# Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreword from the Chair of the Expert Review Panel</td>
<td>4</td>
</tr>
<tr>
<td>Executive Summary</td>
<td>5</td>
</tr>
<tr>
<td>Review of the Concordat to Support the Career Development of Researchers</td>
<td>9</td>
</tr>
<tr>
<td>A. Introduction</td>
<td>9</td>
</tr>
<tr>
<td>B. The role of the Concordat</td>
<td>9</td>
</tr>
<tr>
<td>C. Definitions</td>
<td>10</td>
</tr>
<tr>
<td>D. The future of the Concordat</td>
<td>13</td>
</tr>
<tr>
<td>E. Stakeholders, signatories and representation</td>
<td>15</td>
</tr>
<tr>
<td>F. Governance and implementation</td>
<td>17</td>
</tr>
<tr>
<td>ANNEX 1: Expert Review Panel Membership and Terms of Reference</td>
<td>20</td>
</tr>
<tr>
<td>ANNEX 2: Suggested revision of the Concordat to Support the Career Development of Researchers</td>
<td>21</td>
</tr>
<tr>
<td>1. Name</td>
<td>21</td>
</tr>
<tr>
<td>2. Other introductory sections</td>
<td>21</td>
</tr>
<tr>
<td>3. Revised Principles and Obligations in full</td>
<td>21</td>
</tr>
<tr>
<td>Principle 1: Research Staff Responsibilities</td>
<td>21</td>
</tr>
<tr>
<td>Principle 2: Principal Investigator Responsibilities</td>
<td>22</td>
</tr>
<tr>
<td>Principle 3: Employer Responsibilities</td>
<td>23</td>
</tr>
<tr>
<td>Principle 4: Funder responsibilities</td>
<td>26</td>
</tr>
<tr>
<td>Principle 5: Equality, Diversity and Inclusion</td>
<td>27</td>
</tr>
<tr>
<td>Principle 6: Implementation and Review</td>
<td>28</td>
</tr>
<tr>
<td>ANNEX 3: Background, context and evidence</td>
<td>30</td>
</tr>
<tr>
<td>Background to the Review</td>
<td>30</td>
</tr>
<tr>
<td>Contextual Information</td>
<td>31</td>
</tr>
<tr>
<td>Evidence used in the Review</td>
<td>34</td>
</tr>
<tr>
<td>ANNEX 4: Summary of evidence received from the community consultation</td>
<td>35</td>
</tr>
<tr>
<td>ANNEX 5: Case studies of best practice from the review</td>
<td>46</td>
</tr>
<tr>
<td>Principle 1: Research Staff Responsibilities</td>
<td>46</td>
</tr>
<tr>
<td>Principle 2: Principal Investigator Responsibilities</td>
<td>47</td>
</tr>
<tr>
<td>Principle 3: Employer Responsibilities</td>
<td>47</td>
</tr>
<tr>
<td>Principle 4: Funder responsibilities</td>
<td>50</td>
</tr>
<tr>
<td>Principle 5: Equality, Diversity and Inclusion</td>
<td>51</td>
</tr>
<tr>
<td>ANNEX 6: List of acronyms used in the report</td>
<td>53</td>
</tr>
</tbody>
</table>
Foreword from the Chair of the Expert Review Panel

I think we can all agree that research and innovation are vital for social and economic development of our country, and that researchers are important drivers. To enable this we must train researchers to be creative and rigorous independent thinkers. They must have wide horizons to identify and pursue lines of research that are of importance and to find places where they can have a fulfilling career.

The development of researchers with these perspectives is a central role of our research organisations. To become independent researchers and to be innovators they need time and support to develop their ideas and to take them forward towards making an impact on society. The research world is becoming more open through the Open Science initiatives, driven by the academic world but of benefit to all. It is also becoming ever more competitive – for funds, people, impact and, most important of all, ideas. Scrutiny is ever present and initiatives such as the Declaration on Research Assessment (DORA) will help to make that scrutiny fair and transparent.

The researcher community within Universities and other Research Organisations has grown over the last decade as the science budget from national and international sources has grown, as have many charities in spite of challenging financial times. Research career opportunities in the private sector are buoyant and they will increase as the UK aims for its target of 2.4% of GDP spent on research and innovation and as the Industrial Strategy is taken forward. Many employers recognise the powerful skills that researchers develop which can be deployed in a wide range of roles: for example in policy, consultancy, management and administration particularly in research rich organisations. The researcher community far outnumbers the academic positions available so the availability and awareness of the breadth of career options must be highlighted along with opportunities to develop the skills they need to pursue their chosen career path. These trends can be seen in all major developed economies in particular Western Europe and the U.S.A. Research is an international business so those for whom mobility is possible are in a strong position to make the most of international opportunities. The correspondence of some postdoctoral researchers indicates concerns about their prospects making it important to increase awareness of the breadth of opportunities for those with the researcher skill set.

The Concordat to Support the Career Development of Researchers was established in 2008 and signed by all major organisations involved in research training in the U.K. It followed the European Charter and Code for Researchers but has had greater formal commitment. The impact in the U.K. has been significant but our consultation showed not as much as it could have had. More recently organisations such as the Max Planck Society in Germany have developed guidelines for postdoctoral training. The world is hungry for trained researchers so it is important for the U.K. to maintain a strong training environment, particularly in the wake of Brexit and in the global war for talent.

Given the changes since its launch it was timely that the Concordat Strategy Group should commission a review of the Concordat. I was asked to chair this review and this is our report. I would like to thank my review group colleagues who engaged so fully and also the many who responded to our consultation. The U.K. researcher community is without doubt vigorous and committed. We still have progress to make. It is our view that a Concordat is necessary and that its provisions are strengthened through the stakeholders to propel the U.K. research training environment to be the best in the world.

Prof David Bogle FREng

University College London
Executive Summary

1. This review aims to evaluate the impact of the Concordat to Support the Career Development of Researchers since its publication in 2008 and review the progress in implementing its Principles. It reviews existing evidence as well as that commissioned by an Expert Review Panel through a community consultation and contextual analysis of the research environment in the UK. The future of the Concordat is considered and recommendations are made in relation to its governance and implementation.

2. The Expert Review Panel concluded that the Concordat has had a significant impact on the support for career development of researchers. However, progress in implementing the Concordat is variable across the Principles and inconsistent across employing institutions; therefore, it should continue to have a role going forward. Although the implementation of the Concordat is overseen by a Concordat Strategy Group, additional drivers will enable further cultural change, with closer links to research funding and sharing of examples of good practice being required.

3. A suggested revised version of the Concordat is provided. There is a need to update language, improve accessibility and communications, and to emphasise the specific roles of different groups in supporting researchers. In addition to researchers themselves and their employing organisations, Principal Investigators and Funders have specific responsibilities and this is reflected through a revised structure of ‘Principles and Obligations’ which address the responsibilities of different stakeholder groups.

4. A consultation provided the Expert Review Panel with a wide range of views from across the community, including whole institution responses as well as views from researchers, Principal Investigators and researcher developers, both in academia and industry. A range of positive impacts were identified from this consultation, including considerable improvement in researcher access to training resources, and increased visibility and representation of researchers within Higher Education Institutions. However, areas of concern remain, particularly around a lack of awareness of the Concordat especially amongst research staff and outside academia; the clear need for improvements in the use of time-limited contracts; and lack of appropriate recognition of the vital role that researchers play within their institutions.

5. The Concordat should support the career development of all individuals who have a role in carrying out research, be they postdoctoral researchers, research assistants, fellows, technicians or others who pursue research outside research contracts. However, most progress is required in the support of early career researchers in academia. An increased understanding is needed of the UK researcher community through better data gathering and in the tracking of researcher careers.

6. Researchers should be supported to develop independence, and equal value and support should be provided to all researchers, no matter what their career aspirations are. With a continuing trend of global and sectoral researcher mobility, increased value must be placed on the skills and experiences of researchers who move to roles outside academia.

7. There have been notable improvements in the equality, diversity and inclusion of researchers; however, more needs to be done particularly relating to non-gender issues. Therefore, a Principle in this area is still required and specific Obligations relating to inclusivity should also be included within the Principles for different stakeholder groups. Improvements are also required in supporting the health and wellbeing of researchers.
8. Although this review did not assess specific programmes or activities, the Expert Review Panel acknowledged the intrinsic link between the Concordat and the HR Excellence in Research Award. On reviewing evidence relating to this programme, variability in the culture changes associated with the HR Excellence in Research Award were noted. The programme should therefore be reviewed to ensure that it continues to deliver a driver for change in relation to the Concordat.

9. The recommendations of the Expert Review Panel are:

Recommendation 1: The Concordat should continue to be used in order to maintain the UK’s standing as a world leader in its support for researchers, and to continue to improve the culture of researcher support. However, some revisions are required to ensure it is effective in driving culture change.

Recommendation 2: The focus and primary aim of the Concordat is for the support of research staff. The definition of ‘researchers’ used in the Concordat should be explicitly broadened to include staff not primarily hired as researchers, but who are research active. Any reporting relating to the implementation of the Concordat should be clear about the groups of researchers to which it refers.

Recommendation 3: A revised Concordat should focus on researchers in academia but with recognition that the issues in industry and other sectors are similar, although the challenges may be different. It must also emphasise that the Principles and Obligations apply equally to all research staff, regardless of contract type.

Recommendation 4: There should be increased support for researcher independence, including autonomy in their own career development, and the freedom to innovate.

- A revised Concordat should address the tension between PIs and postdoctoral independence, setting out clearly the obligations for both groups.
- There should be increased emphasis and support, by both funders and employers, for uptake of researchers’ 10 days training allowance.
- Development of researcher independence should be supported through allocated time within grants.
- 20% of a researcher’s time should be allowed for developing independent research and skills.

Recommendation 5: A revised Concordat should promote finding solutions to the problems of mobility, time-limited contracts and promotion that many researchers face.

Recommendation 6: The language, formatting and structure of the Concordat should be updated. A revised Concordat should be:

- Updated to reflect modern policies and practices. It is essential that the Concordat is informed by and linked to any relevant new or revised legislation or policy frameworks.
- More succinct but link to specific examples of good practice.
- Accessible to all stakeholder groups. Consideration should be made to the format of the Concordat to ensure it remains relevant and up to date. Different formats may be required for different stakeholder groups.
- Restructured to articulate the responsibility of different stakeholder groups, including research staff, PIs, employers and funders. A structure of Principles and Obligations would clearly set out the responsibilities of the different groups in driving and implementing change.

Recommendation 7: Equality, diversity and inclusion should be integrated throughout a revised Concordat, outlining specific responsibilities of stakeholder groups in supporting this area. Whilst avoiding repetition, the retention of an updated Principle is also required so that it remains a priority.
Recommendation 8: A communications plan should be developed which ensures that the Concordat remains relevant to new and updated legislation / policy, and which ensures that all relevant stakeholder groups have appropriate access to the Concordat.

- The list of signatories should be reviewed and, if required, updated.
- Funders should require all PIs to be aware of the Concordat and ask them to communicate it to their research staff.
- Employers should ensure that the communications plan is implemented throughout their organisation, and should monitor researcher engagement with the Concordat, for example through participation in annual surveys.

Recommendation 9: Concordat signatories should prioritise a more comprehensive collection of researcher and research careers information, and the Concordat Strategy Group should investigate options to achieve this.

- The UK should aspire to support data collection exercises that are comparable with international models.
- Funders should support research into the most appropriate methods required to obtain such data.
- Existing surveys, including CROS and PIRLS, should be updated to ensure that broad comparability can be made about researcher aspirations and career paths across the sector. Such surveys should aspire to be as representative of the sector as possible.
- Best practice should be shared on ways to engage with researcher alumni communities.
- The Higher Education Statistics Agency should be invited to join the Concordat Strategy Group as a delivery partner.

Recommendation 10: The Concordat must continue to be owned by the sector, with implementation overseen by a representative steering group.

- The Terms of Reference of the Concordat Strategy Group should be reviewed.
- The membership of the Concordat Strategy Group should be reviewed, ensuring that all relevant stakeholder groups (including researchers, PIs, employers and funders) are represented, and/or in working groups which report to the CSG. To represent employers of researchers beyond academia, the involvement of the Confederation of British Industry (CBI) is welcomed.

Recommendation 11: The sector should take a strategic approach in considering the skills needs of the UK through commitment to activities which develop the skills of research staff regardless of contract length and in preparation for diverse career paths.

Recommendation 12: There should be a coordinated approach between the development of UK Research and Innovation and the Concordat going forward. UKRI should use its sectoral influence to ensure appropriate consistency across different research domains.

Recommendation 13: A revised Concordat should include a new Principle for funders. Funders should ensure that the Principles of the Concordat are adopted through changes to funding processes.

Recommendation 14: The UK operation of the HR Excellence in Research Award, or any other relevant awards, should be reviewed to ensure it remains relevant as a driver for change.

- A meta-analysis of data for best practice (from published action plans) would give a composite picture of the ‘ideal’, along with case studies for implementation.
- Evaluation of applications for the award must be evidence-based and institutions may require more guidance on requirements.
• Strong consideration should be given to the use of a graded assessment (e.g. bronze / silver / gold).
• There must be a quality assurance of reviewers and of the reviewing process, to ensure that assessment panels are representative of the sector.
• Views should be sought from organisations outside academia (such as businesses, charities and others) in order to produce guidance for HEIs on the requirements of the award.

**Recommendation 15:** The UK operation of the HR Excellence in Research Award should be reviewed to ensure that all UK HEIs have access to the UK application process and are not constrained in applying for any associated EU funding beyond Brexit.

• A revised membership model for Vitae should be considered, which separates services associated with the HR Excellence Award and other Vitae activities, and which operates in an open and transparent way.
• The Concordat Strategy Group must ensure that processes are in place to maintain UK standards for researcher development which are at least comparable to those set by the EU.
• Guidelines should be developed to outline any funding implications for UK HEIs who are not in receipt of an HR Excellence Award.
Review of the Concordat to Support the Career Development of Researchers

A. Introduction

1. **Aim and objectives:** This review aims to evaluate the impact of the Concordat since its publication in 2008 and make recommendations for the future of the Concordat in the context of a changing UK research environment, as well as wider national and international developments.

2. **Expert Review Panel:** A group of individuals comprising researchers, researcher developers, senior academics and industry, from the UK and internationally, reviewed a wide range of evidence from across the sector in order to understand the context of the Concordat, its implementation and impact on the research community, and its future role. Information about the membership and terms of reference of the Expert Review Panel can be found at Annex 1.

3. **Future of the Concordat:** The UK Government has put research and innovation at the heart of its Industrial Strategy, has committed to an additional funding of £7bn by 2021/22, and plans to increase total R&D expenditure to 2.4% of GDP by 2027. In this context, the Concordat should continue to have a key role in driving further culture change in the development of researchers, through activities led by researchers themselves, as well as their employers, managers and funders. This review proposes how change could be driven more effectively through revisions to the structure and wording of the Concordat, as well as a review of the governance structure and incentives to research organisations. Some changes are required for the Principles themselves, as well as some of the surrounding context, expanding the Obligations and being explicit about who they apply to. Additionally, a future version of the Concordat should have greater detail about practical steps to take forward the Principles, with examples of good practice from across the sector and recommendations to funders. Greater emphasis is required in all the Principles on the underlying values that will drive cultural change, for example the quality of conversations between PIs and researchers, and the validity of moving to careers outside academia. A suggested revised version of the Concordat is provided at Annex 2.

4. **Evidence:** Background, contextual information and a description of the evidence reviewed, is provided at Annex 3. A community consultation, commissioned by the Expert Review Panel, sourced further evidence on the impact and future of the Concordat. This provided a large additional evidence base which was invaluable for understanding some of the issues, areas for improvement, and in identifying further examples of best practice. A summary of the consultation is provided at Annex 4. Examples of good practice have been identified and are provided at Annex 5.

B. The role of the Concordat

5. **Purpose:** The Concordat was established in 2008 ‘to improve the employment and support for researchers and research careers in UK higher education’ by ‘setting out clear standards that research staff can expect from the institution that employs them, as well as their responsibilities as researchers’.

In the context of a changing landscape and a continuing rise in the number of research staff, the role of the Concordat has been questioned.
6. **Positive impacts of the Concordat:** Evidence clearly shows that the Concordat has had an important role in improving the culture of support for researchers. There are a number of notable impacts, and examples are given as case studies of good practice in Annex 5. General themes include:

- **Inherent impact:** the existence of the Concordat demonstrates a level of commitment by its signatories to research careers; internationally, it is seen as leading good practice; without the Concordat, smaller institutions may lack specific support for researcher development; it has fuelled the creation of innovative activities to support researchers.

- **Benefits for researchers:** improvements in the appraisal system including the introduction of separate career development reviews in a number of institutions; guidelines for development needs analysis; training programmes; researchers’ representation on institutional committees; the proliferation of research staff associations and empowering the voice of researchers.

- **Wider benefits:** increased support for staff wellbeing; improvements to workload or fair treatment; institutions valuing diversity; and a reduction in the use of fixed term contracts.

7. **International context:** The UK is leading the way in developing policy and best practice in the support of the career development of researchers. Globally, there are few examples of documents similar to the Concordat which explicitly set out principles in this regard. Those of note include:

- The European Charter for Researchers and Code of Conduct for the Recruitment of Researchers were both published in 2005 and more recently in 2011, the European Commission developed a European framework for research careers.

- Elsewhere in Europe, the HRK German Rectors’ Conference published in 2014 “Guidelines for the advancement of early career researchers in the post-doctoral phase and for the development of academic career paths in addition to that of a professorship”. The Max Planck Society Institutes (through guidelines on the postdoc stage https://www.mpg.de/guidelines-postdocs) and Helmholtz Association of Research Centres in Germany offer excellent support for postdoctoral researchers.

- Beyond Europe, Australia published a Review of its Research Training System in 2016, which examined many of the issues considered by this Review. In the United States, there are example structures, such as the Stanford University Office of Postdoctoral Affairs (https://postdocs.stanford.edu/current-postdocs) and the National Institutes of Health Office of Intramural Training and Education (www.training.nih.gov) which provide a focus on training for postdoctoral researchers.

- In the USA, the National Academies of Sciences, Engineering and Medicine have published their review and recommendations for the support of academic researchers in the biomedical sciences, ‘The Next Generation of Biomedical and Behavioural Sciences Researchers: Breaking Through’.

8. **Consistency and buy-in:** Overall, there has been inconsistent progress in the implementation of the Concordat’s Principles, with variation across the Principles as to the level of success of implementation. The Concordat lacks a clear statement of its purpose, and there is not enough sharing of best practice across institutions or between departments. Efforts towards implementation by researcher developers and others can have limited success where there is insufficient support or communication with Principal Investigators, senior management and human resources. It is timely to review the Concordat and its implementation in order to maximise the benefit for research and the research community.

**Recommendation 1:** The Concordat should continue to be used in order to maintain the UK’s standing as a world leader in its support for researchers, and to continue to improve the culture of researcher support. However, some revisions are required to ensure it is effective in driving culture change.

C. Definitions

9. **Researchers:** The number of postdoctoral researchers has increased significantly since the Concordat was first published (see Annex 3) and the primary role of the Concordat in the past has been for early career researchers (ECRs) in academia. However, the wording of the Concordat currently does
not reflect the diversity of research roles in academia. It reflects the view of the research intensive Universities and does not capture interdisciplinary activity, portfolio working, or collaborative research with industry, other institutions and the public. The Concordat should apply to all research staff who are carrying out or otherwise involved in research or the research pipeline, whether or not this is part of the role that they are currently employed in. This should include:

- Postdoctoral researchers
- Research assistants and associates
- Research fellows
- Technicians
- ‘Hidden researchers’

The Concordat should apply to all research staff who are carrying out or otherwise involved in research or the research pipeline, whether or not this is part of the role that they are currently employed in.

10. The issues differ for these different groups of researchers. For example, technicians tend to be on permanent or open-ended contracts but are not sufficiently valued for their contributions to (often) multiple concurrent research grants. The hundreds (or more) of ‘hidden researchers’ in UK HEIs, on the other hand, tend to be qualified to postgraduate level but due to post-PhD economic pressures spend much of their time providing teaching support for HEIs, leaving little capacity for personal development or advancing research. Such individuals often have limited access to training materials or the research environment more generally, since they are not classified as research staff by their employing organisation, and are restricted in their eligibility to apply for research grants. All researchers, regardless of their career aspirations (be they teaching, research or another destination), must be supported in their career development.

All researchers, regardless of their career aspirations (be they teaching, research or another destination), must be supported in their career development.

11. **Principal Investigators:** This is an important group of researchers who have a key responsibility for supporting the career development of their more junior colleagues. PIs hold responsibility for obtaining and managing all aspects of research grants; recruiting research staff; and advising and developing their own and their staff’s careers, in particular those individuals who they line-manage.

12. **Postgraduate research students:** In order to ensure that postgraduate researchers (PGRs) are prepared for successful careers in research, whether in academia or elsewhere, it is crucial that they are informed and equipped with guidance and support equivalent to that available to postdoctoral researchers. Much of the Concordat concerns the responsibilities of the employer for the researcher, and therefore applies more to research staff than students. The focus for the Concordat should be on research staff (as defined above), but PGRs should be made aware of the realities of a research career and the role of the Concordat at an early stage.

---

1 Technicians include all technical staff associated with research, including technology or skills specialists, facility managers, technologists, or other research technical professional staff. A definition is provided here.

2 Hidden researchers include a large number of individuals who are employed by HEIs on teaching only contracts, often on an hourly-paid basis, and who pursue research outside their contracted hours. This group of researchers tends to be in the arts, humanities and social science disciplines, but can also be in other areas. Existing support mechanisms do not necessarily serve these communities.
Relevance for researchers in other sectors: The expectations of researchers across industry and academia have converged considerably and there is fluidity between sectors which should be encouraged. The sophisticated skills and experience that researchers develop outside academia are highly valued and need to be acknowledged, as well as the importance of those staff whose primary role is not research.

Best practice in support of researchers in other sectors: There is perhaps greater flexibility and mobility in research roles beyond academia – in industry, charities, museums, think-tanks, consultancies etc. Many businesses have excellent support for career development and HEIs could learn much from the sector. The differences between industry and academia are cultural, and career and broader personal development needs to become more embedded in HEI culture.

The community consultation and other evidence showed that the Concordat has not yet driven much culture change in spite of the ostensible commitment of the signatories. The main focus of the Concordat must be to help strengthen the talent pipeline and development of skilled researchers to encourage research and innovation in the UK.

Recommendation 2: The focus and primary aim of the Concordat is for the support of research staff. The definition of ‘researchers’ used in the Concordat should be explicitly broadened to include staff not primarily hired as researchers, but who are research active. Any reporting relating to the implementation of the Concordat should be clear about the groups of researchers to which it refers.

The sophisticated skills and experience that researchers develop outside academia are highly valued and need to be acknowledged.

The main focus of the Concordat must be to help strengthen the talent pipeline and development of skilled researchers to encourage research and innovation in the UK.

Recommendation 3: A revised Concordat should focus on researchers in academia but with recognition that the issues in industry and other sectors are similar, although the challenges may be different. It must also emphasise that the Principles and Obligations apply equally to all research staff, regardless of contract type. HEIs have a duty of care to their employees to support their personal and career development.

Researcher independence: The outstanding potential of early career researchers may not be being met across all HEIs. The Concordat does not currently address the tension between PIs (who currently lead researcher activities) and postdoctoral independence. The tightness of the peer review process for research funding often results in projects with insufficient scope for allowing risk and developing independence of the researchers employed on the grant. It is vital that the support of research should reflect that the production of trained people is as important as the production of data, papers and patents. The panel recommends that researchers be allowed 20% of their time for personal development, including time to pursue independent research, training (currently 10 days per year), consultancy, visits to other research centres or groups, organising seminars and networking events, placements at industry or policy organisations, teaching or other relevant activities.
Recommendation 4: There should be increased support for researcher independence, including autonomy in their own career development, and the freedom to innovate.

- A revised Concordat should address the tension between PIs and postdoctoral independence, setting out clearly the obligations for both groups.
- There should be increased emphasis and support, by both funders and employers, for uptake of researchers’ 10 days training allowance.
- Development of researcher independence should be supported through allocated time within grants.
- 20% of a researcher’s time should be allowed for developing independent research and skills.

17. Employment contracts: The UK is demonstrably agile in its ability to respond to changing research needs. Part of this is due to the way that research is funded, using the dual support mechanism. However, such a mechanism requires that researchers focus primarily (and even exclusively) on achieving the objectives of the grant on which they are funded, and this can have implications both at work (lack of long-term professional or personal development, changes to employment contracts, perceived or actual requirement to relocate) and at home (relocation issues affecting family commitments, implications for mortgage approvals). Concern has also been expressed at the limited opportunities for promotion and progression. Despite some improvements in this area, issues remain around managing expectations of researchers and employing staff on contracts of meaningful length, as well as fairness in treating staff on different employment terms.

Recommendation 5: A revised Concordat should promote finding solutions to the problems of mobility, time-limited contracts and promotion that many researchers face.

D. The future of the Concordat

18. Language: The language is out-dated. Care should be taken over wording to avoid the negative bias towards researchers leaving academia; instead, it should reinforce positive areas such as the development and nurturing of talent for a wide range of roles in society and to the benefit of the UK economy. Use of words like ‘atypical’ and ‘attrition from the research path’ reinforce the notion that there is a normal / typical way to do research in academia and any deviation from it is something that should be merely tolerated.

19. Accessibility: Evidence strongly suggests that awareness of the Concordat is low, particularly amongst researchers but also amongst more senior academics. Awareness outside academia is extremely limited. The term “Concordat” may be a barrier to researcher engagement, although removal of this term altogether could have negative implications for branding. Suggestions for alternatives include “National Agreement”, “Statement of Expectations” and “Principles and Obligations”. Consideration of the format of a revised Concordat should take into account modern ways of working as well as the need to reference up to date legislation. The Concordat should be presented using different media and mechanisms to suit a diversity of audiences. Research managers should consider how best to ensure all researchers are made aware of the Concordat at the point of employment, ensuring that a tangible and recognisable format is available for all.
Resourcing researcher development: Within academia, researcher development is usually the remit of the Human Resources Departments, sometimes with an academic champion (Pro-Vice Chancellor or similar). Research staff are often not given as high a priority by their institutions as permanent academic, administrative and technical staff or postgraduate researchers. Since most research staff are funded through external grants through the full economic costing model or the particular arrangements for charities, there should be no issue about properly prioritising and funding their training and development, both technical and generic.

Recommendation 6: The language, formatting and structure of the Concordat should be updated. A revised Concordat should be:

- Updated to reflect modern policies and practices. It is essential that the Concordat is informed by and linked to any relevant new or revised legislation or policy frameworks.
- More succinct but link to specific examples of good practice.
- Accessible to all stakeholder groups. Consideration should be made to the format of the Concordat to ensure it remains relevant and up to date. Different formats may be required for different stakeholder groups.
- Restructured to articulate the responsibility of different stakeholder groups, including research staff, PIs, employers and funders. A structure of Principles and Obligations would clearly set out the responsibilities of the different groups in driving and implementing change.

Equality, Diversity and Inclusion: Significant progress has been made on inclusion of all researchers in career development and other activities, irrespective of gender, nationality and other protected characteristics. However, evidence suggests that implementation can be perfunctory or partial, and often lacking evidence for effectiveness. Further progress is therefore required, particularly in support of protected characteristics besides gender, such as race and disabilities. Additionally, legislation has changed since the Concordat was published in 2008 and a revised version needs to be up to date and relevant.

Recommendation 7: Equality, diversity and inclusion should be integrated throughout a revised Concordat, outlining specific responsibilities of stakeholder groups in supporting this area. Whilst avoiding repetition, the retention of an updated Principle is also required so that it remains a priority.

Health and wellbeing of researchers: Institutions need to consider the health and wellbeing of the researcher community in order to retain the current status of the UK as a thriving place to carry out research; this should be integrated into a revised Concordat. Support mechanisms need to be in place to promote a healthy work-life balance and particularly in relation to mental well-being of researchers. Of note here is the work of Universities UK through its Mental Health in Higher Education programme and the HEFCE Catalyst Fund projects on supporting mental health and wellbeing for postgraduate research students.

Concordat communications: The implementation of the Concordat should include a communications plan, which would ensure that all researchers and signatories are made aware of, and committed to, the Principles of the Concordat. Additionally, since its launch there have been numerous legislative updates and other developments in the Sector\(^1\), which should be appropriately linked to the Concordat.

---

\(^1\) These include: Employment law (for example, working hours, holiday entitlement); Equality Act; Health and Safety/Occupational Health; Expenses and benefits, responsibilities under a contract, trading standards, customs and export; Intellectual property/copyright; HR Excellence in Research Awards; Athena Swan; Sectoral guidelines, based on the Principles, for the researchers supported by the funders, linking in with their own policy, guidelines, resources and activities; REF/TEF
Recommendation 8: A communications plan should be developed which ensures that the Concordat remains relevant to new and updated legislation / policy, and which ensures that all relevant stakeholder groups have appropriate access to the Concordat.

- The list of signatories should be reviewed and, if required, updated.
- Funders should require all PIs to be aware of the Concordat and ask them to communicate it to their research staff.
- Employers should ensure that the communications plan is implemented throughout their organisation, and should monitor researcher engagement with the Concordat, for example through participation in annual surveys.

24. Data for tracking researchers and research careers: Further information is needed on short-and long-term career destinations of researchers, to better understand routes in and out of academia, including what career routes researchers take and why. Precedent has been set by the US National Science Foundation, which undertakes regular surveys of current and previously funded researchers. Information is also needed on how UK employers value their researchers and how researcher skills are used. More consistent use of exit surveys of researchers from PhD graduation onwards, and across all research roles, should be implemented by research organisations, including destinations information. Funders should have a role in researching and supporting methods for longer-term career tracking. Additionally, equality, diversity and inclusion data is required in order to provide benchmarking for institutions of support for all researchers, including in relation to recruitment, promotion and progression.

Recommendation 9: Concordat signatories should prioritise a more comprehensive collection of researcher and research careers information, and the Concordat Strategy Group should investigate options to achieve this.

- The UK should aspire to support data collection exercises that are comparable with international models.
- Funders should support research into the most appropriate methods required to obtain such data.
- Existing surveys, including CROS and PIRLS, should be updated to ensure that broad comparability can be made about researcher aspirations and career paths across the sector. Such surveys should aspire to be as representative of the sector as possible.
- Best practice should be shared on ways to engage with researcher alumni communities.
- The Higher Education Statistics Agency should be invited to join the Concordat Strategy Group as a delivery partner.

E. Stakeholders, signatories and representation

25. Community consultation: The Expert Review Panel commissioned a broad community consultation to further evidence the impact of the Concordat since its publication, and to obtain views on its future. A summary of the consultation and the responses is provided at Annex 4. The consultation elicited a good response from the community, with input received from both individuals (researchers, PIs, senior managers and researcher developers) and institutions (universities, industry, representative groups, funders and policymakers). The following key messages were drawn from the community consultation:

The consultation elicited a good response from the community, with input received from both individuals and institutions
• Positive impacts of the Concordat included:

- A considerable increase in researcher access to training resources, including management training.
- Increased visibility of early career researchers throughout organisations (such as through representative membership on committees and boards), and creation of research staff associations.
- More consistent practice in appraisals or career development meetings, and in the development of mentoring programmes.
- Improvements in employment contracts, eligibility for funding, and career paths for researchers.
- Institutions are now actively valuing diversity of research communities.

• Areas of concern included:

- A widespread lack of awareness of the Concordat amongst postdoctoral researchers in particular, and also more senior staff.
- Despite some improvements, outstanding issues remain around employment contracts, eligibility for funding, or lack of knowledge about various career paths open to skilled researchers.
- Institutions are not yet sufficiently valuing staff and some researchers are unfairly treated including through inappropriate workloads.
- There is inconsistency within and across institutions in implementing the Concordat and/or some institutions lack the engagement of senior leadership in its implementation.
- Some institutions appear to be insincere in implementing the Concordat, or are ‘paying lip service’ to reporting or monitoring mechanisms.

26. **Stakeholders:** The key stakeholders of the Concordat are the universities who employ researchers; researchers themselves; the funding agencies in their capacity as promoters of research excellence and innovation for the UK; and the broad range of organisations beyond academia who employ researchers trained by the HEIs and other research organisations. These constituencies are represented on the Concordat Strategy Group (CSG). However the last category is not represented sufficiently strongly.

**Recommendation 10:** The Concordat must continue to be owned by the sector, with implementation overseen by a representative steering group.

• The Terms of Reference of the Concordat Strategy Group should be reviewed.
• The membership of the Concordat Strategy Group should be reviewed, ensuring that all relevant stakeholder groups (including researchers, PIs, employers and funders) are represented, and/or in working groups which report to the CSG. To represent employers of researchers beyond academia, the involvement of the Confederation of British Industry (CBI) is welcomed.

27. **Industry:** Broadly speaking, there are differences in culture with regard to the career development of research staff in industry and academia. Research staff in industry, particularly in large companies, are supported in the development of skills and opportunities for progression as a workforce planning strategy. There is acknowledgement from research staff in academia that their career development is not generally viewed by their employer as a strategic activity for the benefit of the organisation. The main reason for this difference appears to be the mobile nature of researchers within academia, driven by the way that research is funded and a lack of drivers for long-term investment in staff for a specific organisation. As a generalisation, training is not done for the benefit of the whole HE sector.
Recommendation 11: The sector should take a strategic approach in considering the skills needs of the UK through commitment to activities which develop the skills of research staff regardless of contract length and in preparation for diverse career paths.

28. UK Research and Innovation (UKRI): The new structural organisation of research funding in the UK through the formation of UKRI is clearly a very significant development. Its stated purpose is “to ensure the UK maintains its leading position in research and innovation by creating a system that maximises the contribution of each of the component parts and creates the best environment for research and innovation to flourish”. It seeks “to develop the talent pipeline for research and innovation to support those with the greatest talent and potential”. The Concordat has a clear role in helping to deliver this.

Recommendation 12: There should be a coordinated approach between the development of UK Research and Innovation and the Concordat going forward. UKRI should use its sectoral influence to ensure appropriate consistency across different research domains.

F. Governance and implementation

29. Drivers for change: People are at the heart of research excellence and HEIs, as the main employers, are key players. HEIs have a duty of care to their employees to support their personal and career development. Funders also have an influential role, managing the peer review process for funding schemes, and setting the terms and conditions of grants on which researchers are employed. It is clear that there is a strategic national need that all researchers have appropriate development opportunities, and constraints such as the narrowness of the peer review process, the lack of awareness among PIs of the Concordat Principles, the structure of grants, and the lack of a coordinated strategy for “hidden” researchers do not necessarily lead to this. It is concerning that the evidence indicated that many university HR Action Plans do not appear to have senior ownership. In contrast, this is not the case for Athena SWAN where there has been demonstrable support at the highest level. An external agency beyond HEIs is required to oversee the deeper implementation of change in research staff development, including through regular review; however, there is little appetite for enforced regulation of signatories or of enforced implementation of the Principles.

30. Vitae: Vitae, as a delivery agent of the CSG, have had a pivotal role in the implementation of the Concordat, as well as in management of the UK process for the HR Excellence in Research Award. For example, through CROS and PIRLS surveys; Concordat briefings for different stakeholder audiences; resources and support for Researchers and Researcher Developers; and sharing good practice.

31. Research Concordats: The four other Research Concordats4, published since 2008, are managed and implemented using a variety of models including independent boards and representative oversight groups (the latter akin to the Concordat Strategy Group). Drivers for compliance with these concordats include: integration of Principles within funders’ terms and conditions and assurance processes; review of annual narratives from signatory organisations explaining how they are complying with the Principles; and links with government policymakers and parliamentary committees.

32. Funders: Clearly funding agencies have a crucial role to play. The peer review process, with its heavy focus on research outcomes and impact, has a mixed record in driving change in this area; however, there is an opportunity for research funding to be leveraged to drive progress and the peer review process must explicitly consider the development of researchers as a vital part of the assessment of all proposals, alongside the potential for research results. This requires processes and plans for development as well as scope for independent activities by the researchers to allow them to develop their independence. Career development activity is included under the ‘Environment’ category of the Research Excellence Framework, so this will also help drive change and should have a high profile with the sector.

---

4Concordat on Openness in Animal Research in the UK; Concordat to Support Research Integrity; Concordat on Open Research Data; and Concordat for Engaging the Public with Research.
Recommendation 13: A revised Concordat should include a new Principle for funders. Funders should ensure that the Principles of the Concordat are adopted through changes to funding processes.

Clearly funding agencies have a crucial role to play. The peer review process, with its heavy focus on research outcomes and impact, has a mixed record in driving change in this area; however, there is an opportunity for research funding to be leveraged to drive progress and the peer review process must explicitly consider the development of researchers as a vital part of the assessment of all proposals, alongside the potential for research results.

33. **HR Excellence in Research Award:** The HR Excellence in Research Award identifies institutions recognised by the European Commission as enhancing working conditions for researchers across Europe, as set out in the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers (launched in 2005). In terms of operation, Vitae support and deliver the UK process for the HR Excellence in Research Awards for its member institutions, through an arrangement with the European Commission, which gives a simplified process to demonstrate compliance with the European Charter and Code of Conduct.

34. The purpose of this review is not to assess specific programmes or activities; however, the HR Excellence in Research Award is currently intrinsically linked to the Concordat, and is clearly a useful driver for institutional strategy in support of researcher career development – particularly as it uses more metrics than in the past. Much of the progress in implementing the Principles of the Concordat to date can be attributed to the HR Excellence in Research Award as a driver. However the nature of the award, which does not have minimum standards but instead assesses whether the action plan provided by the institution is proportionate (i.e. reflects type of institution and the research staff population), results in considerable variability in the ways in which it drives improvements in the culture of supporting research staff. There is potential for this award – or others like it – to have a greater role in driving change. Funders should be looking for success with the HR Excellence in Research Award in a similar way to the Athena SWAN award. Review of the UK process for this programme could help to facilitate culture change going forward.

**Recommendation 14:** The UK operation of the HR Excellence in Research Award, or any other relevant awards, should be reviewed to ensure it remains relevant as a driver for change.

- A meta-analysis of data for best practice (from published action plans) would give a composite picture of the “ideal”, along with case studies for implementation.
- Evaluation of applications for the award must be evidence-based and institutions may require more guidance on requirements.
- Strong consideration should be given to the use of a graded assessment (e.g. bronze / silver / gold).
- There must be a quality assurance of reviewers and of the reviewing process, to ensure that assessment panels are representative of the sector.
- Views should be sought from organisations outside academia (such as businesses, charities and others) in order to produce guidance for HEIs on the requirements of the award.

35. **Operation:** The end of RCUK / HEFCE funding and Vitae’s move to a subscription model of membership means that non-member UK institutions have to go through the European process for the HR Excellence in Research Awards. The UK process needs to be paid for and there are few viable alternatives; however, greater transparency, accessibility and consistency is required in governance models and costs associated with the management of the award. Although initial discussions with the European Commission have been positive, the exit of Britain from the EU may also have implications for the inclusion of the UK in the HR Excellence in Research Award.
**Recommendation 15:** The UK operation of the HR Excellence in Research Award should be reviewed to ensure that all UK HEIs have access to the UK application process and are not constrained in applying for any associated EU funding beyond Brexit.

- A revised membership model for Vitae should be considered, which separates services associated with the HR Excellence Award and other Vitae activities, and which operates in an open and transparent way.
- The Concordat Strategy Group must ensure that processes are in place to maintain UK standards for researcher development which are at least comparable to those set by the EU.
- Guidelines should be developed to outline any funding implications for UK HEIs who are not in receipt of an HR Excellence Award.
ANNEX 1: Expert Review Panel Membership and Terms of Reference

Membership of the Expert Review Panel

- Professor David Bogle, University College London (Chair)
- Dr Emma Compton-Daw, University of Strathclyde
- Dr Liz Elvidge, Imperial College London / Researchers14
- Professor David Gavaghan, University of Oxford
- Dr James Henstock, University of Liverpool
- Professor Dave Jones, National Institute for Health Research
- Professor Katie Normington, Royal Holloway, University of London
- Dr Ciara Rooney, Queen’s University Belfast
- Dr Rebekah Smith McGloin, Coventry University
- Dr Dave Watson, IBM (retired)
- Dr Matt Wenham, Australian Academy of Technology and Engineering
- Secretariat support provided by RCUK/UKRI: Clare Bhunnoo and Joanna Dunster

Expert Review Panel Terms of Reference

The Expert Review Panel will:

- Review existing evidence (from previous reviews as well as the CROS survey and other reports) and, if gaps exist, commission new evidence from key stakeholder groups (to be identified by the Panel) within the UK research sector on the implementation of the Concordat principles
- Review progress in implementing / embedding the Concordat principles, identifying examples of good practice from institutions and areas of complementarity / overlap with other sector standards, including the HR Excellence in Research Award, Athena SWAN and the other Concordats
- Identify areas where further work in implementing / embedding the Concordat principles is required
- Consider the future audience for the Concordat and whether this should extend beyond research staff, for example to include technicians, early career academics, and researchers in other sectors
- Make recommendations on the future requirements of the Concordat, including (but not exclusively) whether the Concordat (or similar instrument) continues to have a role in supporting career development of researchers
- Provide recommendations for revised or new principles, where appropriate
- Identify priority activities to research organisations on how Concordat principles can be further embedded / implemented
- Make recommendations to the Concordat signatories on how future implementation of Concordat principles should be measured, monitored and supported

The panel will report into the Concordat Executive Group (CEG; a sub-group of the CSG) on the progress of the review. The CEG will provide guidance to the panel on any questions relating to the overall scope of the review. RCUK (now UK Research and Innovation, UKRI), on behalf of the CSG, will provide independent secretariat support to the panel and will act as the main point of contact between the Chair/panel and CEG. Review information, including minutes of Expert Review Panel meetings, are to be hosted by RCUK/UKRI.
ANNEX 2: Suggested revision of the Concordat to Support the Career Development of Researchers

1. Name

The revised Concordat should be renamed as follows, to support greater engagement with all stakeholder communities:

The Research Staff Concordat: Principles and Obligations to Support the Career Development of Researchers

This document is a National Agreement on a Statement of Expectations of actors in research in the UK.

2. Other introductory sections

The preamble should be updated to reflect the following:

- The context to the first version of the Concordat, including what it was created to achieve, evidence for the effectiveness of implementation, and the independent review.
- Acknowledgement that numbers of academic positions are limited and careers beyond academia are currently the most common path/destination for researchers. It is therefore essential that they are given the opportunity to develop the transferable skills required to be successful, such as leadership, people management and project management skills.
- Emphasis that above all, there is a need for researchers within and beyond academia to develop independence, to be supported and empowered to take responsibility for their career development.
- Inclusion of an updated collection of definitions, for consistency and ease of use. See Concordat Review report, section C.

3. Case studies

Examples of good practice should be provided for each of the Principles. In reviewing the evidence, the Expert Review Panel identified a range of case studies, not intended to be exclusive, some or all of which could be used in a revised Concordat; these are provided at Annex 5. A revised Concordat should have separate case studies for each Principle, accessible in an appropriate format and including relevant information sources.

4. Revised Principles and Obligations

Principle 1: Research Staff Responsibilities

Individual researchers must take responsibility for and engage in their own personal and career development and lifelong learning.
Obligations

1. **Development plan and review:** Research staff must articulate, in a development plan, how they intend to gain and develop the skills needed to pursue their further career. This plan should be reviewed annually with the PI, and others who can give an independent view. Accordingly, they should identify training needs and actively seek out opportunities to develop their skills. Research staff must ensure that their career development requirements and activities are regularly discussed, monitored and evaluated throughout the year in discussion with their PI and, where available, an independent mentor. This should include realistic expectations of the opportunities for academic career progression and support for diverse career paths.

2. **Career ownership:** Research staff should recognise that the primary responsibility for managing and pursuing their career is theirs. Where appropriate, they should take opportunities to engage with the working life of their employing organisation and broader research communities, representing themselves and their peers to promote awareness of their development needs (e.g. through participation in researcher based committees, societies, and by giving feedback through surveys). Researchers should take responsibility for using the 10 days training (included within the 20% independent time allocation) offered by their institution, to take part in developmental activities that will benefit their professional development.

3. **Knowledge exchange:** Research staff should seek opportunities to develop their awareness of knowledge transfer and exploitation and where appropriate, facilitate its use in policy making and the commercialisation of research for the benefit of their employing organisation, as well as the wider society and economy as a whole. For example, by attending knowledge transfer training courses, participating in committees to increase awareness, and gaining knowledge / experience on how to influence policy.

4. **Ethical responsibilities:** Research staff should recognise their responsibility to be aware of requirements for conducting and disseminating research results in an honest and ethical manner and to contribute to the wider body of knowledge.

5. **Equality, diversity and inclusion:** Research staff should take responsibility for cultivating an awareness of equality, diversity and inclusion in their activities, contributing to an inclusive and respectful working environment.

---

**Principle 2: Principal Investigator Responsibilities**

Principal Investigators (PIs) are responsible for supporting the professional and career development of research staff. This will be achieved through regular, constructive and well-planned conversations.

Obligations

1. **Line management:** PIs will undertake training in the management of staff and be aware of their responsibilities in managing the day-to-day activities of research staff and their wider career development. PIs should cultivate and be supportive of a positive working environment that takes into account the health and wellbeing of all research staff.
2. **Expectations and regular review:** PIs are expected to manage research staff and ensure that the individual researcher is clear about what is expected of them and has realistic expectations of the limited opportunities for academic career progression. PIs are therefore expected to have regular performance and development reviews with all research staff for whom they are responsible which will ideally include the setting of research-related objectives and wider professional and career goals; these goals should be reviewed regularly to facilitate progress.

3. **Career options:** Recognising that many research staff are on fixed term contracts, PIs should provide regular opportunities for research staff to discuss their professional needs and encourage exploration of all career options (both within and beyond academia). PIs should make researchers aware that academic positions are limited, to manage researcher expectations, and support them in whichever career path the researcher chooses to pursue. PIs should be informed and sensitive to the institutional processes around redeployment and redundancy.

4. **Developing independence:** PIs should acknowledge that progression to the next stage of a career often requires that a researcher has demonstrated independence in their research. PIs should therefore support and provide opportunities for all researchers to develop their own ideas and establish a portfolio of evidence that demonstrates this independence. 20% of a researcher’s contracted time should be allocated for activities relating to developing independence, including time to pursue independent research, training (currently 10 days per year), consultancy, visits to other research centres or groups, organising seminars and networking events, placements at industry or policy organisations, teaching or other relevant activities.

5. **Gathering evidence:** In support of the career development of the researcher, PIs must make every effort to identify opportunities that will help the researcher build up a portfolio of evidence in a range of areas additional to research that can be used to support job applications (for example teaching, administration, funding applications, budget management, public engagement and knowledge exchange).

6. **Awareness:** PIs should ensure that they are sufficiently aware of the development opportunities available to researchers, and should encourage researchers to take up those opportunities in meeting their career goals.

7. **Acknowledging conflict:** PIs should acknowledge and address the conflict between meeting the objectives of the funded research and supporting the career development of the researcher.

8. **Ethical responsibilities:** PIs are responsible for supporting researchers in developing an understanding of their obligation to conduct and disseminate research in an honest and ethical manner that contributes to the wider body of knowledge, as part of their career development.

9. **Equality, Diversity and Inclusion:** PIs must operate in a manner appropriate to supporting equality, diversity and inclusion in all areas of relevance to their line management of research staff. PIs should undertake training that allows them to understand their legal responsibilities with regard to equality law.

**Principle 3: Employer Responsibilities**

Employers are responsible for ensuring the correct policies, processes and activities are in place to fulfil their institution’s responsibilities and duty of care to support researcher career development and create a culture of valuing research staff.
Principle 3.1: Recognition and Value of Research Staff

Employers should put in place appropriate policies, training, recruitment and support that reflects the value that they place in each individual researcher.

Obligations

1. **Valuing contributions of all:** Employers will develop guidelines that recognise and value the contribution of all researchers to the Institution. Employers will ensure that researchers are included in decision-making discussions, as members of committees at all levels, social activities and department communications, and that they are supported and encouraged to participate in opportunities for training, development, mobility and citizenship activities that improve the life of the discipline, unit, university and the higher education sector.

2. **Equality, diversity and inclusion:** Employers will foster an environment that is inclusive, respectful and supportive of researcher wellbeing, through provision of appropriate guidance and training to staff. Employers will commit to valuing and affording equal treatment to all researchers, regardless of the terms of their contract. In particular, employers should ensure that the development of researchers is not undermined by instability of employment contracts. This approach should be embedded throughout all departmental structures and systems.

3. **Employment conditions:** Employers and funders will commit to working together to find achievable ways to improve employment conditions for researchers through their policies and guidance. Employers and funders will ensure that researchers are employed on contracts of a meaningful length (e.g. at least six months) to ensure that researchers have sufficient capacity to progress their personal development as well as contribute to research challenges. All Employers will implement and abide by the Principles and terms laid down in the Fixed Term Employees (Prevention of Less Favourable Treatment) Regulations (2002) and/or any relevant subsequent legislation. This will include systems for redeploying research staff where resources allow and considering how access to funding and support between grant funding can be offered.

4. **Review:** Employers will ensure that PIs are required to conduct regular, formal performance and development reviews, including career development plans, and provide training to support them to do this. Employers commit to developing processes and systems to enable the development, assessment and reward of PIs in this area and to capture the development needs of research staff identified through these review meetings. The vital role that senior academics play in providing mentorship, support and recognition for researchers at all levels will be acknowledged, encouraged and rewarded.

5. **Induction:** Employers will commit to providing all new researchers with a tailored induction programme, to ensure understanding of the organisation, its policies and procedures. In particular, induction will highlight the career planning resources available and the right to performance review. It will emphasise the shared responsibility between employers, funders and researchers regarding development, with reference to the Concordat.

6. **Progression and promotion:** Employers will ensure that where applicable at an institution the process for progression and promotion for researchers is transparent and in accordance with procedures agreed between the relevant trade unions and the employers nationally and locally. Employers will carry out comprehensive exit surveys, in order to understand the career progression and motivations of their researchers as they transition to a new role.
Principle 3.2: Support for Career Development

Research staff are actively encouraged and supported to develop independence through enhancement of personal and professional skills such that they are competitive for diverse career paths.

Obligations

1. **Career advice**: Employers will ensure their research staff have access to professional, independent and fair advice on career management, which considers career paths both inside and outside academia. Employers should undertake exit surveys and record career destinations of research staff leaving the institution.

2. **Career development plan**: Employers will actively support research staff to evaluate their personal and professional development needs regularly through creation and review of career development plans. After extended periods at the postdoctoral researcher stage, employers should have processes in place for reviewing appropriate options for career development and progression.

3. **Awareness and transferable skills**: Employers will actively promote and develop activities which enable research staff to broaden their awareness of multiple fields and sectors, and develop the transferable skills required to be successful, such as leadership, people management and project management skills.

4. **Academic and research skills**: Employers will commit to providing research staff with the opportunity to develop core academic and research skills, such as teaching, publishing, supervision and grant writing.

5. **Developing independence**: Employers should acknowledge that progression to the next stage of a career often requires that a researcher has demonstrated independence in their research. Employers should therefore support the PIs who are managing researchers in providing opportunities for all researchers to develop their own ideas and a portfolio of evidence that demonstrates this independence, making use of the 20% of the researcher’s contracted time that is allocated for independent research and development activities.

6. **Personal development**: Employers and funders agree that research staff be entitled to spend a minimum of 10 days per year focused on personal, professional and career development (as part of allowing 20% of researcher time for developing independence) and PIs must enable staff to take advantage of development opportunities.

7. **Evaluation**: Employers will, as a matter of course, evaluate the impact of development opportunities, and ensure good practice is shared and incorporated into future activities.

8. **Guidance**: Employers should ensure that PIs provide effective research environments for the training and development of researchers and encourage them to maintain or start their continuous professional development. Employers should make researchers aware of their responsibilities, and those of the employer and funder, with reference to the Concordat.

Principle 3.3: Recruitment and Selection

Employers will operate fair, open, transparent, merit-based and inclusive recruitment practices in order to attract and select the best researchers with the expertise, knowledge and skills most suited to the job.
Obligations

1. **Communication:** Employers will ensure they clearly communicate to PIs through training and development that researchers are to be recruited based on their ability to advance research in their field and their potential to contribute to the research output of the institution.

2. **Transparency:** Employers will ensure their recruitment and selection procedures are informative, transparent and open to all qualified applicants regardless of background. Person and vacancy specifications must clearly identify the relevant skills, knowledge and behavioural qualities required for the post with specific attention paid to avoiding all forms of unconscious and implicit bias.

3. **Diversity of recruitment panels:** To assure fairness, consistency and the best assessment of the candidate’s potential, employers will ensure that recruitment and progression / promotion panels reflect diversity as well as a range of experience and expertise. In order to promote these values, individuals who are members of recruitment and promotion panels should have received relevant, recent training (within the last three years). Unsuccessful shortlisted applicants should be given appropriate feedback, if requested, as this may be of assistance to the researcher in considering their future career development.

4. **Rules and consistency:** Employers should ensure that all PIs understand the rules and implications of recruitment decisions and be responsible for consistency in their application of pay or grade for researchers. The level of pay or grade for researchers should be determined according to the requirements of the post, consistent with the pay and grading arrangements of the research organisation.

5. **Monitoring and review:** Employers should regularly collate and monitor recruitment data and, building from these data, should develop, implement and revise recruitment policies to ensure that effective and inclusive recruitment practices are in place.

**Principle 4: Funder responsibilities**

Funders will embed the career development of researchers into their processes for investing in research.

**Obligations**

1. **Research grant funding:** Funding agencies’ peer review processes must consider the development of researchers as a vital part of the assessment of all research grant proposals, alongside potential for direct research results and other considerations. Inclusion of a suitable career development plan for each researcher associated with the proposal should be required, which addresses how researchers will be supported in developing their independence whilst recognising the diversity of career paths available. This could be further achieved through:

   a. Allocating funding within each grant for use by researchers in developing independence.
   b. Providing appropriate guidance for peer reviewers, panellists and panel chairs to ensure that researcher development is appropriately considered during peer review of grant proposals.
   c. Requiring evidence that all PIs and line managers of research staff have undergone relevant and recent management / supervision training.

2. **QR funding:** Funding Councils must ensure that the systems in place for the development of researchers have a high profile, particularly in the Research Excellence Framework which considers the research environment. The REF Environment statement should be more explicit about metrics for career development of researchers. Funding Council and REF panel expectations should be clearly articulated using guidelines and examples of good practice.
3. **Eligibility and recognition:** Researchers should be encouraged to apply for funding as co-investigators, and be supported in acting in this role throughout the duration of the grant. Funders will review eligibility requirements and definitions of co-investigators to increase development opportunities for researchers and recognise the contributions they make to writing, reporting and other administrative duties associated with managing grants.

4. **Communication:** Funders will ensure that the Principles of the Concordat are communicated and promoted to all researchers, PIs and employers associated with research grants.

5. **HR Excellence in Research award:** Funders should have similar expectations for success with the HR Excellence in Research Award to the Athena SWAN award. Funders may wish to consider publishing best practice guidelines, adapted from award-holding HEIs, or from businesses or third sector organisations, to help guide HEIs in their applications for the award.

6. **Data collection and career tracking:** Funders will develop more effective methods and implement processes for collection of data relating to the career development and progression of researchers.

7. **Employment conditions:** Employers and funders will commit to working together to find achievable ways to improve the stability of employment conditions for researchers and to support continuity of employment through their policies and guidance. Employers and funders will ensure that researchers are employed on contracts of a meaningful length (e.g. at least six months) to ensure that researchers have sufficient capacity to progress their personal development as well as contribute to research challenges.

8. **Consistency:** Wherever possible, and in line with the Haldane Principle, funders must ensure consistency in the approaches taken in supporting the career development of researchers, irrespective of funding source, mechanism and subject area.

9. **Equality, diversity and inclusion:** Funders will commit to ensuring that their funding mechanisms and policies are adapted to changing equality and diversity legislation and guidance.

10. **Adoption of the principles:** The signatory funders will ensure that their terms and conditions of grants include the expectation that the Research Organisations that they fund will adopt the principles of the revised Concordat.

**Principle 5: Equality, Diversity and Inclusion**

Equality, diversity and inclusion (ED&I) must be promoted in all aspects of the recruitment and career management of research staff.

**Obligations for all stakeholders**

*Note that specific Obligations relating to ED&I are included within the other Principles.*

1. **Legislation:** The UK legislative framework currently outlaws discrimination on the basis of age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex and sexual orientation. It is recognised that legislation will be amended in response to, and to drive changes in, the equality landscape. Employers will commit to being at the forefront of implementing equality legislation and contributing to and driving appropriate changes.
2. **Inclusive culture:** Employers will ensure that all ED&I-related strategies, policies and practices will seek to promote and embed an inclusive culture within the workplace, to the benefit of all staff groups. Where there are specific research staff demographic issues relating to equality and diversity, these will be identified as such in the appropriate strategy or action plan (e.g. Athena SWAN, Race Equality, and Stonewall) and cross-referenced in any Concordat compliance submissions.

3. **Working conditions:** Employers will ensure that the working conditions for research staff provide the flexibility necessary for successful research performance in line with legal requirements. Employers are expected to recognise that for parents and others who have taken career breaks, including carer’s leave, have worked part-time, or have taken routes into research from outside academia, the “early career” period may be prolonged. Working conditions should allow all research staff to combine family and other commitments with career progression.

4. **Work patterns:** Employers will commit to respond flexibly to requests for changed work patterns and to resist instant refusals on the assumption that, because research has always been carried out in a particular way, it cannot be done differently.

5. **Allowing for personal circumstances:** Account should be taken of the personal circumstances of groups of research staff. These should not be restricted to protected characteristics (see 1 above). Examples might include research staff who have responsibility for young children or adult dependents, trans research staff, research staff for whom English is not a first language, older or younger research staff, or research staff with disabilities and long-term health issues. Employers and funders will ensure that policies and practices do not directly or indirectly disadvantage such groups.

6. **Bullying and harassment:** Employers will commit to ensure that measures exist through which discrimination, bullying or harassment can be reported and addressed without adversely affecting the careers of innocent parties.

**Principle 6: Implementation and Review**

The sector and all stakeholders will undertake regular and collective review of their progress in strengthening the pipeline and development of skilled researchers to encourage research and innovation in the UK.

**Obligations**

The signatories agree to:

1. Maintain a **steering group** under an independent chair to oversee the implementation and review of the Concordat with appropriate representation of the funders and sector bodies including the Professional Institutions. This group will consider its stakeholders, and inform the relevant organisations of progress.

2. Draw up an **implementation plan** for the Concordat, incorporating a communications plan, to ensure a coherent and sustained approach by organisations operating in the sector and the appropriate use of survey and monitoring tools such as the Careers in Research Online Survey (CROS).

3. Undertake and publish a **major review** of the implementation of the Concordat after three years, including strategies for communication and implementation, and relationship to other research Concordats, relevant legislation and other external influences.
4. Develop a consistent and robust way of tracking the careers of researchers nationally / internationally to understand the career trajectory of former research staff to facilitate better understanding of career pathways, within and beyond academia, to inform development activities and support mentoring initiatives.

5. Present careers inside and outside of academic institutions as equal in status.

6. Advocate that research staff taking diverse career paths brings long term benefits to society as well as their own organisations.

7. Share best practice between institutions and promote these for the benefit of the research community and its beneficiaries.

8. Ensure that the principles of the Concordat, and strategies for communicating and implementing its principles, remain in line with the other research Concordats, relevant legislation or other relevant external influences.
ANNEX 3: Background, context and evidence

1. Background to the Review

The UK Concordat to Support the Career Development of Researchers (“The Concordat”) is an agreement between funders and employers of researchers in the UK. It was launched in 2008 and sets out a number of Principles to improve the employment and support for researchers and research careers in UK higher education.

The Concordat has not been updated since it was first published in 2008 and there have been many changes within the research system since then, as well as wider national and international developments. Most recently, such changes include:

- Changes to the way researchers are funded, such as:
  - The creation of UK Research and Innovation (from April 2018)
  - New mechanisms for funding research in the UK, e.g. Global Challenges Research Fund, Industrial Strategy Challenge Fund, Newton Fund

- Changes to the ways researchers are employed, such as:
  - Creation of private universities
  - Reduction in numbers of researchers employed in the private sector in the UK (e.g. closure of several major pharmaceutical company UK research departments)

- International developments, such as:
  - Exit of the UK from the European Union

Thus, the purpose of the review was to ensure that the Concordat fulfils its intended purpose from 2018 onwards.

This independent Review of the Concordat was commissioned by the Concordat Strategy Group (CSG), whose role is to oversee the management and implementation of the Concordat. The secretariat for the CSG is provided by Vitae.

The focus of the review was on the Concordat to support the career development of researchers; however, this is one of a suite of five UK research concordats, including:

- Concordat for Engaging the Public with Research
- Concordat to Support Research Integrity
- Concordat on Openness on Animal Research in the UK
- Concordat on Open Research Data

The Concordat is a set of Principles of relevance to research staff in the UK. A definition of researchers is included and, although not explicitly stated, the Concordat is of most relevance to researchers and researcher-interested parties within the academic sector.
2. Contextual Information

The following information summarises trends in the numbers of research staff employed in UK HEIs.

Number of research staff

In the UK, numbers of research staff\(^5\) employed within UK Higher Education Institutions (HEIs) have increased by around 23% to 49K in the period since the publication of the Concordat (Figure 1).

---

**Figure 1: Numbers of female and male research staff employed in UK Higher Education Institutions since 2004/05**

<table>
<thead>
<tr>
<th>Academic year</th>
<th>% Female</th>
<th>% Male</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004/05</td>
<td>0%</td>
<td>100%</td>
<td>0</td>
<td>49K</td>
</tr>
<tr>
<td>2005/06</td>
<td>0%</td>
<td>100%</td>
<td>0</td>
<td>49K</td>
</tr>
<tr>
<td>2006/07</td>
<td>0%</td>
<td>100%</td>
<td>0</td>
<td>49K</td>
</tr>
<tr>
<td>2007/08</td>
<td>0%</td>
<td>100%</td>
<td>0</td>
<td>49K</td>
</tr>
<tr>
<td>2008/09</td>
<td>0%</td>
<td>100%</td>
<td>0</td>
<td>49K</td>
</tr>
<tr>
<td>2009/10</td>
<td>0%</td>
<td>100%</td>
<td>0</td>
<td>49K</td>
</tr>
<tr>
<td>2010/11</td>
<td>0%</td>
<td>100%</td>
<td>0</td>
<td>49K</td>
</tr>
<tr>
<td>2011/12</td>
<td>0%</td>
<td>100%</td>
<td>0</td>
<td>49K</td>
</tr>
<tr>
<td>2012/13</td>
<td>0%</td>
<td>100%</td>
<td>0</td>
<td>49K</td>
</tr>
<tr>
<td>2013/14</td>
<td>0%</td>
<td>100%</td>
<td>0</td>
<td>49K</td>
</tr>
<tr>
<td>2014/15</td>
<td>0%</td>
<td>100%</td>
<td>0</td>
<td>49K</td>
</tr>
<tr>
<td>2015/16</td>
<td>0%</td>
<td>100%</td>
<td>0</td>
<td>49K</td>
</tr>
<tr>
<td>2016/17</td>
<td>0%</td>
<td>100%</td>
<td>0</td>
<td>49K</td>
</tr>
</tbody>
</table>

---

Protected characteristics

There have been slight changes in the proportions of researchers by certain protected characteristics:

**Gender:** Overall, the ratio of female to male researchers has increased only slightly from 45% female in 2004/05 to 47% in 2016/17, with no apparent change in pattern since the Concordat’s publication in 2008 (Figure 1). The proportion of female researchers has increased in most disciplines (Table 2), with the most marked increases in design, creative and performing arts; agriculture, forestry and veterinary science; and architecture and planning. However, despite these increases, the proportion of female researchers remains low in some disciplines, particularly engineering and technology.

**Table 2: Proportion of female research staff by discipline (cost centre group)**

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Proportion of female researchers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative &amp; business studies(^5)</td>
<td>52% 2004/05 53% 2008/09 49% 2016/17</td>
</tr>
<tr>
<td>Agriculture, forestry &amp; veterinary science</td>
<td>49% 2004/05 49% 2008/09 54% 2016/17</td>
</tr>
<tr>
<td>Architecture &amp; planning</td>
<td>43% 2004/05 39% 2008/09 43% 2016/17</td>
</tr>
<tr>
<td>Biological, mathematical &amp; physical sciences</td>
<td>38% 2004/05 38% 2008/09 39% 2016/17</td>
</tr>
</tbody>
</table>

\(^5\) Includes social studies until 2011/12
Disability: The proportion of researchers reporting to have a known disability has slowly increased at a steady rate since 2004, and has been at a level of nearly 3% since 2014/15.

Ethnicity: The proportion of researchers of a black or minority ethnic background is slowly increasing, with current levels at around 20%.

Working patterns

Female researchers remain more likely to work part-time than their male counterparts, with little change since 2004 (Table 3).

<table>
<thead>
<tr>
<th>Mode of employment</th>
<th>Gender</th>
<th>2004/05</th>
<th>2008/09</th>
<th>2016/17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-time</td>
<td>Female</td>
<td>35%</td>
<td>35%</td>
<td>35%</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>49%</td>
<td>48%</td>
<td>47%</td>
</tr>
<tr>
<td>Part-time</td>
<td>Female</td>
<td>11%</td>
<td>11%</td>
<td>12%</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>6%</td>
<td>6%</td>
<td>6%</td>
</tr>
</tbody>
</table>

Contract types

There have been changes to numbers of researchers employed on different contract types since the publication of the Concordat and in the preceding years:

Numbers of researchers on open ended contracts have increased significantly since 2008, continuing the trend from before the Concordat was published. Numbers of researchers on a fixed term contract (FTC) have remained relatively steady, with slightly fewer in the years immediately following the publication of the Concordat and with an increase between 2012 and 2014. Proportionally, numbers of FTCs have decreased from 89% of all researcher contracts in 2004 to 66% in 2016 (Figure 4).
The proportion of both male and female researchers on an open-ended contract has increased across the review period (Table 5), and the proportion of both genders on a FTC have reduced significantly, with around two-thirds of both male and female researchers now on a fixed-term contract (Table 6).

**Table 5: Proportions of research staff by employment contract type and gender**

<table>
<thead>
<tr>
<th>Contract type</th>
<th>Gender</th>
<th>2004/05</th>
<th>2008/09</th>
<th>2016/17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed-term</td>
<td>Female</td>
<td>41%</td>
<td>34%</td>
<td>31%</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>48%</td>
<td>40%</td>
<td>35%</td>
</tr>
<tr>
<td>Open-ended / Permanent</td>
<td>Female</td>
<td>5%</td>
<td>12%</td>
<td>16%</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>7%</td>
<td>14%</td>
<td>18%</td>
</tr>
</tbody>
</table>

**Table 6: Proportion of female and male researchers employed on a fixed-term contract**

<table>
<thead>
<tr>
<th>Gender</th>
<th>2004/05</th>
<th>2008/09</th>
<th>2016/17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>90%</td>
<td>74%</td>
<td>66%</td>
</tr>
<tr>
<td>Male</td>
<td>88%</td>
<td>74%</td>
<td>67%</td>
</tr>
</tbody>
</table>

**Mobility**

Research staff numbers demonstrate an increasingly mobile population, with the non-UK researchers now representing nearly half of the total researcher population (Table 7).
3. Evidence used in the Review

The Expert Review Panel reviewed information from a wide range of sources relating to both the Concordat as a whole and individual Principles. The following sources of evidence were used (note this is not an exhaustive list):

- Background to the Concordat, including information about the membership and role of the Concordat Strategy Group, and subsequent guides and briefing documents hosted on the Vitae website.
- Contextual/historical reports including the Review of progress in implementing the recommendations of Sir Gareth Roberts (Hodge review).
- Data about employment of researchers in UK academic institutions; career destinations of researchers and postgraduate research students, including results from the Destinations of Leavers of Higher Education (DLHE) and Longitudinal-DLHE surveys, related reports and the Doctoral Careers Impact Study. Labour Market Survey reports.
- Researcher surveys – such as Careers in Research Online Survey (CROS), Principal Investigators and Research Leaders Survey (PIRLS) and associated reports.
- Information about relevant Awards and Charters, including HR Excellence in Research Awards, Athena SWAN Charter and Awards, and related programmes.
- HEI strategies to implement the Principles of the Concordat – including a representative sample of institutional HR Action Plans, which are published annually by institutions with an HR Excellence in Research Award. This evidence base was used to understand the role of the HR Excellence in Research Award in implementing the Concordat, and to pick out examples of best practice and areas for improvement. (Note: individual institutions were not reviewed).
- HEI submissions to the Environment section of REF 2014.
- Business strategies to implement the Principles of the Concordat – including published organisations strategies/commitments in developing research staff within research-intensive private sector organisations.
- Information about funder support – including specific reference to the Concordat, expectations of research fellows and future research leaders, strategies for support of postdoctoral researchers and career tracker tools.
- Other related reviews from the UK and internationally, such as the UCEA study on supporting early career researchers in Europe, the NIHR Review of Training Programmes and the Review of Australia’s Research Training System.
- Information about the management and implementation of other Research Concordats.
- Reports from Concordat related discussion fora, including Researchers14 and the National Postdocs Meeting 2017.

A community consultation was carried out during the review period in order to gain views from researchers and researcher-interested parties, regarding the impact of the Concordat and its future. A summary of the responses to the community consultation is provided at Annex 4.
ANNEX 4: Summary of evidence received from the community consultation

The Concordat survey contained five sections:

A) An introduction to the survey and an outline of the 7 Concordat Principles
B) Information about the respondents and their demographic
C) The impact of the Concordat on the respondent’s organisation
D) Further evidence to demonstrate the impacts described
E) The future of the Concordat

Respondent demographics

A total of 347 responses were received from across the research community. The majority of respondents self-identified as University researchers (Table 1), with many others representing institutional views from HEIs, funders, policymakers and other representative groups. Respondents were able to select more than one stakeholder group.

Table 1: Responses by respondent role

<table>
<thead>
<tr>
<th>Role</th>
<th>Number of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>University researchers</td>
<td>246</td>
</tr>
<tr>
<td>University lecturers, principal investigators and research leaders</td>
<td>73</td>
</tr>
<tr>
<td>Funders, policymakers and representative groups</td>
<td>41</td>
</tr>
<tr>
<td>Industry researchers or research managers</td>
<td>14</td>
</tr>
<tr>
<td>University HR professionals and researcher developers</td>
<td>11</td>
</tr>
<tr>
<td>Hourly Paid Lecturers</td>
<td>8</td>
</tr>
<tr>
<td>Total responses</td>
<td>347</td>
</tr>
</tbody>
</table>

Most industry-based responses were from individuals who had been employed within the private sector for more than two years.

In total, 111 discrete institutions responded to the survey (plus 36 respondents did not supply institutional information), covering all regions of the UK. In most cases, a small number of responses were received from an individual institution; seven institutions supplied 8 or more responses.

Table 2: Institutions and number of responses received

<table>
<thead>
<tr>
<th>Institution of respondent</th>
<th>No. of responses</th>
<th>Institution of respondent</th>
<th>No. of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not provided</td>
<td>36</td>
<td>British Heart Foundation</td>
<td>1</td>
</tr>
<tr>
<td>University of Oxford</td>
<td>30</td>
<td>Broadly Flow Control</td>
<td>1</td>
</tr>
<tr>
<td>Cardiff University</td>
<td>16</td>
<td>Brunel University</td>
<td>1</td>
</tr>
<tr>
<td>University of Manchester</td>
<td>16</td>
<td>Cancer Research UK</td>
<td>1</td>
</tr>
<tr>
<td>University of Nottingham</td>
<td>13</td>
<td>Cranfield University</td>
<td>1</td>
</tr>
<tr>
<td>University of Edinburgh</td>
<td>9</td>
<td>Durham University</td>
<td>1</td>
</tr>
<tr>
<td>University of York</td>
<td>8</td>
<td>Edge Hill University</td>
<td>1</td>
</tr>
<tr>
<td>Institution</td>
<td>Count</td>
<td>Group/Department</td>
<td>Count</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>-------</td>
<td>-----------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>Imperial College London</td>
<td>7</td>
<td>Equality Challenge Unit</td>
<td>1</td>
</tr>
<tr>
<td>Newcastle University</td>
<td>7</td>
<td>Glasgow Caledonian University</td>
<td>1</td>
</tr>
<tr>
<td>University of Sheffield</td>
<td>7</td>
<td>Glyndwr University</td>
<td>1</td>
</tr>
<tr>
<td>University of Strathclyde</td>
<td>7</td>
<td>Hatton’s Model Railways</td>
<td>1</td>
</tr>
<tr>
<td>Queen’s University Belfast</td>
<td>6</td>
<td>Heriot-Watt University</td>
<td>1</td>
</tr>
<tr>
<td>University of Liverpool</td>
<td>6</td>
<td>HR Excellence Award National Panel</td>
<td>1</td>
</tr>
<tr>
<td>Lancaster University</td>
<td>5</td>
<td>International Consortium of Research Staff Associations (ICoRSA)</td>
<td>1</td>
</tr>
<tr>
<td>Sheffield Hallam University</td>
<td>5</td>
<td>Keele University</td>
<td>1</td>
</tr>
<tr>
<td>Swansea University</td>
<td>5</td>
<td>Leeds Arts university</td>
<td>1</td>
</tr>
<tr>
<td>The University of Manchester</td>
<td>5</td>
<td>Leeds Beckett</td>
<td>1</td>
</tr>
<tr>
<td>University of Bath</td>
<td>5</td>
<td>Loughborough University</td>
<td>1</td>
</tr>
<tr>
<td>University of Bristol</td>
<td>5</td>
<td>Manchester Metropolitan University</td>
<td>1</td>
</tr>
<tr>
<td>University of Cambridge</td>
<td>5</td>
<td>Measen Dryline Limited</td>
<td>1</td>
</tr>
<tr>
<td>Royal Veterinary College</td>
<td>4</td>
<td>Narrative Eye</td>
<td>1</td>
</tr>
<tr>
<td>University of Hertfordshire</td>
<td>4</td>
<td>National Postdoc Meeting 2017 Organising Committee (University of Cambridge)</td>
<td>1</td>
</tr>
<tr>
<td>University of Leeds</td>
<td>4</td>
<td>Northumbria University</td>
<td>1</td>
</tr>
<tr>
<td>Edinburgh Napier University</td>
<td>3</td>
<td>Oxford Brookes University</td>
<td>1</td>
</tr>
<tr>
<td>Kingston University</td>
<td>3</td>
<td>Research Councils UK</td>
<td>1</td>
</tr>
<tr>
<td>University of Aberdeen</td>
<td>3</td>
<td>Researchers14</td>
<td>1</td>
</tr>
<tr>
<td>University of Dundee</td>
<td>3</td>
<td>Royal Holloway, University of London</td>
<td>1</td>
</tr>
<tr>
<td>University of Huddersfield</td>
<td>3</td>
<td>Science Council</td>
<td>1</td>
</tr>
<tr>
<td>University of Warwick</td>
<td>3</td>
<td>SEPnet (South East Physics Network)</td>
<td>1</td>
</tr>
<tr>
<td>Bangor University</td>
<td>2</td>
<td>SOAS University of London</td>
<td>1</td>
</tr>
<tr>
<td>IBM Research</td>
<td>2</td>
<td>Teesside University</td>
<td>1</td>
</tr>
<tr>
<td>Institute of Cancer Research</td>
<td>2</td>
<td>The Daphne Jackson Trust</td>
<td>1</td>
</tr>
<tr>
<td>King’s College London</td>
<td>2</td>
<td>The London School of Hygiene and Tropical Medicine</td>
<td>1</td>
</tr>
<tr>
<td>London School of Economics</td>
<td>2</td>
<td>The Royal Academy of Engineering</td>
<td>1</td>
</tr>
<tr>
<td>Nottingham Trent University</td>
<td>2</td>
<td>The Royal Society</td>
<td>1</td>
</tr>
<tr>
<td>Queen Mary University of London</td>
<td>2</td>
<td>The Royal Veterinary College</td>
<td>1</td>
</tr>
<tr>
<td>The Institute of Cancer Research</td>
<td>2</td>
<td>The University of Salford</td>
<td>1</td>
</tr>
<tr>
<td>The Open University</td>
<td>2</td>
<td>UK Funding Bodies</td>
<td>1</td>
</tr>
</tbody>
</table>
Impact of the Concordat on respondents’ organisation

Respondents were asked to assess the extent that their institution was supporting researchers in line with the Concordat. Overall, the majority (73%) of respondents considered that the Concordat principles were supported by their organisation (Figure 3). Certain groups (funders/policy makers, HR professionals and researcher developers) had more knowledge than others (Principal Investigators, lecturers and researchers) about how their organisation supported researchers in line with the Concordat (Figure 4).
Many respondents identified provision of research/career development activities, creation of researcher-led groups and committees, and influence on policies as activities that had taken place within their organisation as a direct consequence of the Concordat (Figure 5). Many respondents (mostly researchers) identified that they were not aware of activities that had taken place as a direct consequence of the Concordat, often citing a reason being that they had joined the institution since the launch of the Concordat in 2008.
Additional commentary provided further insight, revealing both positive impacts of the Concordat and areas of outstanding concern. In order of number of respondents citing the issue, the positive impacts of the Concordat were described as follows:

- Increased access to training resources, including management training
- Increased visibility of early career researchers throughout the organisation (e.g. in committees and boards), or creation of research staff associations
- More consistent practice of appraisals or career development meetings, or development of mentoring programmes
- Improvements in employment contracts, eligibility for funding, or career paths
- Institutions actively valuing diversity
- Institutions demonstrating good recruitment practice
- Acknowledgement that the existence of the Concordat has a positive impact
- Creation of postdoctoral researcher development centres
- Institutions providing Concordat-specific training
- Increased support for researcher wellbeing
- Institutions demonstrating value of staff, improvements to workload or fair treatment

In order of the number of respondents citing the issue, areas of outstanding concern were as follows:

- Lack of awareness of the Concordat or no known impact
- Employment contract issues, eligibility for funding, or lack of a clear career path
- Institutions not valuing or unfairly treating staff, or inappropriate workload
- Inconsistency in implementing the Concordat (e.g., between University departments) or lack of senior leadership
- Insincerity in institutions implementing or ‘paying lip service’ to the Concordat
- Concerns around insufficient progress in valuing diversity of staff
- Wellbeing of researchers not being addressed
- Individuals not made aware of training resources
- Lack of management training
- Appraisals not taking place in practice

Figure 5. Have any of these activities taken place within your organisation as a direct consequence of the Concordat?
Further evidence

Respondents were asked to identify any additional sources of evidence that the Expert Review Panel should take into consideration when reviewing the Concordat. Most answers suggested the collection of new primary data through interviews, surveys or focus groups of researchers at various career stages, but particularly early career. Some of the sources suggested had been examined already in the course of the review, including the Athena Swan institutional submissions, HR Excellence Action Plans and REF 2014 Environment statements. Some novel sources of evidence were suggested, including:

- AGCAS Graduate Labour Market Survey
- European Framework for Research Careers
- Equality Act 2010
- Public Sector Equality Duty
- Technical Commitment Initiative.

Revision of the Concordat

Respondents were asked to provide comments on the individual principles of the Concordat, specifically how they should be improved and updated. Many comments were received for each individual principle; common themes and exemplary quotes have been identified and provided below:

**Principle 1: Research Staff Responsibilities**

Common themes included:

- Diversity of research career choices should be reflected in recruitment guidelines
- Support for researchers between contracts
- Constraints upon HEIs in current funding environment
- Emphasise the skills and abilities of researchers

“More needs to be done to address the continued use of fixed term contracts. There is a need to provide better support/guidance for institutions to support researchers between contracts.”

“The language of the Concordat should be careful not to make value judgements about career pathways which lead away from hands-on research. Here, ‘highest potential’ and ‘excellence’ are loaded terms.”

“It would be useful to recognise that not all researchers have the aspiration to be an independent researcher, rather that some are happiest working in teams with a common goal. It would also be useful to recognise that there are limited opportunities to be an independent researcher and that most researchers will not attain this status. They still have career aspirations and warrant reward for their contribution to the departments and research areas that they work in.”

“The review of this principle should question and clarify what the intentions around retaining staff are, and if the title should be expanded to include the term retention.”

**Principle 2: Recognition and Value**

Common themes included:

- Commitment to developing management skills/support for management
- Attribution of value beyond skills for research
- Equal treatment of staff
“There is a continuing problem that ECRs experience of being managed is variable and there has been no success in equipping PIs across the sector with management and leadership skills in any consistent manner. Success would look like a commitment to management and leadership training for all new PIs. It is our moral responsibility to ensure that our staff are properly managed.”

“We would strongly urge that the concordat be more explicit about what assessment of line managers could look like, how it could be achieved in practice, and what type of assessment could realistically impact upon those line managers who are dispositionally reticent to support researcher development holistically.”

“Promotion and pay progression for teaching and research staff is currently much easier and the process is far more systematic than for research-only staff. It is unclear in Principle 2 whether the concordat is either acknowledging or commenting on this disparity.”

**Principle 3: Adaptability and flexibility in a divers research environment**

Common themes included:

- Disparity between ‘mobility’ vs ‘retention’
- Transition between research and non-research environments; diverse career paths

“Stop emphasizing mobility. Data show it is disproportionately women who are expected to move and then whose careers stall when they can’t (due to caring responsibilities, and partner careers). An institution that constantly "prepares" people to move on makes one feel unwanted from Day 1. It is also completely at odds with Principle 1’s claim to care about "retaining", which in my experience of three Russell Group universities, is patently untrue.”

“Staff should be encouraged to broaden their skills and interests beyond the professional skills needed for research; and develop skills and interests which could serve them outside of research if need be.”

**Principle 4: Career development and lifelong learning**

Common themes included:

- Generally the responses align with those from principle 3
- Designated time allowance for progression training
- Changing demands of academic duties

“Greater transparency on career progression. Also, we need 10 days a year for lifelong learning. Some researchers are not being allowed time for training and development opportunities.”

“The concordat makes no provision that employers should guarantee researchers any personal career development time, nor does it specify or suggest what reasonable time should be allowed. I consider this should reasonably be around 20% of contract time (as is often specified in academic and teaching contracts). In my job description I am allocated 2.5% of my time for personal / career development. I have colleagues with no written guarantee of personal / career development time in their contract. The way the principles are currently written allows institutions (or individual PIs) to require that most personal development, e.g. publications, training and attending conferences, will take place in a researchers own time. This can be discriminatory against those with health issues, disabilities and caring responsibilities (often women).”

**Principle 5: Researchers’ responsibilities**

Common themes included:
• Shared responsibility of researcher and employer
• Concision to make this principle clearer
• Inclusion of researcher responsibilities clause within principle 1

“The Concordat could address directly contentious issues such as ownership of research outputs, co-authorship of papers and grants, etc. It could also address reward for what is often unrecognised labour.”

“Points 5 and 6 could be shortened for clarity. If a new principle (see question 10) were included in the revised concordat it could clarify the responsibilities of researchers and PIs. This should include more emphasis on career development and the researcher being more pro-active. The responsibility for career development and planning for an individual lies with that individual’…” This principle should include a bullet point list rather than exhaustive detail contained elsewhere in the document.”

“Evidence from Staff Surveys and CROS also consistently shows that researchers still have unrealistically high expectations of pursuing an academic career and it would be a good opportunity to introduce a new or expand an existing clause to raise their awareness that academia is only one of many avenues for their future employment and to be proactive in their own career planning at an early stage.”

Principle 6: Diversity and Equality

Common themes included:
• Embed Principle 6 within all other principles
• Overlap with Athena Swan agenda / other existing legislation
• Modernisation of language

“Principle 6 [is] not currently fit-for purpose - if retained, all appropriate clauses should be updated and align with the Equality Act 2010.”

“Principle 6 was written prior to the implementation of the Equality Act 2010 so it is not reflective of the protections researchers have under current UK wide equality legislation. The understanding of what equality and diversity means in academia and the research environment has also evolved since the Concordat was written. For example, within the EU research funders are now encouraging research organisations to consider how diversity is considered in research design as well as the diversity of research teams.”

“The language is out-dated – use of words like ‘atypical’ and ‘attrition from the research path’ reinforce the notion that 6.5 seemingly speaks out against; that there is a normal/typical way to do research in academia and any deviation from it is something that should be merely tolerated.”

Principle 7: Implementation and Review

Common themes included:
• Dissemination of information and researcher engagement
• Continued monitoring and feedback
• Institution responsibility and accountability

“This section is difficult to provide evidence against as it is predominantly for signatories rather than employers. Overall the Concordat is not particularly accessible to the researcher. It is very wordy. A more user-friendly version that can be circulated to researchers would help raise awareness of, and engagement with, the Concordat.”
Respondents were asked whether there are any new Principles needed in a future version of the Concordat. Many of the responses identified areas or circumstances not adequately covered by the existing Principles, but which could be requirements for communication and implementation. Few suggested any distinct new Principles. Responses relating to Principles have been grouped thematically below, and a final section lists general comments.

a. Theme: Stability, contract-length

For: Funders, Institutions, PIs

Respondent Recommendations:

- Minimum contract length (for example, three years)
- Transparency about numbers of permanent positions in academic research, precarity in early years.
- Contracts for research staff should be equivalent to those of non-research staff at the same organisation, in terms of contract length, pay grades, promotion and rewards, performance evaluation.
- Institutions could hire a body of permanent staff who can meet its core research needs, in the same way that a body of permanent teaching staff teach across a range of courses.
- Institutions to offer permanent employment after a reasonable term of service with the same employer (for example, four years).
- Bridging support for ECRs between postdoc and a permanent position, or between grants, to ensure continuity of development.
- Researchers on fixed-term contracts should be allowed to apply for research funding as a PI or Co-I.

b. Theme: responsible use of metrics in research

For: Funders (including QR funders), Institutions

Respondent Recommendations:

- Support for researchers to achieve the publications/grant income/impact required to meet the metrics as they stand.
- Consider whether metrics are fit for purpose.
- Consider methods of incentivising good behaviour, such as a greater role for career development and support in REF submissions.
- Encourage transparency around acknowledging researchers’ intellectual property, and contribution to a piece of work, especially paper authorship.

Future of the Concordat

Respondents were asked whether there are any new Principles needed in a future version of the Concordat. Many of the responses identified areas or circumstances not adequately covered by the existing Principles, but which could be requirements for communication and implementation. Few suggested any distinct new Principles. Responses relating to Principles have been grouped thematically below, and a final section lists general comments.

...
c. Theme: good practice in management of researchers

For: funders, institutions, PIs
Respondent Recommendations:

• Time and funding for career development activities to be built in to funding proposals, where researchers are to be hired. For example, training, secondments, working on own research and funding proposals, networking.
• Proposals to include a career development/skills development plan for any researchers attached to the grant, demonstrating that the grant will benefit them.
• Requirement for PIs/line managers of researchers to undergo training in project and people management. For example, ILM Level 5.
• Skills background and career expectations may be different from those expected ten years ago, due in part to changes in doctoral training and funding provision. This principle must be shaped with reference to doctoral funding landscape.
• Formal institutional recognition and reward of best practice in support for researcher career development.

d. Theme: Suitability of support and guidance

For: Funders, Institutions, PIs
Respondent Recommendations:

• Institutions to hire careers advisors who focus on researchers’ end goal (for example, social justice, technological innovation, policy engagement), rather than binary academic/non-academic pathway.
• Recommendation for institutions to consider whether the support that they provide is suitable for ECRs in all subject areas, recognition that the career pathways of ECRs in the physical sciences, and those in the arts, humanities and social sciences, are often different. Such a Principle could advocate equal standing for ECRs, regardless of contract type.
• Ensure equality of treatment and opportunity for students from different funding backgrounds (for example, RC-funded, overseas, self-funded, University-funded students).
• Career paths of researchers include portfolio working, team scientists, collaboration and engagement with partners outside academia, practice-based research, transitions into and out of academia. Support and training should reflect this variety. Within a UKRI context, the importance of interdisciplinarity and entrepreneurship might also be included.

e. Theme: Increase public and other sectors’ engagement with research

For: Funders, Institutions, PIs, Researchers
Respondent Recommendations:

• Researchers should be encouraged to seek opportunities to engage the public and other sectors with their research.
• Institutions, PIs and funders should support them to do so. Providing pots of funding, time on research grants, access to networks and communities, systems for press releases and interview requests, media training, industry secondments and knowledge exchange.
• Through open data and research sharing principles, we seek to encourage innovation and new ideas from competent parties outside HEIs, helping them to work with us to achieve equivalent Concordat principles.

f. Theme: Career tracking

For: Funders, Institutions, Researchers
Respondent Recommendations:
1. Explore ways to implement joined-up career tracking, with the view of skilled researchers and professionals in the workplace as an impact of investment in research.

2. Encourage researchers to use ORCID to allow them to be identified and tracked throughout career, including roles outside academia.

**Other Respondent Recommendations:**

1. The wording of the Concordat as a whole does not reflect the diversity of research roles in academia, it is Russell Group-centric, and does not capture portfolio working, or collaborative research with industry, other institutions and the public.

2. Greater emphasis in all the Principles on the underlying values that will drive cultural change; for example, the quality of conversations between PI and researchers attached to grant, validity of moving to careers outside academia.

3. Definition of ‘researchers’ used in the Concordat should be broadened to include staff not primarily hired as researchers, but who are research active.

4. Structure of the Concordat could be re-shaped to provide greater emphasis, and to clarify who the recommendations are for in each case.

5. Create tools for institutions to promote awareness of the Concordat among their staff, so they can use best-practice guidelines and get involved in implementation. For example, implementation plans (as with the HR Excellence Award), which should be published on the RO’s website.

6. Tie in Concordat with the development of UKRI, recommendation for funders to ensure consistency between subject areas.

7. Strengthened wording of recommendations for research group leaders, universities’ senior management and funders in driving cultural change.

8. Guidelines around communication of the Concordat within institutions, and ensuring that the available support reaches those who need it. Role of the PI in mentoring and leading researchers, and embedding a culture of professional and personal development within their group, is essential.

9. Link the Concordat with other mechanisms:

   a. Employment law (for example, working hours, holiday entitlement)
   b. Equality Act
   c. Health and Safety/Occupational Health
   d. Expenses and benefits, responsibilities under a contract, trading standards, customs and export
   e. Intellectual property/copyright
   f. HR Excellence in Research Awards
   g. Athena Swan
   h. Concordat on Openness in Animal Research in the UK
   i. Concordat to Support Research Integrity
   j. Concordat on Open Research Data
   k. Concordat for Engaging the Public with Research
   l. Sectoral guidelines, based on the Principles, for the researchers supported by the funders, linking in with their own policy, guidelines, resources and activities.
   m. REF/TEF.
ANNEX 5: Case studies of best practice from the review

Principle 1: Research Staff Responsibilities

• **University of Oxford** has a Careers Working Group, comprising postdoctoral researchers and the Careers Service, to plan and provide careers-related resources and events. These include an Early Career Researcher blog, a Careers Conference for Researchers, focusing on careers beyond academia, and the production of a database of research career profiles in non-academic sectors. They have designed a Professional/Personal Development Review, and divisional and departmental training programmes, all of which are made available to researchers during their contract, and for one year afterwards.

• **University of Liverpool** run a ‘teaching for researchers’ course to give practical experience to PDRAs of academic teaching, plus a less formal resource for recruiting PDRAs to teaching support roles via a convenient google form (link here). Examples of PTRA teaching include:
  - An extra tutorial for a small groups of students to deepen their knowledge on a topic already covered in a lecture
  - Some extra help for workshop sessions
  - A supplementary lecture as a “guest speaker”
  - Support tutorials to students with formative or summative assessment (e.g. provide feedback), etc.

  *Source: University of Liverpool ’Teaching for Researchers course’ https://www.liverpool.ac.uk/researcher/teaching-for-researchers/
  University of Liverpool PDRA teaching support webform https://goo.gl/forms/MVwfQkE2Yqe5fIh92*

• **University of York** has a dedicated Research Excellence Training Team (RETT), which plans and delivers support and development opportunities for research students, staff and graduate teaching assistants. This includes Leadership in Action and Management in Action, for experienced and inexperienced line managers, and Research Leaders for PIs and those with line management of postdocs. In co-operation with the universities of Cambridge, Sheffield and Bristol, they run a cross-departmental objective-led mentoring scheme for research staff and postdocs, based on mentoring best practice guidance from the Biotechnology and Biological Sciences Research Council. *BBSRC Academic Career Mentoring and Best Practice for Formal Mentoring Programmes*

• Many larger institutions provide central facilities and support including pastoral and career-development aspects. **Imperial College London**’s Postdoc and Fellows Development Centre offers training courses and workshops, online resources, support for funding applications, and one-to-one consultations for postdocs, fellows and clinical researchers. The University of Cambridge’s Office of Postdoc Affairs provides a hub for information about resources and opportunities open to postdoctoral researchers, and also consults with postdocs about their support needs to improve and expand their provision.

  *Sources: http://www.imperial.ac.uk/postdoc-fellows-development-centre/about/
  https://www.opda.cam.ac.uk/aboutus/what-the-opda-does*

• **University College London** has a number of cross-disciplinary Research Domains in areas of strategic importance and significant activity (currently there are eight including Neuroscience, eResearch, and Collaborative Social Science). Each of these has an Early Careers Network which is run by the early career researchers themselves with some administrative and financial support from the Domain Chair. They organize a range of research and networking events but also careers events with invited speakers (often alumni) in research and research-related positions outside academia. The networks have proved to be very successful and powerful in building communities and broadening horizons of researchers for a number of reasons: they allow researchers to build networks beyond their local research group and Department (and beyond UCL), allow for sharing of experience in research and personal and professional
development across a large community with common interests, provide opportunities for mentoring by people beyond someone’s research group, provide opportunities to discuss the future of an area to identify major challenges and formulate new research directions, and provide leadership opportunities for members of each community.

UCL also supports a number of Grand Challenges which focus on major societal challenges which also encourage involvement by early career researchers. As well as events the Grand Challenges programme provides opportunities to bid for modest funds to support projects which cross a number of Departments and Faculties. A number of excellent projects proposed by early career researchers have been funded.

- University of Sheffield developed the Think Ahead Mentoring Programme iteratively in consultation with researcher and academic groups and underpinned by ethical professional practice in mentoring. The programme provides workshop-based induction activities, support for contracting, cohort meet ups, mentor CPD, online materials, and practice supervision. Mentoring relationships are mentee-led and are encouraged to develop flexibly within this framework of on-going support. Over 100 partnerships have completed the programme each year, and data indicate that mentees gain by support for career planning and decision making and hence experience associated increases in confidence and motivation at work. Mentor evaluation data show that academics are applying mentoring skills to their supervision and line-management relationships, meshing their new skills with their existing academic practice.

- Imperial College London and other institutions are promoting formal co-supervision of research students, through the launch of a scheme which allows postdoctoral researchers to be officially recognised as an ‘Assistant Supervisor’ if they supervise PhD students.

- Imperial College London runs an annual Dame Julia Higgins Postdoc Collaborative Research Fund, an interdisciplinary fund in the Faculty of Engineering, to which small teams of postdoctoral researchers can apply in order to undertake an independent project.

- University of Oxford provides a comprehensive training programme for supervisors through the Oxford Learning Institute. Although designed for use by supervisors of research students, much of the guidance is applicable to PIs as line managers of research staff, particularly regarding the research environment, infrastructure and resources, and support for academic and other careers. 
  
  Source: http://supervision.learning.ox.ac.uk/

- At IBM, line management of employees includes an expectation of support for career development. Research talent is nurtured through one hour per week of in-kind support, such as coaching. For both line managers and their line reports, performance is linked directly to salary and promotion, and an important metric of success is the quality of employees in the team.

- The Universities of St Andrews, Dundee, Abertay and the Glasgow School of Art run a cross-institutional mentoring scheme in which academics act as mentors. It pairs Teaching and Research academics with colleagues at an earlier career stage to provide guidance and structured support. 
  
  Source: https://www.st-andrews.ac.uk/capod/staff/coachingandmentoring/mentoring/researchstaffmentoring/

Principle 2: Principal Investigator Responsibilities

- Imperial College London and other institutions are promoting formal co-supervision of research students, through the launch of a scheme which allows postdoctoral researchers to be officially recognised as an ‘Assistant Supervisor’ if they supervise PhD students.

Principle 3: Employer Responsibilities

Principle 3.1: Recognition and Value of Research Staff
Principle 3.2: Support for Career Development
Principle 3.3: Recruitment and Selection
University College London introduced a policy that all research staff should be appointed on open ended contracts. UCL HR policy is as follows: “The majority of staff appointed on research grant and contracts are likely to be appointed on a grant, or series of grants and contracts, lasting longer than nine months. Accordingly, these individuals will be appointed on “Open-ended contracts with grant/project end dates”. However, there will be a minority of research grants and contracts where the project involves the employment of persons for a limited duration of less than nine months. In these circumstances a fixed term contract should be used.”

“Open-ended contracts with grant/project end dates should be used for employees who are appointed with a known risk of redundancy. This is most commonly the case with staff employed on:
1. research grants and contracts where either the project or funding has a finite duration; and 2. projects (e.g. project managers for systems implementations or capital projects, etc) where there is a finite task or funding.”

Open-ended contracts will include a paragraph making reference to the possibility of redundancy in certain circumstances. As far as possible this statement will be generic in order to avoid the need to issue new or amended contracts of employment when employees change grants, or when projects are extended or a researcher is taken on for another post through the redeployment process.

Coventry University piloted, reviewed and published a new Academic Role Profile Framework (built on elements of the Vitae Researcher Development and the HEA frameworks) in 2016-17 which consolidates, standardises and clarifies roles, expectations and progression criteria for all academic roles. It ensures clear progression routes for academics along pathways of research, learning and teaching, and enterprise. Performance review, training and development for all researchers is mapped to the framework. Review conversations must now take place quarterly (as a minimum) and are strongly encouraged on a monthly basis, using an online tool. Development needs can be reviewed at a research group, unit or institutional level and this information is fed into the development, training and funding programmes for researchers at all levels.

Queen’s University, Belfast has mapped out the career trajectory for researchers interested in pursuing academic careers, showing how they pass from early to advanced stage researchers and then to early stage academics or research fellows. Their scheme shows the typical characteristics of research undertaken at each stage and the responsibilities of the researcher, the PI and institution. The training and development available for each stage is documented with expected outcomes for each level of researcher.

(a) University of Liverpool (Institute of Ageing and Chronic Disease) ensure that PDRAs and ECRs have a representative member on most committees and panels, including the research strategy group so that decision making (including planning decisions and allocation of smaller grants and awards) is transparent and can be communicated to peers.

(b) Run an annual “Candid Q&A” meeting for female researchers in the Faculty with established female academics. This acts as both a networking and feedback mechanism, allowing PDRAs to gain contacts and advice as well as bring out any issues and concerns they have in the Faculty or about their own development.

(c) University of Liverpool aiming to increase awareness of the support available to researchers, at all levels, in relation to making funding and grant applications and enhancing the impact and transferability of their research, including a successful pilot and evaluation of ‘Making an Impact’ development week to inform broader development.

• **University of Liverpool** Doctoral College is a new online portal that supports PDRA and staff development through continuous professional development. All postgraduate and staff training is centrally accessible, providing a good opportunity to tailor packages of personalised development. Source: Liverpool Doctoral College [https://www.liverpool.ac.uk/study/postgraduate-research/liverpool-doctoral-college/](https://www.liverpool.ac.uk/study/postgraduate-research/liverpool-doctoral-college/)

• **University of Liverpool** have published their Action Plan to Support the Implementation of the Concordat to Support the Career Development of Researchers (2017-2019) which is supported through the Liverpool Doctoral College and continuous professional development by grouping together PDRA and new/established staff training programmes. This is available to view online for prospective PDRA/job applicants. Source: University of Liverpool: Action Plan to Support the Implementation of the Concordat to Support the Career Development of Researchers 2017-2019 [https://www.liverpool.ac.uk/media/livacuk/cll/researcher/2017_2019_action_plan.pdf](https://www.liverpool.ac.uk/media/livacuk/cll/researcher/2017_2019_action_plan.pdf)

A core part of the Liverpool action plan is recruiting to the tenure-track fellowship programme (which has also been used by several other universities to recruit and train staff from PDRA level to lecturer positions), research team leader programme (available to PDRAs and fellows), and very high compliance with the performance development review every 6 months with line manager. Source: Liverpool Doctoral College [https://www.liverpool.ac.uk/study/postgraduate-research/liverpool-doctoral-college/](https://www.liverpool.ac.uk/study/postgraduate-research/liverpool-doctoral-college/)

• **Queen’s University, Belfast** has appointed a careers advisor with responsibility for tailored training for postdoctoral researchers, offering one-to-one career consultations. In the Faculty of Medicine, Health and Life Sciences, a Postdoctoral Director enhances current training opportunities for PDRAs; there are plans to extend this provision across the University. Other support available for postdoctoral research staff includes mentoring, through Athena Swan Gender Initiative, support for using the Vitae Researcher Development Framework, and ‘Meet the Employer’ events to introduce PDRAs to employers from outside academia.

• The **US National Institutes of Health**, Office of Intramural Training & Education, runs programs and services for postdoc trainees at NIH on academic and transferrable skill development. They provide guidance for personal assessment against a set of agreed core competencies, to create an Individual Development Plan (IDP), and provide professional development resources. Many of these resources are also made freely available to medical research trainees outside the NIH through their website, including attendance at OITE career symposia. Source: [www.training.nih.gov](http://www.training.nih.gov)

• The **Australian Quality Indicators for Learning and Teaching** carries out surveys on Graduate Employment (formerly Graduate Destinations), and Employer Satisfaction. This includes a longitudinal survey of graduates previously polled in 2014. It reaches alumni of undergraduate and postgraduate taught courses, and may provide a framework for assessing similar outcomes for postdocs. Source: [https://www.qilt.edu.au/about-this-site/employer-satisfaction](https://www.qilt.edu.au/about-this-site/employer-satisfaction)

• **Royal Holloway, University of London**, has in place a promotions system where everyone’s cv is considered by the departmental review panel each year, so that full applications can be encouraged where merit suggests rather than relying on self-promotion. All panels must have representation from both genders. Promotion requirements are fully transparent through a matrix system which outlines the expectations at each level. Source: [https://www.royalholloway.ac.uk/humanresources/payandbenefits.aspx](https://www.royalholloway.ac.uk/humanresources/payandbenefits.aspx)

• **University of West of England** also operates a dedicated Research Review and Progression Panel which meets four times a year to consider promotion applications for staff on research grades (two rounds per year). There are clear role profiles and criteria that are considered. All unsuccessful candidates are given
the opportunity to have feedback on their application and interview performance. Research grades on the UWE salary scale are in line with the national Framework Agreement. Applications for progression to Research Fellow or Senior Research Fellow are considered by the Research Review & Progression Panel, which is chaired by the Deputy Vice Chancellor. Unsuccessful applicants receive feedback which includes advice on areas for further development.

Source: UWE, HEEIR Action Plan 2016

• In September 2014 the University of Sussex introduced a review of researchers on fixed-term contracts (FTCs), which led to an initial cohort of 56 individuals (35 f, 21 m) being transferred from FTCs to indefinite contracts. The review of researcher FTCs has subsequently been embedded as an annual process; in 2015, 8 individuals were transferred and in 2016 50 individuals (25 f, 25 m) were transferred (the scope of the 2016 review expanded). The original HR Excellence submission identified researcher induction as a key priority area for improvement
  o October 2014 introduction of a quarterly research staff induction and welcome lunch.
  o Welcome email for new starters within their first two weeks to provide information about key resources.
  o New research staff webpages including specific pages for new research staff, international researchers, FAQs and practical information. The research staff webpages are the most frequently visited pages of the Research and Enterprise site with the research staff homepage receiving 3900 ‘unique views’ in 2016.
  o Jan 2016 Introduction of 28pg welcome guide for new research staff sent out with appointment letters.

Since 2013 significant progress was made through interventions including:

Source: Sussex 4 Year Review Report

• UCL Careers offers specific services for researchers (http://www.ucl.ac.uk/careers/about/eligibility/researchers) which they provide for both postdoctoral and postgraduate early career researchers. A key success factor is that their whole team have PhDs and has done a postdoctoral period before they moved into careers support so they really understand the position of early career researchers and the challenges and dilemmas that confront them at what is usually a transitional period of their lives with all the uncertainties that this brings. Their services are very popular: events, research careers fairs, on-to-one advice sessions. They author a blog for researchers which often includes stories about researchers and their careers outside of academia (http://blogs.ucl.ac.uk/ucl-researchers/tag/careers-case-study/) and some short video interviews of researchers who have gone off to a range of careers where they talk about their role and the skills they use from their research training.

• King’s College London recognised that the research staff community needed a clearly identifiable hub, with a remit to listen to and advocate for them and offer practical support. They consequently established the Centre for Research Staff Development (www.kcl.ac.uk/crsd). The Centre has introduced new programmes including a suite of leadership courses, supports university-wide representation, and identifies and proposes policy changes to enable research staff to fulfil their potential. An annual event, a weekly email newsletter and a prize to recognise excellence in supporting research staff, whilst all straightforward initiatives, serve to raise the profile and visibility of this vital staff cohort.

• King’s College London initiated a committee of research staff representatives for the 2016 HR Excellence in Research review and action plan, which lost several members following submission. At a subsequent workshop for research staff representatives the Centre for Research Staff Development (CRSD) helped the representatives appreciate how they could contribute to higher level decisions and restart the committee. With further support and guidance from the CRSD, including coaching for the chairperson and appropriate introductions, they gained a new sense of purpose. They are now actively contributing to internal and external consultations and initiatives, organising their own succession planning and showing strong leadership.
• **University of Cambridge** created the first Office of Postdoctoral Affairs (OPdA) in 2013, which works in close partnership with key providers such as the Careers Service, the Accommodation Service, the Researcher Development Programme, and the Postdocs of Cambridge Society, in order to spearhead a bold, strategic agenda that takes a holistic view of the entire postdoctoral experience. This institution-wide commitment has taken physical form on each of the University’s main campuses in the three dedicated Postdoc Centres, which are used for academic, social, and development events. At the new North West Cambridge development, a significant proportion of the accommodation has been set aside for research staff, at affordable prices. [www.opda.cam.ac.uk](http://www.opda.cam.ac.uk)

• **The University of Manchester** has an annual promotion round open to all Research Staff irrespective of their contractual status and external funding stream. Clear promotion criteria are available for all grades of Research Staff and promotion committees openly invite and encourage applications providing evidence of working at a higher level, [http://www.staffnet.manchester.ac.uk/human-resources/current-staff/career-development/academic-promotions-procedures/](http://www.staffnet.manchester.ac.uk/human-resources/current-staff/career-development/academic-promotions-procedures/)

• To support Research Staff at the end of contract (FTC or open ended linked to external funding) The University of Manchester has developed an Extended Access to emails and e-resources Policy for Researchers, in partnership with the University’s Research Staff Association. After a successful pilot in 2012 this policy is now embedded across the University. This policy is unique amongst UK HEIs providing access to email accounts and e-resources for a 12-month period beyond the termination of an employment contract.

**Principle 4: Funder responsibilities**

• Numerous UK funders and research organisations[^6] are signers to the San Francisco Declaration on Research Assessment (DORA), which sets out principles for the responsible use of metrics and criteria used in evaluating scientific productivity of research grants, and which promotes evaluation of publications by research content rather than the journal in which it is published when assessing an individual researcher’s contributions, or in hiring, promotion or funding decisions.

• Placement / internship programmes support inter-sectoral mobility. Examples include Knowledge Transfer Partnerships (KTPs), the BBSRC Flexible Interchange Programme, and PhD internship programmes supported by several research councils.

• Staff Scientists at the National Institutes of Health in the USA and researchers funded by the Research Council of Norway are given 20% of their time for independent research; in industry, this is often considered to be an underestimate.

• Research funders monitor and report on the factors affecting researchers’ career development to inform their capacity-building and leadership strategy, and to provide information to organisations that hire researchers, including UK HEIs.

a. **The Royal Society** surveys the career expectations of PGRs in science, technology, engineering, medicine and mathematics (STEMM) subjects, and has used these to produce a code of overarching principles and responsibilities for students, supervisory teams, careers and training services, and HEIs. Doctoral Students’ Career Expectations: principles and responsibilities

b. **The Royal Society** has carried out an analysis of diversity data in the UK scientific workforce, in response to a lack of diversity that they feel represents a potential loss of talent. This meta-analysis of data from the Annual Population Survey 2011, the longitudinal British Cohort Study and the Higher Education Statistics Agency surveys is quantitative, identifying trends across numerous

[^6]: A full list of signers is available here: [https://sfdora.org/signers/](https://sfdora.org/signers/)
protected characteristics, upon which the society makes recommendations to better understand the factors behind entry, progression and retention. A Picture of the UK Scientific Workforce: diversity data analysis for the Royal Society

c. **The Royal Society** and the **Wellcome Trust** commissioned RAND Europe to undertake a survey of mental health in the research environment. The research examines understandings of mental health and wellbeing, how the mental health and wellbeing of researchers compares with other populations, interventions to support researchers and their effectiveness, and recommendations for further evidence-gathering in this area. Understanding mental health in the research environment

d. **Wellcome Trust** follow the progress of their researchers’ careers through three schemes – basic science, clinical and international careers. These data inform the Trust’s provision of research and career support through policy influence, equality and diversity initiatives, funding schemes and a Research Leadership Development Programme. Risks and Rewards: how PhD students choose their careers.

e. **The Medical Research Council, Academy of Medical Sciences, British Heart Foundation, Cancer Research UK, National Institute for Health Research** and **Wellcome Trust** carried out a cross-funder review of early-career clinical academics. Their report describes the routes by which students and trainees develop their interests and experience in research, their subsequent career pathways, and the role of enablers and barriers to progression, informing the provision of support at critical stages. A Cross-Funder Review of Early-Career Clinical Academics: Enablers and Barriers to Progression

f. **British Academy** and the **Arts and Humanities Research Council** commissioned research into the diversity of employment, needs and aspirations of early-career researchers in the arts and humanities. The survey population includes ‘hidden’ ECRs, i.e. those who are not employed as researchers in academia but who practice research, and may aspire to return to the sector. Support for Arts and Humanities Researchers Post-PhD

**Principle 5: Equality, Diversity and Inclusion**

- **University of Leeds** action plan from their Athena Swan (silver) application targets several areas of interest to the Concordat Review with specific action points indicating good HR practice:
  - Use the experience of recently appointed female staff to revise the wording of job descriptions and create template documents to minimise unintentionally gender biased adverts.
  - Encourage external applications to Daphne Jackson/Dorothy Hodgkin or similar fellowships through revising their Women in Engineering pages to make them more visible and including specific information to support potential applicants.
  - Explicitly consider the gender/diversity balance during interviews, including both the interview panel and the informal tours, lunch, meetings with faculty members, etc.
  - Record the gender balance of roles that are offered following interview but declined.

- **University of Cambridge** ensure that promotional material, artwork, even predominantly male images (e.g. past institute heads) visible, especially during interviews, are gender balanced and reflect equality diversity, inclusivity.
  - Exit questionnaires are now commonly stated on Athena Swan action plans and recruitment webpages.
  - University of Cambridge state explicitly whether supervisor (for PhDs) is male or female.
  - Cambridge also cover childcare costs for all staff interviews.
  - Mentoring scheme expanded to include feedback on uptake.

*Source: University of Cambridge, Department of Physics. Athena SWAN Action Plan 2013.*

- Most Universities now have made publicly available a good and transparent standard practice for recruitment and selection that covers legal and Athena Swan directives. A good example is **University of Sussex** School of Mathematical and Physical Sciences which neatly summarises the principles.

*Source: University of Sussex staff recruitment webpages http://www.sussex.ac.uk/mps/internal/staff/mpsrecruit*
• University of Manchester use ‘head-hunters’ to fill higher grade vacancies; in the School of Chemistry this led to an all-female shortlist and the appointment of a female Professor.

Potential candidates are approached by phone or email and encouraged to apply for specific positions. This may be an appropriate retention/reward strategy for filling internal posts in larger universities with a large PDRA base.

Source: University of Manchester Staff Recruitment and Selection webpages http://www.staffnet.manchester.ac.uk/equality-and-diversity/athena-swan/good-practice-guide/recruitment-and-selection/

• University of Leeds actively encourage PDRAs to use their mentoring and continuous professional development programme to seek an academic mentor from outside their department, institute or faculty to develop and action their career objectives.

PDRAs are permitted to sit on interview panels for academic and research posts, and their attendance is encouraged at presentations by prospective candidates. This gives early career researchers valuable insight into academic recruitment and the attributes that the School/Faculty is looking for as well as experience for a CV.

Source: University of Leeds Faculty of Engineering, ATHENA SWAN SILVER ACTION PLAN (Appendix A, 2016-2019).

• University of Liverpool Women in Science and Engineering (LivWiSE) promotes and supports female staff member development. LivWiSE celebrates, supports and promotes women in science, technology, engineering, maths and medicine (STEMM). Members of LivWiSE range in age and experience, from students and academics to alumni and corporate partners. Membership is open to both women and men. Throughout the academic year LivWiSE organises events, lectures, networking and development opportunities and works closely with industry partners, women in science and STEMM organisations.

Source: Liverpool Women in Science and Engineering (LivWiSE) https://www.liverpool.ac.uk/engineering/livwise/

• Trinity College Dublin has recently established the Trinity Centre for Gender Equality and Leadership (TCGEL) to “develop and embed sustainable practices, advance gender equality in Trinity, and ensure a diverse, innovative and productive academic community of global significance”.
# ANNEX 6: List of acronyms used in the report

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEG</td>
<td>Concordat Executive Group</td>
</tr>
<tr>
<td>Co-I</td>
<td>Co-Investigator</td>
</tr>
<tr>
<td>CROS</td>
<td>Careers in Research Online Survey</td>
</tr>
<tr>
<td>CSG</td>
<td>Concordat Strategy Group</td>
</tr>
<tr>
<td>DLHE</td>
<td>Destinations of Leavers of Higher Education</td>
</tr>
<tr>
<td>ECRs</td>
<td>Early Career Researchers</td>
</tr>
<tr>
<td>FTC</td>
<td>Fixed Term Contract</td>
</tr>
<tr>
<td>HEI</td>
<td>Higher Education Institution</td>
</tr>
<tr>
<td>NIHR</td>
<td>National Institute for Health Research</td>
</tr>
<tr>
<td>ORCID</td>
<td>Open Researcher and Contributor ID</td>
</tr>
<tr>
<td>PDRA</td>
<td>Postdoctoral Research Assistant/Associate</td>
</tr>
<tr>
<td>PGR</td>
<td>Postgraduate Researcher (Postgraduate Research Student)</td>
</tr>
<tr>
<td>PI</td>
<td>Principal Investigator</td>
</tr>
<tr>
<td>PIRLS</td>
<td>Principal Investigators and Research Leaders Survey</td>
</tr>
<tr>
<td>QR</td>
<td>Quality-Related (research funding)</td>
</tr>
<tr>
<td>RCUK</td>
<td>Research Councils UK</td>
</tr>
<tr>
<td>REF</td>
<td>Research Excellence Framework</td>
</tr>
<tr>
<td>RO</td>
<td>Research Organisation</td>
</tr>
<tr>
<td>TEF</td>
<td>Teaching Excellence Framework</td>
</tr>
<tr>
<td>UCEA</td>
<td>Universities and Colleges Employers Association</td>
</tr>
<tr>
<td>UKRI</td>
<td>UK Research and Innovation</td>
</tr>
</tbody>
</table>