer-holders. These values show no gender imbalance, but we shall monitor the situation carefully and take action on any variances.
(vi) Degree classification by gender – comment on any differences in degree attainment between males and females and describe what actions are being taken to address any imbalance.

3(b)(vi) Student data: Degree classification

Undergraduate course

Students on the U/G course receive a classification each year (1st, 2.1, 2.2, 3): performances in the 4th year of the U/G course are shown in Figure 10.

![Figure 10](image)

Figure 10. Proportion of students awarded particular classifications over time for the final year of the U/G course. The numbers in the boxes indicate the actual number of students involved.

The year-by-year variations in the percentages are substantial because the number of students achieving a particular class of degree can be small. The right-hand side of the graph shows the total numbers over the five-year period.

On average, 28% of female and 29% of male students have been awarded a first in their final year with 48% of female and 47% of male students being awarded class 2.1. The similarity of these values indicates that there is no obvious gender imbalance in performance.

There is some evidence (not shown) for a gender imbalance in U/G performance in the earlier years of our course, but it is very encouraging that this imbalance disappears by the final year of studies. We shall review and analyse this aspect regularly [AP 18] and formulate plans to redress based on analysis of the root causes.
Staff data

(vii) Female : male ratio of academic staff and research staff – researcher, lecturer, senior lecturer, reader, professor (or equivalent). Comment on any differences in numbers between males and females and say what action is being taken to address any underrepresentation at particular grades/levels

3(b)(vii) Staff data: female: male ratio

Academic staff

The proportion of female academic staff is shown in Figure 11.

![Figure 11. Proportion of female academic staff in the Department over time. The numbers in the boxes indicate the actual number of female academic staff. The benchmark line shown is the national average for Chemical Engineering departments (21.3%, HESA 2013-14).](image)

Over the last five years, the number of female academic staff has increased to 6, and the current proportion (22%) is just above the national benchmark for chemical engineering staff (21.3%, HESA 2013-14). This proportion will increase next year as we have appointed three new lecturers this year, of whom two are women.

The recent increases reflect initiatives undertaken in the last few years to reduce gender disparity and will continue in the future by:

(i) Pro-actively encouraging female applicants [AP 17]
(ii) Ensure female representation on interview panels [AP 10]
(iii) Emphasising CEB’s commitments to AS and E&D, [AP 02, 05], promotion and recognition, [AP 31, 32, 33] and a supportive environment, [AP 24, 25, 28, 29, 30].

22
The division of academic staff by grade is shown in Figure 12.

Figure 12. Number of men and women who are professors, readers, senior lecturers, and lecturers (or equivalent).

Women are now represented in each of the four categories of staff. The proportion of professors who are female is currently 33%, far above the national benchmark for CE professors (6.9%). These professors provide good role models for female staff and students in CEB and this aspect will continue to be actively promoted [AP 12, 13]. As a result of recent appointments, the proportion of women lecturers will be 27% by 2016 (currently 12.5%).

Research staff

The proportion of female research staff (excluding academic staff) in CEB is shown in Figure 13.

Figure 13. Proportion of female research staff in the Department.
The numbers in the boxes indicate the actual number of female researchers. The benchmark line shown is the national average for Chemical Engineering departments (32.6%, HESA 2013-14).
As with academic staff, the proportion of female researchers shows a pleasing trend and has increased over the last five years, being above the national benchmark for CE research staff (32.6%, HESA 2013-14).

**viii) Turnover by grade and gender** - comment on any differences between men and women in turnover and say what is being done to address this. Where the number of staff leaving is small, comment on the reasons why particular individuals left.

3(b)(viii) Turnover

The turnover in academic staff is low. In the last five years, three professors (all male) have retired, one Lecturer (male) has taken up an academic position elsewhere, and the fixed-term contract of one Lecturer (female) came to an end; she was employed as a substitute teacher while an established academic was on leave, and returned to a research position afterwards.

The University has an Employer Justified Retirement Age of 67 in order to enable career progression for younger staff and give opportunities to new members of staff. This should help to reduce gender imbalance over a longer time period.

![Figure 14](image)

**Figure 14.** The proportion of research staff leaving each year by gender. The numbers in the boxes give the actual numbers.

There is far greater turnover in research staff, as seen in Figure 14, principally because post-doctoral researchers (PDRA) are employed on fixed-term contracts. In some cases PDras left before the end of their contracts in order to secure permanent academic positions elsewhere. There is considerable year-by-year variation. Over the period analysed, an average of 33% of female researchers left each year, compared to an average of 38% of male researchers. These percentages are skewed by an anomalous large number of male departures in 2013-14.

We shall monitor the leavers situation carefully [AP 20] including improving our mechanism for gathering information on future destinations of PDras to determine if our initiatives on career development, [AP 25, 27] are having any impact.

*(Section 3, 1,985 words / maximum 2000)*
4. **Supporting and advancing women’s careers**

**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 their significance and how they have affected action planning.

(i) **Job application and success rates by gender and grade** – comment on any differences in recruitment between men and women at any level and say what action is being taken to address this.

4(a)(i) **Job application and success rates**

During the five-year period 2011-2015, six academic appointments have been made: one professorship (male); two lectureships (one female, one male); and three temporary lectureships (one female). The temporary lectureships were fixed term contracts as substitute teachers for established academics on leave from the Department.

Three additional lectureship appointments (two female) have been made since 31 July 2015, but fall outside the period analysed. We will continue to highlight female staff on CEB promotional material [AP 13].

In order to give reasonably sized numbers, the application data for these positions have been combined and are shown in Figure 15.
Figure 15. Proportion of female applicants, short-listed people, and appointed people, for:
(a) academic positions in the Department in the period 2011-15.
(b) research staff positions in the period November 2013 to March 2016 (University only has data from November 2013)

The numbers in the boxes indicate the actual number involved.
The benchmark line shown is the national average for Chemical Engineering departments (21.3%, HESA 2013-14).

The data show that women are not disfavoured in the appointments process.

(ii) Applications for promotion and success rates by gender and grade – comment on whether these differ for men and women and if they do explain what action may be taken. Where the number of women is small applicants may comment on specific examples of where women have been through the promotion process. Explain how potential candidates are identified.

4(a)(ii) Promotion and success rates

The mechanism for promotion of academic staff is through the University’s Senior Academic Promotion (SAP) scheme. The process is advertised annually to all eligible staff. Potential applicants are actively encouraged to discuss the matter with the HoD or other senior colleagues. SRD review meetings provide an ideal opportunity to discuss promotion opportunities with individuals.

In the last five years (2011-2015), there have been four promotions to professor (1 female), three to reader (0 female) and one to senior lecturer (1 female). In order to preserve anonymity, the data on applications for promotion have been combined and are shown in Figure 16.
Figure 16. Data on the number of applications for SAP in 2011-2015 by gender. Any reapplications for promotion by the same individual are counted as a fresh application.

We note that 4/15 (27%) of applications for promotion have come from women, while women account for 2/9 (22%) of the successful promotions. The numbers are too small to draw any meaningful conclusions, but are comparable to the proportion of female academics in CEB (currently 22%). In future, we propose to encourage applications from women [AP 33] and give more information and pro-active support in the construction of cases for SAP [AP 32] including the feeding back of anonymised cases of successful promotions as examples, an initiative recently agreed with the Faculty Promotions Committee.

Most of the Department’s research staff are PDRAs. During the period 2011-2015, there have been six promotions (two female) from PDRA to Senior Research Associate (SRA) level. Candidates are identified by the group heads. Again, applications from women will be encouraged [AP 33] and pro-actively supported [AP 32, 34 – 36].

More information on mentoring in relation to promotion is given in Section 4(b)(ii), and information on the promotions criteria are described in Section 4(c)(i).
(b) For each of the areas below, explain what the key issues are in the department, what steps have been taken to address any imbalances, what success/impact has been achieved so far and what additional steps may be needed.

(i) Recruitment of staff – comment on how the department’s recruitment processes ensure that female candidates are attracted to apply, and how the department ensures its short listing, selection processes and criteria comply with the university’s equal opportunities policies.

4(b)(i) Recruitment of staff

CEB ensures that all recruitment adheres to the University’s policy of equality of opportunity for all. Substantial guidance is provided by the HR Division on how to recruit effectively and to ensure compliance with the University’s policies, procedures, employment law and equal opportunities legislation ([http://www.hr.admin.cam.ac.uk/](http://www.hr.admin.cam.ac.uk/)).

Job advertisements are reviewed by the HR Administrator for unconscious bias / discrimination and gender neutrality. All job postings include the phrase “The University values diversity and is committed to equality of opportunity”. Whilst all job advertisements include a downloadable document detailing “Further Information” about each role, this document will be more explicit about University benefits such as flexible working options, family leave policies and salary sacrifice scheme for childcare which will reinforce our commitment to these areas [AP 28].

All academics and staff members of recruitment appointment panels must complete the University’s online “Managing Diversity” training [AP 04, 05]. All other departmental staff are encouraged to complete this training too [AP 04]. As at February 2016, 34% of all staff and 64% of academics have completed this course.

The Departmental HR Administrator currently provides all recruiting managers a shortlisting spreadsheet which is completed for each recruitment campaign. Following best practice, the shortlisting criteria are reviewed, especially in cases where successful candidates from outside the EU may require Certificates of Sponsorship from the University in order to apply for their right to work visas.

Beyond standard advertising procedures, CEB will actively promote the Departments recruitment plans and career opportunities as noted previously in Section 3(b)(vii) and other sections.
(ii) Support for staff at key career transition points – having identified key areas of attrition of female staff in the department, comment on any interventions, programmes and activities that support women at the crucial stages, such as personal development training, opportunities for networking, mentoring programmes and leadership training. Identify which have been found to work best at the different career stages.

4(b)(ii) Support for staff at key integration points

Figure 17. Proportion by gender across all career stages for the Department in 2015.

In CEB, the main integration points are:

- Joining the Department: information on the support given for new appointees is provided in Section 4(c)(ii).
- Being promoted: information on the support given for promotions and the appraisals process is provided in Section 4(c)(i).
- Having a career break: information on the support given to returning carers is provided in Section 4(f).
- Leaving the Department: information on the support given to those leaving is provided in Section 4(g).

The issue from Figure 17 is that we train far more researchers than we could possibly take on as academic staff. Accordingly, the University has a number of programmes in place to support research staff with their career planning, such as the Office of Postdoctoral Affairs (OPdA), Careers Service and PPD.

The OPdA offers a wealth of resources, such as information on programmes, courses, PPD opportunities, career development resources and leadership training. All research staff joining CEB are given a folder containing OPdA information in addition to the CEB Welcome Pack. This has led to changes in the induction of new research staff. A Departmental Postdoc Committee, called PCB (Postdocs of CE&B) has recently been formed to provide support for research staff. The Chair of the Committee liaises closely with the OPdA in order to identify development opportunities that
would be relevant for research staff. This group has significant support from the SMB and will be strongly supported in all future activities [AP 36].

The University’s Careers Service is available to all academic/research staff and all students and offers specialist careers advice for contract research staff and postdocs.

PPD provide an online database with details of all the courses available for academic, research staff and students. These include training in interview techniques, communication and presentation skills, lecturing performance and supervision of students. Individuals within CEB are encouraged to take ownership of their own personal and professional development [AP 23]. The Department will however continue to make staff aware of these opportunities regularly [AP 02, 07, 23].

The School of Technology also organises forums for female researchers, providing opportunities for career advice and networking in a supportive environment. The recent staff survey emphasised the need to publicise these opportunities more within CEB and this will be done through the revised AS webpage [AP 02], by sharing best practice learning amongst groups across the School [AP 06] and by encouraging CEB women to volunteer for representation on School Committees [AP 10, 11].

In addition and as a result of feedback from the staff survey, we now plan to introduce a departmental mentorship scheme for PDRAs which will be in place by October 2016 [AP 34]. We have begun to recruit mentor volunteers, and matching will begin shortly.

**Career development**

(c) For each of the areas below, explain what the key issues are in the department, what steps have been taken to address any imbalances, what success/impact has been achieved so far and what additional steps may be needed.

(i) Promotion and career development – comment on the appraisal and career development process, and promotion criteria and whether these take into consideration responsibilities for teaching, research, administration, pastoral work and outreach work; is quality of work emphasised over quantity of work?

4(c)(i) Promotion and career development

The results from the recent staff survey highlighted that only 36% of departmental staff felt there were sufficient opportunities for career progression at the University. Furthermore, 63% contract research staff and 58% academic staff confirmed that they would take advantage of the Leadership training if provided. This clearly demonstrates the need for a better career development process and will be achieved by the use of the University’s Staff Review and Development (SRD) process. This process aims to enhance work effectiveness and facilitate career development [AP 30].

It also became apparent during the AS application process that the Department’s provisions in the area of SRD completion were patchy: some members of academic and research staff received regular appraisals, while others did not [AP 24]. Further, even when an appraisal had taken place, the paperwork had not been completed correctly and results have not been entered formally into
the appropriate HR database. As at 31 July 2015, only 4 (out of 27) academic staff had been appraised formally in the previous two years. Only 7 (out of 48) research staff had been appraised formally in the previous two years (though some of these researchers are recent appointments and so not yet due an appraisal).

SRD activities within the Department have recently been reviewed and prioritised [AP 24]. The Department is currently setting in place a system by which review and development meetings are monitored to ensure that they actually take place with proper documentation of results. The new system will enable the Department’s HR Adviser, a new female appointment, to plan schedules for academic appraisals, and to provide timely reminders to PIs when a member of the research staff is due an appraisal. Accordingly, all those involved in appraisals will be required to undertake training, either on-line or by means of short courses being arranged in CEB throughout 2016, [AP 22] and complete appraisals by end of 2016. The new HR Adviser will be tasked [AP 30] with drawing up a strategy, in consultation with the HoD, to review SRDs and, in particular, to ensure that identified CPD tasks stemming from the SRD are undertaken, thus ensuring implementation of planned action. Initially, we aim to have all staff appraised on a two-year cycle, but our longer-term objective is to complete this process on an annual cycle.

The promotion of academic staff is through the University’s SAP process. The criteria for promotion explicitly consider contributions towards research, teaching and a general contribution (which includes administration, pastoral work and outreach work). For promotion to professor or reader, the research contribution has three times the weighting of the teaching and general contribution. Candidates must pass a threshold for all three categories to be considered for promotion. Quality of work is paramount. The procedure encourages candidates to declare personal circumstances which impact their application; such circumstances have been considered on a number of applications made recently in the Department.

Within the Department, potential applicants for promotion are actively encouraged to discuss the matter with the HoD or another senior colleague. It is also the case that the HoD encourages those considered to have a good prospect of success (male or female) to apply.

Within the University, a CV Mentoring Scheme has been set up. This is now available to all applicants, but was originally set up specifically to support female academics who were considering applying for promotion. This scheme provides a valuable opportunity for CV and promotion paperwork to be reviewed by an experienced academic before it is submitted [AP 32]. Since 2013, the University has also ran forums on SAP giving potential applicants the opportunity to hear more about the process and ask questions. These are hosted by the Pro-Vice Chancellor for Institutional Affairs.

Specific support for women considering promotion includes annual programmes covering a range of themes from gaining recognition to career development provided by the E&D section, Women’s Staff Network and the Senior Gender Equality Network.

In addition to University-wide support, to be publicised internally [AP 02], we shall undertake Departmental initiatives, too. Thus, as noted in Section 4(a)(ii), above, we shall encourage applications [AP 33] and give more, pro-active support in the construction of cases for SAP [AP 32] including the feeding back of anonymised cases of successful promotions as examples, an initiative recently agreed with the Faculty Promotions Committee.
Experienced research staff may be promoted to SRA level. The criteria are a high level of competence and independent standing as researchers. Most will need to have full operational responsibility for a major project or research facility. Candidates can be proposed by a member of academic staff, with a safety net provided by the HoD who reviews the status of all PDRAs with more than 5 years’ experience annually, with promotions being considered by the Syndicate (Faculty Board). An identified funding source is needed to be available for the promotion. Again, encouragement for women applicants will be strengthened [AP 33] and assistance with applications provided [AP 25, 32].
(ii) Induction and training – describe the support provided to new staff at all levels, as well as details of any gender equality training. To what extent are good employment practices in the institution, such as opportunities for networking, the flexible working policy, and professional and personal development opportunities promoted to staff from the outset?

4(c)(ii) Induction and training

The University provides an online induction programme for all staff explaining how the University operates and a “New research staff welcome event”. The event acknowledges the fact that whilst research staff form one of the largest staff groups in the University, they face distinctive challenges both in orientating themselves within the University and in developing their careers.

At a Department level, all new staff receive a HR induction by the HR Administrator. This is usually a one-to-one meeting which covers basic employment matters, such as pay and benefits, IT information and Health & Safety training. All staff are given a “Welcome Pack” and PDRAs are also given a pack providing information on the support available to them from the OPdA.

The “Welcome Pack”, devised at the time of our previous AS submission, was designed jointly by research staff within the Department and the Postdocs of Cambridge Society. It contains a list of links to University services and information about Cambridge. However, the staff survey feedback recognised that induction was patchy (only 44% of staff felt their local induction gave them the information and knowledge to do their job effectively), and this will be remediated in future by ensuring comprehensive induction for all staff [AP 26] to be designed by our new HR Adviser, including the Department’s commitment to equality [AP 01]. Research staff are also required to undertake safety training before doing experimental work. The survey highlighted confusion around CEB’s committee structure, so our induction procedures will include details on this [AP 08] and how representations can be made to such committees [AP 09].

New academic staff are encouraged to participate in the University’s training schemes as part of its “Pathways in Higher Education Practice” programme. They are also assigned a mentor within the Department, usually a professor, to provide advice on settling into the new job, teaching and research. The deputy HoD (teaching) will observe one or two lectures and provide feedback to each new lecturer.

The University offers an on-line E&D training course to all staff, as part of a standard induction process. All academic staff on decision-making committees and those who participate in recruitment processes are required to complete this training and our AP involves monitoring and ensuring this [AP 04].
4(c)(iii) Support for female students – describe the support (formal and informal) provided for female students to enable them to make the transition to a sustainable academic career, particularly from postgraduate to researcher, such as mentoring, seminars and pastoral support and the right to request a female personal tutor. Comment on whether these activities are run by female staff and how this work is formally recognised by the department.

4(c)(iii) Support for female students

Cambridge Colleges are the main point of pastoral support and advice for students. There are three all-women Colleges. Some Colleges provide training events aimed specifically at female undergraduate and postgraduate students (e.g. the Gateway programme at Murray Edwards College, the Sprint programme at Newnham College).

Information on activities within the University aimed at women and targeting gender equality are circulated to members of the Department including students. These include the University’s Women in Science, Engineering and Technology Initiative (WiSETI), which arranges an annual lecture celebrating inspirational female scientists.

EnterpriseWISE is a tailored entrepreneurship course offered by the Centre for Entrepreneurial Learning, with the express purpose of developing skills, knowledge and confidence for PhD and early career women who are working in Science, Engineering and Technology. The University’s E&D team run ‘Cakes and Careers’, which are events coupling seminars by academic/industrial speakers with networking, and are aimed at female PhD students and postdocs pursuing a career in science. Another example is ‘Springboard’, which is a personal development programme for all female staff/graduate students, which addresses aspects such as assertiveness, self-confidence, work-life balance and career aspirations.

The SoT also organises forums for female researchers. These are organised by two GECs within the SoT (one of whom is a member of CEB) [AP 06].

As there are currently no specific Departmental events aimed exclusively at female students, we shall develop a Women’s forum which will run biannually to provide female staff and students with support, assistance and an opportunity to network with other female staff within the Department [AP 35].
**Organisation and culture**

(a) *Provide data for the past three years (where possible with clearly labelled graphical illustrations) on the following with commentary on their significance and how they have affected action planning.*

(i) *Male and female representation on committees – provide a breakdown by committee and explain any differences between male and female representation. Explain how potential members are identified.*

4(d)(i) Committee representation

**Management Structure of CEB**

CEB is led by a Head of Department. The HoD chairs a Senior Management Board comprising senior staff from all sections of the Department. The Senior Management Board provides strategic direction to the Department, and is responsible for overseeing all key activities within CEB. The HoD responds to the Syndicate, which acts as a Faculty Board. Senior Academic Promotions is a committee formed by the Faculty Board of Engineering; CEB has two representatives on this committee. CEB Appointments panels contain representatives from the Department, the School, HR and others, as determined by the General Board of the University.

There are a number of Departmental committees which meet on a regular basis. Table 3 shows the breakdown of gender within each of the key decision-making committees.
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<th>Members 2013/14</th>
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<th>Members 2014/15</th>
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<td>6</td>
<td>33%</td>
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</tr>
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</table>

**Table 3** Breakdown of gender within key committees  
(a) University level Committees  
(b) Key Departmental decision making committees

Staff committee membership varies – each section is encouraged to send a different member to each meeting.

In most cases, the proportions are in line with the number of academic staff in the Department. In some cases, higher female representation comes from women in academic-related or support staff positions. Further discussion on committee appointments is given in Section 4(e)(i). The AP proposes to encourage active involvement in the Department through committee membership, **[AP 10]**, ensuring that actions and minutes arising from such work are properly recorded and disseminated **[AP 09]**.
(ii) Female: male ratio of academic and research staff on fixed-term contracts and open-ended (permanent) contracts – comment on any differences between male and female staff representation on fixed-term contracts and say what is being done to address them.

4(d)(ii) Fixed-term and permanent/open-ended contracts

Very few academic staff (currently two) are appointed to fixed-term contracts. These are a result of occasional cases of temporary lecturer appointments made as substitute teachers when an established member of staff is on leave.

On the other hand, most research staff have fixed-term contracts following appointment to PDRA positions. Contracts are moved to open-ended contracts after two years of employment within the University, however the duration may still be limited due to the grant funding available.

Data on the proportion of research staff on fixed-term contracts are shown in Figure 17.

![Figure 17](image-url)

**Figure 17:** Percentage of research staff on fixed-term contracts by gender. (The figures in the boxes indicate the actual numbers involved).

Over the five-year period, an average of 57% of female research staff have been on fixed-term contracts, while the corresponding figure for male research staff is 61%. The similarity between these numbers indicates no particular gender imbalance, but the situation will be monitored by the ASWG [AP 16].
(e) For each of the areas below, explain what the key issues are in the department, what steps have been taken to address any imbalances, what success/impact has been achieved so far and what additional steps may be needed.

(i) Representation on decision-making committees – comment on evidence of gender equality in the mechanism for selecting representatives. What evidence is there that women are encouraged to sit on a range of influential committees inside and outside the department? How is the issue of ‘committee overload’ addressed where there are small numbers of female staff?

4(e)(i) Representation on decision-making committees

Table 3 in Section 4(d)(i) shows the number of women serving on Departmental Committees. In the past we have had no formal policy on female representation on these committees. We are conscious that it is desirable for committees to have female representation, but also that it is undesirable for our small number of female staff to be overloads. An outcome of the AS process is that we are now aware of the issue, and in future important decision-making committees will have female members.

For University Committees, which include an Appointments Committee, a Promotions Committee, and the CEB Syndicate, we are required to bear in mind gender equality issues when members are appointed. As an example, on the CEB Syndicate some committee members are elected, while others are appointed by the University. In the event that only male members are elected, the University ensures that it appoints some female members.

In terms of women on influential committees within the University, Professor Lisa Hall is the Deputy HoD (research) and sits on the Council of the School of Technology which is responsible for strategic decisions (particularly involving funding) across all Departments within the School. Professor Lynn Gladden has been HoD and has just completed two terms of office as the Pro-Vice Chancellor for Research of the University. Professor Sabine Bahn is a Gender Equality Champion for the School of Technology. Dr Sarah Rough has served on the Degree Committee of the Faculty of Engineering for a number of years. Thus female academic staff in the Department are occupying top positions and serve as role models to aspiring female students.

The importance of promoting female involvement in the management of the Department is highlighted in Section 1.2, which is devoted to promoting this important aspect in response to monitoring gender ratios [AP 12]. Alongside this, mentoring activities for career development, will clarify needs and balance in this aspect of academic life, e.g. [AP 25, 34, 35].
4(e)(ii) Workload model – describe the systems in place to ensure that workload allocations, including pastoral and administrative responsibilities (including the responsibility for work on women and science) are 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.

4(e)(ii) Workload model

The teaching and administrative duties within the Department are organised by the HoD and Deputy HoD (Teaching). The Department does not have a formal workload algorithm, but expects all academic members of staff to contribute to teaching. A document summarising teaching and administrative responsibilities is circulated among academic staff and is discussed annually at the UTOC. Although there is no workload model, a priority is to train all senior staff to be cognisant of essential HR duties [AP 21, 22] and support for carers [AP 28].

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

4(e)(iii) Timing of departmental meetings

Normal working hours are different in each research group and support staff can opt into a flexitime scheme, which allows them to start between 8am and 9.30am and finish between 4.30pm and 6pm. Meetings and events take place in core working hours (10am-4pm, weekdays), with very few exceptions. However, some individual groups organise social events in the evenings, which may be a disadvantage to those with caring responsibilities. CEB is striving to inform the organisers of such events to be mindful of this, through the dissemination of best practice and awareness of appropriate times to hold meetings and key events, both work-related and social [AP 29] by consulting participants first.

4(e)(iv) Culture – demonstrate how the department is female-friendly and inclusive. ‘Culture’ refers to the language, behaviours and other informal interactions that characterise the atmosphere of the department, and includes all staff and students.

4(e)(iv) Culture

The staff survey identified some issues in relation to the Departmental culture and perceived gender equality, e.g. the lack of success in female research fellowship applications. It is hoped that the setting up of a Staff Committee and the implementation of our proposed AP items will begin to foster a more constructive attitude towards the principles outlined in the AS Charter. In general, the Department will strive further to establish a more positive and supportive work environment for both sexes [AP 02].

As a basis for action, the Department has undertaken the following:

• The HoD (with HR assistance) has held two sessions on “creating a positive working environment”. This addressed the culture of the department as well as acceptable/non
acceptable forms of behaviour and the HR processes available to staff should they need help and support in this respect.

- A set of core values have been identified which embrace core E&D principles.
- A mission statement has been defined and emphasises the role of people and respect as essential in fulfilling our world-leading mission.

The core values and mission have been debated and refined by consultation with all staff, both academic and support, and are displayed prominently [AP 01] in CEB literature and on its website. Ensuring true “ownership” of the core values is an ongoing and long-term issue for senior management, taking the form of ensuring that all decisions are seen to be taken within the meaning of the core values and rigorously stopping any behaviour or practice that infringes such values.

4(e)(v) Outreach activities – comment on the level of participation by female and male staff in outreach activities with schools and colleges and other centres. Describe who the programmes are aimed at, and how this activity is formally recognised as part of the workload model and in appraisal and promotion processes.

4(e)(v) Outreach activities

The Department runs regular open days to school students to encourage them to apply to study our U/G course. The Department does not run specific outreach events, but does respond to requests from schools for speakers and visits. The Cambridge Colleges also organise outreach events for potential U/Gs. These include shadowing and access schemes, and many students within the Department have helped with these.

The University arranges numerous outreach events, including Open Days, the Science Festival, and the Festival of Ideas. A number of our students and staff (male and female) have participated in the running of these events. In particular, the University holds annual events to present the STEMM subjects to school students.

Research Day event at CEB – January 2016
Flexibility and managing career breaks

(f) Provide data for the past three years (where possible with clearly labelled graphical illustrations) on the following with commentary on their significance and how they have affected action planning.

(i) Maternity return rate – comment on whether maternity return rate in the department has improved or deteriorated and any plans for further improvement. If the department is unable to provide a maternity return rate, please explain why.

4(f)(i) Maternity return rate

In the last five years (2010-11 to 2014-15), there have been no cases of maternity leave taken by academic staff. Three of the research staff took maternity leave, of which one returned to work, one decided to become a full time parent and the other left due to end of contract. These numbers are too small for any meaningful conclusions to be reached. We will however ensure that key HR policies in the Family Friendly area are communicated to all existing and new staff [AP 28].

University staff are entitled to eighteen weeks’ paid maternity (or adoption) leave, twenty-one weeks Statutory Maternity Pay, and up to thirteen weeks unpaid maternity (or adoption) leave. This period of leave may include up to 10 “Keeping in Touch” days. Staff may choose to request a graduated return to work, with the expectation that they will increase their working hours over the twelve month period. The University has a flexible working policy that is available to those with child care responsibilities.

Since April 2015, the introduction of Shared Parental Leave enables eligible parents to choose how to split the available leave between them. This enables couples to be off work together or at different times. Its purpose is to give parents more flexibility in considering how to best care for, and bond with, their child in the first 52 weeks following birth or adoption, instead of simply taking maternity/adoption and paternity leave.

(ii) Paternity, adoption and parental leave uptake – comment on the uptake of paternity leave by grade and parental and adoption leave by gender and grade. Has this improved or deteriorated and what plans are there to improve further.

4(f)(ii) Paternity leave

The University policy grants two weeks ordinary paternity leave, and up to twenty-six weeks additional paternity leave. CEB has had four requests for ordinary paternity leave from academic and two from research staff in the past five years (2010 to 2015), all of which were granted.

Changes to paternity leave policies will be widely disseminated across the Department [AP 21, 28] and staff encouraged to inform HR of changing circumstances in their family lives to prompt discussions on the leave options available.

Teaching and administrative duties can be affected by paternity leave. These are dealt with on a case-by-case basis by mutual agreement. When a member of academic staff has paternity leave during term time, a replacement for the teaching duties affected by the paternity leave may be
sought; alternatively, the teaching timetable may be reorganised so that teaching obligations are not affected if this is in line with the wishes of the member of staff.

(iii) Numbers of applications and success rates for flexible working by gender and grade – comment on any disparities. Where the number of women in the department is small applicants may wish to comment on specific examples.

4(f)(iii) Flexible working applications

The University has a Flexible Working Policy which was updated to include flexible retirement: [http://www.admin.cam.ac.uk/offices/hr/policy/flexible/](http://www.admin.cam.ac.uk/offices/hr/policy/flexible/)

No academic staff have made applications under this scheme to date.

Part time working is also rare amongst the academic and research staff in the Department, with no academics and fewer than 10% of research staff working part time. The usual reason for part time working is that a second position is held elsewhere making up a full-time role, although there are currently two female researchers combining research with childcare responsibilities. The Department will always try to support such applications, but in the case of third party funded research, there may be constraints on the funding or timescales that make this difficult.

4 (g) For each of the areas below, explain what the key issues are in the department, what steps have been taken to address any imbalances, what success/impact has been achieved so far and what additional steps may be needed.

(i) Flexible working – comment on the numbers of staff working flexibly and their grades and gender, whether there is a formal or informal system, the support and training provided for managers in promoting and managing flexible working arrangements, and how the department raises awareness of the options available.

4(g)(i) Flexible working

For academic and research staff, the normal working hours are different in each research group. In 2013, two members of the research staff (both female) had flexible working arrangements (working a three-day and four-day week) in order to facilitate caring for their young children.

Whilst a very small number of staff work part time, we have a number of cases where staff members have agreed an informal flexible working arrangement with their line manager. We will be encouraging staff to inform HR of any requests for flexible working in the future in order that these can be set up formally in accordance with the University’s Flexible Working Policy [AP 28].

Departmental support staff can opt into a flexitime scheme as mentioned earlier (4(e)(iii)), which allows individuals to work around any childcare or other caring responsibilities they may have. Currently, six members of the assistant staff (across grades four to seven, all female) have applied for flexible working arrangements, all of which have been approved. The types of arrangement are 80% of full-time employment (five cases) and job sharing (one case). The reasons for the applications include child/family care, work/life balance, and pursuing outside interests.
4(g)(ii) Cover for maternity and adoption leave and support on return – explain what the department does, beyond the university maternity policy package, to support female staff before they go on maternity leave, arrangements for covering work during absence, and to help them achieve a suitable work-life balance on their return.

4(g)(ii) Cover for maternity and adoption leave, and support on return

The Department offers support to academic and research staff going on, or returning from, a period of leave, which may include, maternity or adoption leave or leave to care for a dependant.

Academic posts during the leave period would be covered via temporary fixed-term appointments. Funding for these comes from Departmental sources or an additional bid can be made to the School of Technology. Research staff appointments are generally not covered during leave, but funding is made available to extend fixed-term appointments on return from maternity leave. Some third party sponsors (e.g. research councils) provide additional funding for this purpose, others do not. If the latter case, Department funding is used to pay maternity benefits. On return from leave, there are flexible arrangements for the first couple of months (often to use up accrued holiday) in line with a graduated return policy, and then the option of flexible working is made available.

In 2013, a new University-wide “Returning Carers Scheme” was launched to support the career development of research and academic staff. Returning carers (male and female) can apply for funds (up to £10,000) to assist them in building up their research profiles and other academic activity after a period of absence from work. Examples of support provided include (but are not limited to) training to support career development, domestic costs of additional childcare while main carer is away and costs of family member or nanny to accompany new mothers to conferences home or abroad. Despite widespread advertising, as yet, no one in CEB has applied for this funding.

Childcare provision for University staff is important for those with young families, and makes it more likely that staff will return after a maternity break. The University currently operates two nurseries (for children aged from 3 months to 5 years) and a holiday play scheme (for children who are at primary school). There are plans for the ongoing development in North-West Cambridge to include more family-friendly accommodation along with a new University nursery in September 2016. It is hoped that facilities and opportunities for those with caring responsibilities will improve.

(Section 4, 4468 words / maximum 5000)
5. Any other comments

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.

The Department has appointed a new HR Adviser due to start in May 2016 who will be tasked with disseminating and implementing best practice and with one responsibility being to report on progress on the AP and to formulate new policies as issues become apparent.

The feedback from the Panel on our previous submission has been addressed together with a complete review and revision of our AP. The Panel identified a lack of clarity regarding specific actions for improvement and so the application is more focussed and the AP clearer using the SMART protocol.

The results from a recent Staff Survey (92% participation rate) are being reviewed by a newly-formed Staff Committee. The survey highlighted the need for greater information and education both about HR and E&D issues and on how the Department should be managed. As an immediate outcome, core values and mission for the Department have been widely debated and adopted by the Department and strategic planning for the future is now being undertaken – something that has not occurred in the past. As a result, we have put development of people as one of the four critical facets of our mission (alongside excellent in research, teaching and impact of discoveries).

The governance of CEB has changed, with strategy and operations being overseen by a SMB, the transactions of which are transparent to, and informed by, the staff. A standing agenda item at the SMB is the ongoing monitoring and progression of the AP. A further result of this planned approach is that we are able to ensure an appropriate integration of E&D and AS tenets into our strategy. The link between AS and the Departmental strategy to attract more women has been clarified and AS is now regularly discussed at academic and research staff meetings. We are aiming at all academic staff and section leaders to have undertaken the University’s online E&D training by the end of 2016 with a target for all staff by end 2018 [AP 04]. Such targets now form standing items in staff appraisals.

The move of CEB to new premises during 2016-17 will provide a valuable opportunity to review and improve current working practices and enable us to challenge further the way things are done. The recently appointed new lecturers have experience from outside Cambridge (three being female) and have been asked to challenge the status quo whenever possible so as to improve our environment continually.

(Section 5, 403 words / maximum 500)
6. 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. The plan should cover current initiatives and your aspirations for the next three years. The action plan does not need to cover all areas at Bronze; however the expectation is that the department will have the organisational structure to move forward, including collecting the necessary data.

Action Plan

1. Communication and Awareness

1.1 Raise awareness of Athena SWAN and E&D matters [AP 01 - 07]
1.2 Demonstrate transparency in committee structure [AP 08 - 11]
1.3 Raise the profile of women in CEB [AP 12 - 13]
1.4 Tracking progress of women within the department [AP 14 - 20]
1.5 Improve training of staff [AP 21 - 23]

2. Nurturing Environment and Progression

2.1 Provide a nurturing environment and enhance career progression [AP 24 - 30]
2.2 Promotion and recognition [AP 31 - 33]
2.3 Improve mentoring and support [AP 34 - 36]
## Chemical Engineering and Biotechnology Action Plan

### 1. Communication and Awareness

#### 1.1 OBJECTIVE: Raise awareness of Athena SWAN and Equality & Diversity matters

<table>
<thead>
<tr>
<th>Action No.</th>
<th>Description</th>
<th>Action Taken to date</th>
<th>Planned Actions</th>
<th>Responsibility</th>
<th>Timescale</th>
<th>Success Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Awareness of CEB’s Mission and Core Values.</td>
<td></td>
<td>1) Revise the “Welcome Pack” document to highlight CEB’s Mission and Core Values and its commitment to AS, E&amp;D and Dignity@Work policies.</td>
<td>HR Adviser/HoD/IT Section.</td>
<td>June 2016</td>
<td>100% usage of revised “Welcome Pack” document in all HR inductions held.</td>
</tr>
<tr>
<td></td>
<td>Currently these are disseminated to new staff, but not reinforced to existing staff.</td>
<td></td>
<td>2) Prominent display of Mission and Values on CEB web site.</td>
<td></td>
<td>December 2016</td>
<td>Effective poster display in new building.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3) Prominent display of Mission and Values on posters in entrance foyer of new CEB building.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>02</td>
<td>Awareness of E&amp;D in CEB’s culture and processes.</td>
<td>HoD and HR have run a number of staff sessions addressing E&amp;D issues and Dignity@Work.</td>
<td>1) Further sessions/workshops focussing on E&amp;D issues.</td>
<td>HR Adviser/HoD</td>
<td>Immediate and ongoing.</td>
<td>3 sessions delivered by end 2016, and 3 refresher sessions per year in following years. More positive feedback from staff as evidenced in the next staff survey results.</td>
</tr>
<tr>
<td></td>
<td>AS Website created</td>
<td></td>
<td>2) E&amp;D to feature in all future staff surveys conducted.</td>
<td>ASWG, HR Adviser and IT - Communications Officer</td>
<td>Staff survey likely to be held in 2018.</td>
<td>Accurate and up to date information maintained on webpage, including relevant events and any changes to ASWG membership. Web analytics to show 25% increase in website use annually.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3) Update and maintain Athena SWAN webpage on CEB’s website and alert staff to significant changes via CEB bulletin</td>
<td></td>
<td>Review monthly</td>
<td></td>
</tr>
</tbody>
</table>

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Abbreviations can be found on page 2 of the main application form
### Chemical Engineering and Biotechnology Action Plan

**03** Profile and visibility of members of ASWG.

- **ASWG set up from nominated members or volunteers.**
  1. Review and update ASWG membership. A new Postdoc (male) will join the ASWG in 2016. Ensure members are pro-active in fulfilling Action Plan and remain committed.
  2. ASWG members to have active involvement in University wide AS network and workshops. AS events communicated to ASWG by email, with encouragement to participate.

- **ASWG Chair / Coordinator**

  **Review annually**

- **All sections of Department to be represented on ASWG.**

- **Active membership of ASWG with 25% annual turnover of membership. Male representation on ASWG to be increased to 40% by end 2017.**

- At least one ASWG member to attend all University wide AS and E&D events.

**04** Only 34% of CEB staff have completed basic E&D training (as at February 2016).

- **All staff have been asked by email to complete an online E&D training course.**
  1. HR Advisor to review E&D training completion data, and issue formal reminders to individuals who have not completed training. Completion data to be passed to ASWG.
  2. HR Adviser to inform Chairs of appointment panels whether members have been trained in this area.

- **HR Adviser**

  **Quarterly checks January 2017**

  **100% completion rate for all staff by end 2018, with intermediate target of 80% of all staff by end 2016.**

  **Higher target of 100% of academic and section heads by end 2016.**

  **100% of appointment panel members to have completed basic E&D training.**

**05** Lack of awareness of “Unconscious Bias”.

- **Training in awareness of “Unconscious Bias” has not yet started.**
  1. Provision of “Unconscious Bias” training needs to be built into departmental processes. Annual seminars to take place.

- **HR Adviser January 2017**

  **100% of appointment panel members to have completed training.**

  **90% attendance at seminars, or completion of training, by all line managers.**

---

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<table>
<thead>
<tr>
<th>No.</th>
<th>Issue Description</th>
<th>Action Plan</th>
<th>Owner</th>
<th>Review Dates</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>06</td>
<td>Insufficient sharing of good practice between Departments.</td>
<td>Ad hoc sharing of ideas and information at present.</td>
<td>ASWG</td>
<td>Ongoing Review December 2016</td>
<td>At least one ASWG member to attend SoT women’s forums.</td>
</tr>
<tr>
<td>07</td>
<td>Lack of awareness of women-focussed events held within the University.</td>
<td>Department Administrator sends out information to all staff</td>
<td>Gender Equality Champion</td>
<td>Immediate and ongoing</td>
<td>Greater attendance at University events and improved feedback from female staff on opportunities available to them (at least one CEB person at 90% of events).</td>
</tr>
</tbody>
</table>

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Abbreviations can be found on page 2 of the main application form
### 1.2 OBJECTIVE: Demonstrate transparency in committee structure

<table>
<thead>
<tr>
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<th>Timescale</th>
<th>Success Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>08</td>
<td>Confusion on the structure of Department committees and membership</td>
<td>Departmental organogram has recently been added to the CEB intranet.</td>
<td>Structure of committees to be made more transparent, and publicised on CEB intranet and in welcome pack.</td>
<td>SMB</td>
<td>October 2016</td>
<td>Greater understanding of Departmental structure by staff and students as recorded in next staff survey (&gt; 75% satisfaction).</td>
</tr>
<tr>
<td>09</td>
<td>Some staff unaware of committee membership, committee decisions, and how to raise issues.</td>
<td>Terms of reference in place for key committees.</td>
<td>1) Ensure all Departmental committees have key points of contact, terms of reference, members and appropriate support for minute taking 2) Publicise terms of reference and membership of CEB committees on CEB intranet site. 3) Minutes of meetings to be posted on CEB intranet within 4 weeks of meeting taking place.</td>
<td>SMB / Chairs of each Committee</td>
<td>Summer 2016 and to be checked / updated at least every 3 months.</td>
<td>Transparency of Departmental committees achieved with staff being able to access up to date information on the CEB intranet. Improved feedback from staff as measured by staff survey (2018) (&gt; 75% satisfaction).</td>
</tr>
<tr>
<td>10</td>
<td>Need appropriate male and female representation on Departmental committees.</td>
<td>Gender balance not always considered when committee vacancies are filled</td>
<td>1) Publicise suitable vacancies for committee positions, particularly to junior female academics 2) Chairs of each committee to verify gender balance for all selection panels and committees.</td>
<td>Chairs of each Committee.</td>
<td>Immediate and ongoing</td>
<td>Appropriate balance in female: male representation on all main Departmental Committees, commensurate with workload on female staff.</td>
</tr>
<tr>
<td>11</td>
<td>Greater representation of senior female staff on high level Committees external to CEB has had good representation in the recent past.</td>
<td>CEB has had good representation in the recent past.</td>
<td>HoD / SMB to actively encourage female staff to represent the Department on</td>
<td>SMB / HoD</td>
<td>December 2017</td>
<td>Improved balance in female: male representation on Committees</td>
</tr>
</tbody>
</table>

Blue = activities currently underway or completed; Red = future plans
Abbreviations can be found on page 2 of the main application form
| Department (e.g. at School and University level) | high level committees external to the Department. |  | external to the Department that influence CEB’s activities. |

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## 1.3 OBJECTIVE: Raise the profile of women in CEB

<table>
<thead>
<tr>
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</tr>
</thead>
</table>
| 12         | Provision of role models to female staff and students. | Ad hoc attempts to encourage greater female representation. | 1) Seminar series organiser to pro-actively encourage and invite female academics to present seminars.  
2) Review list of alumni and target invitations to female speakers  
3) Regular female-focussed column in CEB focus  
4) Actively encourage presentation by female researchers at annual research day | Academic contact leading seminar series  
Alumni Development team  
CEB Focus editorial team  
CEB Postdoc committee, HoD | Ongoing – to be reviewed termly.  
January 2017  
Ongoing  
January 2017 | 30% female representation to be achieved by December 2016, increasing to 40% by December 2018.  
At least 35% female speakers in 2017  
Aim to have at least one female member of the Department featured in each CEB Focus.  
At least 35% female speakers in 2017 |
| 13         | Insufficient promotion of female success stories at all levels in CEB. | CEB Focus newsletter has Women in CEB section. | 1) Create profiles of female academics, PDRAs, P/G and U/G students and alumni on the CEB website and other promotional material (CEB Focus etc.).  
2) Ensure the CEB website, CEB Focus newsletter and CEB Bulletin all have a fair proportion of female representation. | IT – Section: Communication Officer | Immediate and ongoing | One profile in each quarterly CEB Focus Newsletter. These profiles added to CEB website.  
40% news items on website relating to female staff (50% by Oct 2017). |

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### 1.4 OBJECTIVE: Tracking progress of women within the Department

<table>
<thead>
<tr>
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<th>Success Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>Ensure the number of female applicants for the undergraduate and postgraduate courses remains above the national benchmarks.</td>
<td>This has not presented a problem to date for CEB.</td>
<td>Continue to monitor admissions data in terms of male: female ratios for applications, offers and acceptances. Report data annually to relevant committees.</td>
<td>HoD, Head of Teaching, SMB</td>
<td>Review annually.</td>
<td>Percentage of female applications for the Chemical Engineering and Biotechnology course(s) to remain above national benchmark.</td>
</tr>
</tbody>
</table>
| 15         | Address declining proportion of women taking PGT and PGR courses in recent years. | None                 | 1) Issue questionnaire to new P/G students to identify any gender-related issues in the application/admission system from a student point of view.  
2) Check information on the graduate course website(s) and improve any aspects that might affect gender balance.  
3) Advertise P/G opportunities better to current undergraduates through (a) female academics giving talk(s) about PhD opportunities; (b) final-year U/Gs being invited to graduate student conference. | Head of Teaching       | October 2016   | Reversal of trend: maintain percentage of female P/G students above national benchmark(s). |

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### Chemical Engineering and Biotechnology Action Plan

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<table>
<thead>
<tr>
<th>Action Plan ID</th>
<th>Description</th>
<th>Status</th>
<th>Description</th>
<th>Completion Date</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>Insufficient analysis of staff recruitment data</td>
<td>None.</td>
<td>Monitor data annually on staff recruitment (academic &amp; other) in terms of M:F ratios for: (i) applications received, (ii) candidates shortlisted, (iii) staff recruited.</td>
<td>HR Adviser / SMB</td>
<td>January 2017</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Identification of any trends in recruitment data.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Proportion of female researchers and academic staff could be higher</td>
<td>None.</td>
<td>PI’s to contact and encourage applications from female candidates who meet the criteria specified for vacancies. Encouragement might be at conferences, by targeted email, or word of mouth.</td>
<td>HoD</td>
<td>As academic vacancies arise</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>40% female academics in the Department by 2022. (Long timescale due to limited number of expected vacancies).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Performance of women in CEB U/G degrees.</td>
<td>This has not presented a problem to date with CEB.</td>
<td>Monitor and analyse degree classifications and 'premature leavers' to see if there is a gender imbalance.</td>
<td>Head of Teaching, SMB</td>
<td>Annually from October 2016</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Maintenance of equal % degree class attainment / performance by male and female undergraduates.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Lack of knowledge of PhD student completion rates by gender.</td>
<td>None</td>
<td>1) Monitor PhD student completion rate by gender. 2) Determine the gender ratio and benchmark against other Departments and Russell Group Universities.</td>
<td>Director of Graduate education</td>
<td>Annually from October 2016</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Confirmation that completion rates, and time taken to completion, are not affected by gender.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4) The actions within "raising profile of women within CEB" (Objective 1.3)

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53
| 20 | Lack of information on the reasons for staff departures and destinations of leavers. | All leavers are provided a link to complete a leaver’s questionnaire as part of their exit process. This is often not completed. | 1) Improve procedures for exit questionnaires.  
2) Where possible, conduct exit interviews for staff (particularly PDRA’s) in order to track destinations.  
3) Analyse data and report results to CEB committees annually. | HR Adviser | April 2016 | Review process to be in place by December 2016 | At least 75% of leavers to complete exit questionnaire by end 2017. |

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### 1.5 OBJECTIVE: Improve training of staff

<table>
<thead>
<tr>
<th>Action No.</th>
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<th>Responsibility</th>
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<th>Success Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>Lack of awareness of legislation and current University policies on HR issues (pay, promotion, recruitment, mentoring, maternity and paternity leave, etc.).</td>
<td>HoD identified the need for a qualified HR Adviser. Appointment has been made with the role holder taking up the post in May 2016.</td>
<td>Ongoing training of HR Adviser and HR Administrator to ensure they are fully aware of University policies as they evolve and develop so that appropriate advice can be given to staff.</td>
<td>HR Adviser / HoD</td>
<td>June 2016 and ongoing</td>
<td>Staff to have access to reliable, up to date HR advice. Zero issues of non-compliance with University, Border Agency rules and procedures.</td>
</tr>
</tbody>
</table>
| 22         | Lack of uptake on management training courses                                 | Department has offered training in Management Essentials to Support staff. Links to training modules have been provided to all line managers to assist them with the SRD process. | 1) All academic staff to undertake “Management Essentials” training.  
2) Bitesize SRD training/ briefings sessions (open to all CEB staff) to be held on a regular basis. | HR Adviser              | December 2016 | 100% PI attendance on “Management Essentials”.  
Regular SRD training / briefing sessions held every 6 months. |
| 23         | Staff attendance on PPD courses.                                              | Some line managers encourage staff to attend PPD events, but some do not.             | Inform staff that attendance on PPD courses should form a key part of their personal CPD. | HR Adviser / Line Managers      | December 2016 | 100% of staff to have Personal Development Plans in place to aid their CPD.     |

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Abbreviations can be found on page 2 of the main application form
## 2. Nurturing environment and progression

### 2.1 OBJECTIVE: Provide a nurturing environment and enhance career progression

<table>
<thead>
<tr>
<th>Action No.</th>
<th>Description</th>
<th>Action Taken to date</th>
<th>Planned Actions</th>
<th>Responsibility</th>
<th>Timescale</th>
<th>Success Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td>Completion rate of SRDs for all staff is poor. (Completion rate 36% as at Feb 2016).</td>
<td>CEB commenced a process to review SRD completions and requested all line managers to complete any reviews overdue. Bitesize training sessions undertaken in Feb / Mar.</td>
<td>1) Ensure SRDs are completed where overdue for all staff. 2) Review quarterly to ensure SRD completion rate is maintained. 3) Move to University’s online SRD system</td>
<td>HoD, HR Adviser &amp; Section leaders/ Academic leaders of research groups</td>
<td>December 2016 April 2017</td>
<td>All staff to have timely SRD reviews every two years. Completion rate for Department to increase to 75% by September 2016 and 95% by December 2016. Online system implemented.</td>
</tr>
<tr>
<td>25</td>
<td>Insufficient information and help with career development and progression.</td>
<td>Current provision of such support ad hoc.</td>
<td>1) HR Adviser to devise and agree a coherent strategy to aid the career development of Departmental staff in liaison with University PPD team. 2) Monitor staff attendance on courses, providing staff with training days. 3) Identification of training needs to be a standing item in review meetings between staff and section leaders. 4) Short questionnaires on value of the training course to be issued 3 months after completion to judge value to</td>
<td>HR Adviser HR Adviser and Section leaders / Academic leaders of research groups Section leaders/ Academic leaders</td>
<td>September 2016 From October 2016 From January 2017</td>
<td>Increased staff attendance (&gt;20%) at training events and PPD courses. Increased requests for, and uptake of, training days. 24% “satisfied” rating in 2015 Staff Questionnaire to increase to 70% “satisfied” in next Staff Survey expected 2018. 75% “satisfied” by value of training courses (exit questionnaire).</td>
</tr>
</tbody>
</table>

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| Individual in context of CEB. | Induction procedures do not give sufficient information to start posts effectively. | Welcome Pack used for all inductions for new starters. | 1) Revise training and development section of Welcome Pack.  
2) Review Welcome Pack annually in consultation with all staff groups.  
3) Revise induction for new starters at group and Departmental level, including mandatory University induction for PDRAs | HR Administrator /HoD Staff Committee | June 2016 | Annually from January 2017. | 44% “satisfied” rating in 2015 Staff Questionnaire to increase to 70% “satisfied” in next Staff Survey expected 2018. |
|---|---|---|---|---|---|---|---|
| Not enough research fellows, especially women. | Induction procedures do not give sufficient information to start posts effectively. | Welcome Pack used for all inductions for new starters. | 1) Revise training and development section of Welcome Pack.  
2) Review Welcome Pack annually in consultation with all staff groups.  
3) Revise induction for new starters at group and Departmental level, including mandatory University induction for PDRAs | HR Administrator /HoD Staff Committee | June 2016 | Annually from January 2017. | 44% “satisfied” rating in 2015 Staff Questionnaire to increase to 70% “satisfied” in next Staff Survey expected 2018. |
| Lack of awareness of family-friendly policies. | Not enough research fellows, especially women. | Some staff are aware of fellowship schemes. Email announcements from University are sometimes emailed to relevant staff and research students. | 1) Promote funding opportunities via ‘Research Professional’ section on CEB website.  
2) Ensure scheme information/weblinks updated regularly. | HoD/Director of Research aided by IT Section IT Section | November 2016 | From January 2017 | Numbers of research fellows to increase to 8 by December 2019 (from zero currently). |
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<tr>
<td>26</td>
<td>27</td>
<td>28</td>
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</tbody>
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<table>
<thead>
<tr>
<th></th>
<th></th>
<th>3) Promotion of flexible working options to all staff</th>
<th>Section heads</th>
<th>Increased uptake of flexible working.</th>
</tr>
</thead>
<tbody>
<tr>
<td>29</td>
<td>Scheduling of meetings and work-related events needs to present fewer attendance issues for those with primary carer responsibilities.</td>
<td>None</td>
<td>Introduce and develop policy for meetings to be held during core hours (if possible) for both work-related and social events.</td>
<td>HoD / SMB/HR Adviser</td>
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<tr>
<td></td>
<td>To be gauged via feedback from (i) next Staff Survey, expected 2018, and (ii) an annual audit of meeting times taken from the minutes of meetings. Any other concerns to be raised by staff representatives on CEB Staff Committee and investigated by HoD.</td>
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<td>30</td>
<td>Actions identified in SRDs are not always followed up.</td>
<td>Ad hoc follow up of activities identified in SRDs.</td>
<td>Formulation of HR strategy to ensure that CPD and other targets identified in SRDs are followed up in a timely and appropriate way.</td>
<td>HR Adviser / HoD</td>
</tr>
<tr>
<td></td>
<td>Planned actions for all CPD activities stemming from SRDs.</td>
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</tbody>
</table>

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### 2.2 OBJECTIVE: Promotion and recognition

<table>
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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>31</td>
<td>Lack of awareness of contribution reward / additional increment schemes. Lack of transparency in decision making process.</td>
<td>Panel formed to review applications and determine outcomes.</td>
<td>1) Future rounds to be advertised in CEB Bulletin.</td>
<td>HR / SMB / Academic Secretary</td>
<td>June 2016</td>
<td>Improved feedback from staff that they are kept informed of schemes such as CRS and they are aware of the decision making process.</td>
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<tr>
<td></td>
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<td>2) Refine membership of panel to adjudicate on applications.</td>
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<td>3) Monitor applications and success rates.</td>
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<td>4) Provide feedback to applicants.</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>Poor understanding of promotion schemes.</td>
<td>Information is disseminated by global email message to all staff. Limited support with applications.</td>
<td>1) Make information available on CEB intranet and in CEB Bulletin on (i) Contribution Reward Scheme (CRS), (ii) promotions to SRA and (iii) Senior Academic Promotions.</td>
<td>HR Adviser / HoD /IT Section.</td>
<td>October 2016</td>
<td>Increased awareness by staff and line managers to exceed 95%, as judged in next Staff Survey (2018). Increase in no. of applications from women for such schemes to increase by 10% year on year.</td>
</tr>
</tbody>
</table>
### Chemical Engineering and Biotechnology Action Plan

**5) HR Adviser and HoD**

To collate a list of Senior staff who are willing to assist staff with mock interviews and application support. Make this available to staff when assistance is required.

<table>
<thead>
<tr>
<th>Action</th>
<th>Responsible</th>
<th>Timeframe</th>
<th>Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>33. Not enough female members of Department applying for suitable posts advertised (in Department and elsewhere, at all levels)</td>
<td>Support for applications currently only happens in a few of the research groups.</td>
<td>All Research Group Leaders and Section Leaders to support and encourage the progress of their female staff members.</td>
<td>HR Adviser and Section Leaders / Academic leaders of research groups; Immediate and ongoing</td>
</tr>
</tbody>
</table>

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Abbreviations can be found on page 2 of the main application form
2.3 OBJECTIVE: Improve mentoring and support

<table>
<thead>
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</tr>
</thead>
<tbody>
<tr>
<td>34</td>
<td>Lack of a mentoring scheme for PDRAs in the Department.</td>
<td>HoD has asked all Academic staff to volunteer as Mentors (with training being offered by University PPD if required).</td>
<td>Mentor nominations to be shared and discussed with OPdA in order that a Departmental scheme can be established. Number of new mentoring relationships to be monitored.</td>
<td>HoD / HR Adviser and Gender Equality Champion</td>
<td>October 2016</td>
<td>Monitor satisfaction with mentoring via Scheme Questionnaire seeking 80% satisfaction by December 2018.</td>
</tr>
<tr>
<td>35</td>
<td>Perceived lack of Dal support for women in CEB.</td>
<td>None</td>
<td>A Departmental Women’s Forum to be set up which meets at least biannually.</td>
<td>Gender Equality Champion</td>
<td>October 2016</td>
<td>Two meetings held/year. Measure engagement and uptake through exit questionnaire, aiming at 50% of CEB women attending each event.</td>
</tr>
<tr>
<td>36</td>
<td>Postdoc Committee (PCB) needs support if it identifies gender-related issues.</td>
<td>HoD sent minutes of all Postdoc Committee meetings.</td>
<td>1) HoD to meet with Postdoc Committee Chair on a quarterly basis to identify key issues raised. 2) HoD to support postdocs through organisation of events and encouraging their participation in CEB decision-making committees.</td>
<td>HoD / Committee Chair</td>
<td>Immediate and ongoing</td>
<td>Quarterly meeting between HoD and Postdoc committee chair.</td>
</tr>
</tbody>
</table>

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