University of Edinburgh Research Cultures Action Plan

February 2023

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1. Introduction

Research is at the core of the University's mission, forming one of the four pillars in our Strategy 2030. Through research we strive to advance knowledge and change the world for the better. The University of Edinburgh is highly successful in generating knowledge and delivering impact, as demonstrated in our recent REF2021 results. This ability to deliver excellent research is crucially dependent on our research culture: the values, expectations and behaviours that shape how we support, deliver and communicate research.¹

The Research Cultures Action Plan reflects the University's commitment to foster an environment in which research, researchers, and those that support them, can thrive. A key aspect of our approach is the recognition that advancing knowledge is a team effort, and that the team is made up of a range of contributors beyond the Principal Investigator (PI): from postgraduate researchers, postdoctoral fellows and early and mid-career researchers, through to technicians, archivists, professional support staff and collaborators from across sectors and institutions. In line with this approach, the research community addressed in this Action Plan encompasses all those involved in research, from undergraduates gaining their first experience of research, to established academics leading their field, and includes those providing the services and support that help maintain a flourishing research environment.

Research is a competitive, as well as a collaborative, activity and researchers are often judged on metrics which are beyond their control. Postgraduate research students and early career researchers face the challenge of attempting to stand out in a highly competitive job market. These factors can create pressures within the research environment which fuel anxiety and drive negative behaviours. It is our responsibility as an institution to foster a culture in which researchers are encouraged, supported and recognised for carrying out responsible research in a collegial way; where consideration is given to their personal well-being as well as the well-being of their professional relationships; and which challenges behaviours and structures that work against these goals. This is a shared responsibility for the University as an employer and an educational institution, and for all of us who work and study within the University.

As a large University encompassing a wide range of topics, we acknowledge that there is no single approach to research that will be appropriate for all disciplines, which is why we have presented our plan as addressing 'research cultures' rather than simply 'research culture'. Nevertheless, there are a number of shared norms that we seek to promote in this plan that are relevant to all disciplines and these are captured in the five underpinning values that guide our approach.

The need to foster a positive and inclusive research culture has rightly become the focus of attention across the sector, and within our University. However, it is important to recognise

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¹ The Royal Society defines research culture as follows: 'Research culture encompasses behaviours, values, expectations, attitudes and norms of our research communities. It influences researchers' career paths and determines the way that research is conducted and communicated'. https://royalsociety.org/science-events-and-lectures/2016/09/early-career-researcher-conference/

that this is just one thread in a rich tapestry of initiatives and policies across the University, as well as nationally and internationally. Care has been taken to ensure that this action plan aligns, rather than competes with, these other initiatives that also seek to provide a supportive and productive working environment for researchers. We therefore need to locate the plan within this wider context, highlighting the other policies and initiatives in the University of Edinburgh which touch on the daily experiences of researchers and those supporting research, as well as some of the broader developments across the sector.

2. How the Plan Developed

The Research Cultures Working Group (RCWG) was established in June 2021 as a subgroup of the University Research Strategy Group, with Professor Jane Hillston (Head of School of Informatics and Deputy Vice Principal Research from 2020-22) as Convenor and Dr Sara Shinton (Head of Researcher Development, Institute of Academic Development) as Deputy Convenor. The group was tasked with investigating the current research culture across the University, developing an action plan to improve research culture and publicise existing good practice, setting this in the context of other work in the University to support the People pillar of Strategy 2030.²

Members of the working group were selected following an open call for expressions of interest from across the University. Care was taken to ensure that members covered all career stages, different career paths (academic, technician, professional service, and so on) and all three Colleges, as well as different areas of concern. Members were also chosen for their links into other groups and networks in the University such as the Technicians Steering Group, the Race Equality and Anti-Racism Subcommittee, and the Researcher Development Concordat Implementation Group (CIG). RCWG first met in June 2021, comprising 30 members.

In the summer of 2020, the University had conducted an internal research culture survey, based on the national research culture survey carried out by the Wellcome Trust the previous year.³ Analysing the outcome of this survey was the focus of the first meeting of the RCWG and served to set the agenda for the subsequent meetings as we explored the areas which were revealed as potentially problematic. For each topic we invited evidence from those with first-hand experience of the issues and then discussed existing good practice and potential actions. Topics discussed included harassment and bullying, supporting colleagues with disabilities, researcher precarity, DORA and narrative CVs.

The University of Edinburgh research culture survey gave our work a data-driven foundation, and the topic of how to gather data to judge and monitor progress was frequently returned to during our meetings. A first crucial step of this plan is a commitment to regularly repeat the survey; other ways in which we can collect and analyse data are discussed in the action plan. Culture change takes time and will require commitment and engagement from everyone across the University; however, we believe this challenge must be used as an impetus to get started, rather than an impediment.

³ https://wellcome.org/reports/what-researchers-think-about-research-culture

² https://www.ed.ac.uk/files/atoms/files/strategy-2030.pdf

3. Broader Initiatives

'People' is one of the pillars of the University's Strategy 2030. This is supported by ongoing work within the University on a number of different initiatives developing policies, commitments and action plans. Through the development of this Action Plan, RCWG has sought to keep abreast of existing policies and action plans. Relevant institutional commitments include:

- Concordat to Support the Career Development of Researchers. The Concordat was
 originally launched in 2008, revised and republished in 2019, and the University of
 Edinburgh became a signatory in early 2020. By signing this document, and through
 our Concordat Implementation Group, the University demonstrates its continued
 commitment and ongoing support for research staff careers, as well as working in
 partnership with other institutions and funders to explore more systematic changes.
- UK Concordat to Support Research Integrity. The University of Edinburgh was one of the first signatories to the UK Research Integrity Office's Code of Practice for Research, which underpins the Universities UK Concordat for Research Integrity. This concordat commits us, and all our staff and research students, to maintaining the highest standards of rigour and integrity in all aspects of research. The Concordat commits us to conducting research according to appropriate ethical, legal and professional frameworks, obligations and standards; supporting a research environment that is underpinned by a culture of integrity and based on good governance, best practice and support for the development of researchers; using transparent, robust and fair processes to deal with allegations of research misconduct should they arise; working together to strengthen the integrity of research; and to reviewing progress regularly and openly.
- San Francisco Declaration on Research Assessment (DORA). In 2019, the University signed DORA, which provides a roadmap for global reform in research assessment. As a signatory, the University supports DORA's vision to 'advance practical and robust approaches to research assessment globally and across all scholarly disciplines'. The University's Responsible Metrics Working Group developed a report setting out how we can realise our commitment to the responsible use of research metrics and to implement appropriate, ethical use of data about research activities and individual researchers.
- The Coalition of Advancing Research Assessment (CoARA). In 2022 the University signed up to CoARA, an initiative that establishes a common direction for research assessment reform. The mission of CoARA is to ensure that the assessment of research, researchers and research organisations recognises the diversity of outputs, practices and activities that contribute to the quality and impact of research. This requires basing assessment primarily on qualitative judgement for which peer review is central, supported by a responsible use of quantitative metrics. By the end of 2023 Edinburgh is expected to have started the process of evaluating the criteria, tools and processes it uses in research assessment. In subsequent years we are expected to make steady progress toward fulfilling the CoARA Commitments.

- **Technician Commitment**. In 2017, The University of Edinburgh signed the Technician Commitment, which aims to ensure visibility, recognition, career development and sustainability for technicians working in higher education and research, across all disciplines. In signing up to the commitment, the University pledged its commitment to take ongoing action around key challenges affecting out technical services staff and an annual assessment of the impact of actions taken to evaluate our progress and ensure effectiveness.
- Postgraduate Research. The University has also made a range of commitments to supporting the training and career development of our post-graduate researchers, including through a number of agreements with UKRI for delivery of our Doctoral Training Partnerships. We anticipate that further norms and recommendations will flow from the UKRI's New Deal for Postgraduate Research, and we expect the University to actively embrace these.

We have sought to avoid duplicating work or generating conflicting initiatives or guidance. We have consulted with other relevant University Committees and Networks to understand the broader context of culture within the University, exploring how the various initiatives seek to support and foster the well-being of all our staff and students, paying particular attention to intersectionality. For example, we have worked with the following **University committees and networks**:

- University Equality, Diversity and Inclusion Committee (EDIC)
- Research Ethics and Integrity Review Group (REIRG)
- Concordat Implementation Group (CIG)
- Technicians' Steering Committee
- Doctoral College Management Group
- Doctoral College Teams Forum
- Edinburgh Race Equality Network
- Staff BAME Network
- Disabled Staff Network
- Staff Pride Network

We recognise that many of the measures set out in this Plan are relevant to broader policies and initiatives across the University related to 'People'. For this reason, the Plan should not be seen as a ring-fenced set of initiatives, but overlaps and dovetails with a range of other activities across the University. Where there are existing initiatives of relevance to research culture, we cross-refer to these in the Plan, and include an action to monitor their progress with the potential to trigger further action if necessary. In other areas where there are no existing initiatives, we hope that this Plan may serve as a springboard to catalyse activity to improve the ways we work and support staff beyond the area of research.

The key relevant University strategies and action plans are:

- Strategy 2030
- Concordat for Career Development of Researchers Action Plan
- Technician Commitment Action Plan 2021-2024
- Equality Outcomes 2021-2025
- Gender Equality Action Plan 2021-2024
- Race Equality and Anti-Racism Action Plan
- Edinburgh Open Research Roadmap

We anticipate further priorities and commitments to research culture for postgraduate researchers to be covered in the planned Postgraduate Research Strategy 2023.

4. Underpinning Values

The communities of staff and students engaged in research and research support at the University of Edinburgh are strongly committed to producing rigorous, innovative and impactful research, which advances the boundaries of knowledge and addresses key societal and environmental challenges. This aspiration to research excellence and impact animates everything we do. However, we believe that *how* we produce and communicate our research is just as important as *what* we research. It is, therefore, vital to articulate the core values that underpin and guide our research practices.

We have identified five such values as most relevant to this Action Plan: citizenship; well-being; equality, diversity and inclusion; ethics and integrity; and learning. These foundational values should animate and guide all of our activities in research – from recruitment and career development support, to more targeted training, through to the full range of relationships, practices and outputs involved in our research. These values are inspired by, and fully aligned with, the University's Strategy 2030, and in particular its emphasis in the Behaviours Charter on being Principled, Accessible and Inclusive.

4.1. Research Citizenship

We aim to create a culture that is inclusive, respectful and supportive, both for those undertaking research, and for those that enable it. Indeed, the environment in which we conduct research is created by everyone engaged with research in the University — including, but not limited to, academic staff, technicians, students conducting research, and professional services engaged in research support. Data scientists, archivists, statisticians, software developers and those managing research facilities across all disciplines are also a vital part of our community.

Many research citizens already volunteer their time and commitment to improving our research culture, whether they be Dignity and Respect Advisors, members of staff EDI networks, PGR representatives and societies, or our mentors - indeed, the members of the

Research Cultures Working Group were volunteers. Many other members of staff and students contribute to a positive culture through daily, often invisible acts of collegiality and support for other colleagues. These researchers and support staff help progress our working culture and improve our understanding of how we can work together, often leading by example, and frequently with little or no recognition of their contribution. This action plan aims to highlight the value of the time and work commitments already made, and to emphasise how these contributions aid everyone in the university.

All members of the research community must be valued both as individuals and as team members, and we must work together to create an environment which is considerate and collaborative across all roles and levels of experience.

4.2. Well-being

Research flourishes when the people conducting and supporting it flourish. But there are often pressures in the work and study environment that work against individual well-being, with consequences for collective well-being. To promote strong research, it is essential that we work to ensure that our research culture does not foster unhealthy working practices or inappropriate behaviours.

One key hindrance to well-being is instability in careers. The nature of fixed-term contracts (and open-ended contracts with review dates) and scholarships to conduct research and research-related activities places financial and psychological pressure on people, and can hamper their capacity to build careers and flourish. Financial pressures are particularly acute for our postgraduate researchers and early career researchers. As a University, we need to ensure we create stable positions where viable, reducing reliance on fixed-term roles. Where this is not possible (as is the case with postgraduate research training), we must commit to equipping researchers with the skills and experiences to build successful careers in academia or relevant sectors. Notably, our approach to PGR training needs to recognize non-academic careers as a successful outcome of PhD study, and to adopt a balanced approach in preparing students for both academic and non-academic pathways.

Expectations around performance in combination with poor supervision/leadership can also lead to stress, feelings of inadequacy and imposter syndrome. In some contexts, it can generate inappropriate behaviour and treatment of colleagues, and research misconduct. Some forms of competition in research are inevitable. Researchers compete for limited funding, and face rigorous peer review processes in producing outputs. PhD researchers often face considerable pressures in completing their projects in a context of limited funding and tight timeframes and it is well established that poor mental health in PGR students correlates strongly with difficult supervisor-student relationships. However, we can do much more to support and equip researchers to manage these pressures, and identify and deal robustly with unacceptable behaviours. And we can do more to recognise the breadth of contributions to research, including through the responsible use of metrics.

4.3. Equality, Diversity and Inclusion

Over the past decade, the higher education sector has made considerable progress in advancing equality and inclusion for female researchers. Instruments such as Athena Swan have focused attention on measures to recruit, retain and support women — although significant challenges remain in many disciplines. Far less attention has been paid to other forms of inequality in academia: many groups remain under-represented and continue to face structural barriers, including those from ethnic minority backgrounds; those with a disability; many members of the LGBTQ+ community; and those from disadvantaged socioeconomic backgrounds. Despite various initiatives, those taking parental leave and with childcare responsibility also continue to face particular impediments to advancing their research careers, and these constraints often intersect with other protected characteristics.

The University is committed to addressing these barriers and ensuring our research community is inclusive, diverse and representative of our broader population. This requires active measures to recruit, support and retain colleagues from diverse backgrounds; and to support the career advancement of colleagues from under-represented groups and those with caring responsibilities, enabling them to flourish in our research environment. There are acknowledged challenges within research, both in the UK and internationally, where there is a 'leaky pipeline' that particularly affects those with protected characteristics, at every stage of promotion and career development. We are all worse off when talented individuals from under-represented groups and those with minoritised protected characteristics are unable to realise their potential in research.

This is not a problem the university can fix on its own, but we can address issues within our own workplaces and environments. At PGR level, many of our DTPs have adopted practical measures to widen participation, for example through ringfencing scholarships for Black and Minority Ethnic (BAME) applicants. We are also launching the Edinburgh Research Careers Scheme to support under-represented researchers into postdoctoral research roles. We need to be pro-active in working with colleagues and students, and draw on our own institutional expertise to identify and address barriers to advancement, including through targeted support to address structural inequalities.

4.4. Research Ethics and Integrity

We are committed to ensuring our research culture promotes and supports the highest standards of ethics and integrity. Our approach to research ethics is crucial in guiding our behaviour and decision-making in research. Ethical considerations should inform our research questions and goals, our research methods, whom we collaborate with and how, and how we share and archive our insights and findings. In many areas, the ethical considerations confronting our research have become more challenging over the past few years. For example, many researchers are partnering with a more diverse and complex range of local and international partners; new possibilities for data collection and analysis create new risks around data use, management and sharing; and methods of co-creation and co-production generate new challenges and responsibilities in how we engage patients and publics. For our postgraduate researchers, we are providing training in both responsible research and innovation and research ethics. This training is mandatory for a large number

of PGR students already. Research ethics for supervisors is also part of the mandatory training they receive as reflected in University policy.

Research integrity is a broader but overlapping concept to that of research ethics, referring to the values and conduct animating our research. Research integrity requires complying with the ethical, legal and professional frameworks set out by the University and the wider sector. Following UKRI, research integrity involves upholding values of honesty, rigour, transparency and open communication in our research, as well as care and respect for those involved in research.⁴ Research integrity therefore encompasses both the ethical principles guiding research, and the wider professional standards around conducting rigorous and open research. It covers a range of more specific areas, such as reproducibility and methodological rigour, and open research.

The University has been at the forefront of developing good practice across a number of aspects of ethics and integrity, and recently adopted a comprehensive Ethics Policy. We are committed to working with our relevant committees and University leads to ensure ethics and integrity are firmly embedded in all aspects of research culture, and ensure that our frameworks are continually adapted to address evolving risks and challenges in the wider environment.

4.5. Learning

As a University, we are committed to the professional development of students and staff, and applying our knowledge and expertise to continually adjust and update how we support positive research cultures. This ethos is also core to our identity as researchers and as professionals supporting research: in our roles, we constantly challenge and question practices in our environment, and strive to produce rigorous data and analysis to update our beliefs and guide our conduct. We need to ensure a similar spirit of curiosity, rigour and learning underpins all aspects of our research culture. At the heart of our learning approach is the biannual University research cultures survey, which will form a cornerstone of our plan. We are also committed to improving data relevant to equality and diversity, including through building trust in the use of data to promote equality, and applying our expertise to understanding and addressing barriers to inclusion.

Our University is fortunate in hosting specialists in many aspects of research culture. We benefit from leading expertise on ethics and integrity, from the ethics of new technologies to research on conflict of interest in public health, and corporate responsibility in the area of climate change. We also have access to the expertise of a range of researchers working on inequalities, including those engaged in our networks RACE.ED and GENDER.ED, as well as many aspects of disability and socio-economic inequality. We are keen to ensure our researchers can marshal their expertise as 'critical friends', and will establish mechanisms for them to help challenge and inform practice in the University.

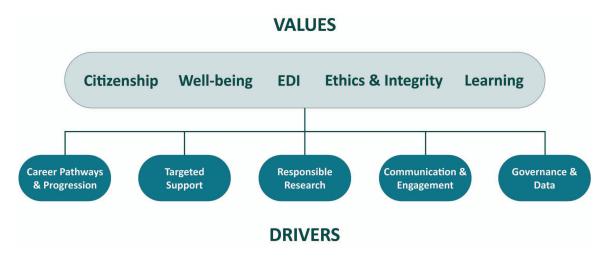
⁴ https://www.ukri.org/what-we-offer/supporting-healthy-research-and-innovation-culture/research-integrity/

 $^{^{5}\} https://www.ed.ac.uk/sites/default/files/atoms/files/university_of_edinburgh_ethics_policy.pdf$

5. Drivers for Change

The action plan aims to realise these values through practical measures across five main areas of delivery, or what we call 'drivers for change' (see Figure 1). These drivers broadly reflect the internal structures of the University, and thus the parts of the organisation that are implicated in delivering the plan across the University. By focusing on drivers, we are therefore ensuring our actions align with those structures, processes and policies that are best positioned to drive forward the goals of the plan.

Figure 1: Values and Drivers for Change



We briefly set out each of the drivers below, along with the main measures we are committed to introducing across them. We note that the Action Plan contains an extensive list of measures, which will need to be prioritised and elaborated in more detail by the Action Plan Delivery Group (see section 5.5). A Delivery Plan will be developed over the course of 2023. We also note that the Action Plan is a living document, which will be updated and refreshed as required, while maintaining transparency around how the actions and activities are progressing.

5.1. Career pathways and progression

In order to promote our values of citizenship, well-being, and EDI, we need to establish and clearly communicate effective, appropriate and fair career pathways and opportunities for progression. Researchers at all levels and in all roles, and colleagues supporting research, should have access to clear support for career development and progression, including moving across different types of research and research-supporting roles. This includes providing opportunities for our early career researchers, including our PGR students, to enhance their skills and build their professional attributes. Such career development support and pathways should build in recognition for positive behaviours, including good citizenship and collegiality, support for EDI, and research ethics and integrity. It should incentivise and reward roles linked to citizenship and collegiality, such as membership of committees, organising peer groups and networks, and providing mentoring and peer support.

Key to delivering these goals are our Human Resources processes and guidance, our PhD supervisors and Heads of Graduate School/Postgraduate Directors, line managers at University, Colleges and School level, the committees and panels involved in career progression. We note in particular the role of the wider community of colleagues who support researchers and research-associated professional staff through mentoring, coaching and annual review; these senior colleagues play a crucial role in shaping our research culture through leading by example and playing an active role in supportive their colleagues.

Key measures include:

- Integrating citizenship and collegiality into criteria for academic, professional services & technician promotion, review and mentoring. In order to encourage and reward research citizenship, contributions to collegiality should be recognised in career progression and appraisal.
- Rolling out the Research Careers Support Tool. In order to promote well-being and avoid our researchers becoming overstretched, researchers should be supported in selecting and prioritising across research activities, using this newly developed tool.⁶
- Introducing a PGR Higher Education Achievement Record (HEAR) that will include evidence of good citizenship, such as contributions towards student and staff communities.
- Reducing reliance on metrics and embracing the narrative CV. Processes for recruitment, promotion and review should align with the sector-wide shift away from reliance on narrow sets of metrics, including through adopting the narrative CV.
- Producing guidance for promotions and scholarship panels on foregrounding EDI considerations. We will provide clear guidance and appropriate data for those involved in recruitment, internal grant review and internal funding and scholarship schemes to factor EDI goals into decision-making.
- Establishing a **University Technicians Lead**. The crucial role of technicians should be supported and developed, through our Technicians Commitment plan and by establishing a new role as University Technicians Lead.
- Raising awareness of employment rights and benefits of staff in fixed-term employment, as well as rights and benefits open to UoE/UKRI-funded PGR students.
 We will provide a website laying out specifics such as CPD, holiday entitlement, sick leave, parental and sickness leave.
- Supporting those on fixed-term (or open-ended with review dates) contracts into
 more stable positions. We will establish a working group to understand the
 population on fixed-term contracts, and how/where steps can be taken to address
 job precarity.
- Promoting PGR career development support via the annual PhD Horizons Conference, Platform One alumni network, and PGR mentoring schemes.
- Developing a strategy for promoting more effective support, integration and representation of our PGR community. We are aware of the particular challenges

⁶ https://support-for-researchers.ed.ac.uk/career-development/research-careers-tool

facing this community, and will develop a comprehensive plan for addressing challenges and gaps in support in 2023.

5.2. Targeted Support

Alongside support for career development, the University offers a range of opportunities for more targeted training and support. This includes schemes to support students and staff at different career stages, including postgraduate researchers and early career researchers; training for PIs and research leaders; training for PhD supervisors, targeted support for grant applications or industry engagement; and networks providing peer support for particular communities, such as the Disabled Staff Network, Staff Pride Network (which is open to PGR students), or the many networks and peer groups that exist for research staff, postdoctoral fellows, postgraduate researchers, technicians and professional support staff.

The Institute for Academic Development provides much of our training and support for staff, including through its liaison with the Research Staff Hub and the Doctoral College. Capacity for the Research Staff Hub is being expanded, through investing in three new roles. The planned PGR strategy (see 1 above) will also guide potential further investment in support, which will be coordinated by the Doctoral College. Our Graduate Schools and many doctoral training programmes and centres also offer a wide suite of targeted training opportunities and support for skills and career development. Also key are Edinburgh Research Office and College and School research offices, which offer a range of schemes for supporting aspects of research training and funding applications.

Key measures include:

- Providing systematic training for PIs and line managers of research-conducting staff, and for supervisors of PGR students. We will roll-out further training to equip research leaders to promote a positive and supportive culture within their teams, including through a new post within IAD. This will enhance existing resources developed within IAD.⁷
- Addressing challenges and imbalanced power dynamics in PGR supervision/support relationships early on, by ensuring that all students have two supervisors; and that there are appropriate processes and structures to tackle potentially toxic working and studying conditions that may arise in research environments.
- Ensuring rigorous implementation of the Concordat for the Development of Research Careers. This includes ensuring researchers have access to support for professional development, including through the dedicated 10 days pledged for research staff in the Concordat.
- Rolling out targeted career development support for early career researchers through a new career advisor role in IAD, and for technicians, through the Action Plan on the Technicians Commitment. Through Growing Research Together, we will also actively explore more comprehensive support for our professional services staff.

⁷ https://doctoral-college.ed.ac.uk/pgr-supervision

- Awareness raising and support for researchers with disabilities. We have identified a
 particular gap in support for this group, and a need for greater recognition of their
 positive contribution to the University, including in our external communications.
- Strengthening cohort building, support and leadership development opportunities for researchers with **black and ethnic minority backgrounds**. The plan sets out measures to sustain and strengthen targeted support for this group of researchers.
- Awareness raising and guidance on available funder adjustments and support for research applicants/awardees with disabilities, childcare responsibilities and other needs, including making medical certificates available where required.
- Ensure a more coordinated approach to support researchers who are subject to **online abuse** because of their work and expertise.

5.3. Responsible Research

The University of Edinburgh is sector-leading in many aspects of responsible research. Our ability to tackle the world's greatest environmental, social and governance challenges is considered is both globally and nationally as leading (QS Sustainability rankings 2023). We benefit from cutting-edge support for open research, including through a number of 'early adopter' initiatives in Open Access, and our outstanding infrastructure for data processing, storage and sharing. We are also leading the way in the agenda on reproducibility, including through the Edinburgh ReproducibiliTea Network and the Edinburgh Open Research Initiative Network. The University recently developed a new Ethics Policy, which systematises our processes and scales up our ambition in this area. A further area of responsible research is the growing concern with security risks around research collaborations and data-sharing, captured in the 'trusted research' agenda.

The actions under this heading seek to reinforce and amplify these activities, while also filling a number of areas identified as requiring further attention. Many of these measures are being brought forward by our research ethics committees, activities on trusted research, as well as Social Responsibility and Sustainability. The University also recently adopted ambitious plans to position us as sector-leading in the area of research on and for environmental sustainability. The actions strongly align with the University's Social and Civic Responsibility, the fourth pillar of Strategy 2030.

Key measures include:

- Systematically rolling out research ethics and integrity training. As set out in the
 new Ethics Policy, all staff and students engaging in research will receive training in
 ethics and integrity through online resources.
- Integrating EDI, equitable partnership and sustainability considerations into
 research ethics review. We will work with our ethics and equalities experts to
 develop guidance on how to embed these considerations into ethics review
 processes, including through wider use of the GENDER.ED toolkit for promoting
 inclusive research and research partnerships.⁸

⁸ https://www.gender.ed.ac.uk/gender-sensitive-research/improving-research/

- Promoting guidance on authorship and acknowledgement in outputs, adopting a
 University-wide Fair Publication Policy. This will include acknowledging the
 authorship contribution of technicians and other staff; as well as the role of
 supervisors in PhD publications, to protect postgraduate researchers.
- Creating learning materials and guidance on **trusted research** partners and export control legislation. We will continue to monitor and advise our research community on evolving requirements, as well as helping shape the UK-wide agenda.
- Ensuring UoE is an early adopter of the UKRI **Concordat for Sustainable Research**. We will be sector leads in good practice on sustainability, including through our refreshed Climate Change Strategy and embracing the Concordat.
- Enabling PIs and facility managers to assess the environmental cost of undertaking their research, to contribute to the University Net Zero emissions target.

5.4. Communication and Engagement

A key driver of culture change is recognising and celebrating positive behaviour. While the measures set out under Career Pathways seek to reward constructive behaviour through promotion and annual review, this section focuses on measures that publicly communicate our values and commitments across our community. It also covers measures to encourage engagement within and across different communities engaged in research and research support, fostering stronger peer support networks.

Key measures include:

- Hosting an annual Research Support services conference (relaunched in 2022), as well as a new Technician Conference that we hope to run annually.
- Hosting an annual Open Research conference (launched in 2022) with student and staff involvement. This will be an internal University event to highlight evolving values, goals and activities within Open Research, and celebrate best practice.
- Instigating a **Postdoc Appreciation Day** bringing together researchers from across the University. This will be an opportunity for cohort building and skills development, covering aspects such as career development, authorship and promotions
- Celebrating the **achievements of researchers with disabilities**. We will develop a set of webpages celebrating and profiling the careers of our researchers with disabilities, to empower others who may be just starting on their careers.
- Establishing a **Neurodiversity Champion** for research. This role will be responsible for developing a support network, guidance for PIs and PhD supervisors, and informative webpages.
- Collating information on **PGR societies and community-building events**, and publish this information on the Doctoral College webpages.
- Developing a communications and engagement plan setting out clear and consistent messages about our aims, plans and commitments on research culture.

 Working with Communications and Marketing to continue to promote underrepresented groups in external communication of research.

5.5. Governance and Data

The success of this action plan crucially depends on governance and data. Governance refers to the structures and processes put in place to elaborate and implement the action plan, and monitor and evaluate progress in meeting its goals. It also covers procedures to ensure compliance with a range of other relevant University policies and guidance, including the Dignity and Respect policy, and channels for complaints and for addressing misconduct.

The use of data is key to realising our goal of being a learning organisation. We are therefore adopting a series of measures to ensure we collect and responsibly use data and analysis to update and deliver the plan on a rolling basis, and drive culture changes.

Key measures include:

- Committing to 2-yearly research culture surveys. These will provide an evidence base for monitoring progress with our research culture, and allow us to continue to identify gaps in our approach, and further areas for action.
- Continuing to conduct the 2-yearly **Postgraduate Research Experience Survey**, drawing on responses to inform our strategy for supporting PGR students.
- Incentivising wider use of **exit interviews** to surface issues of concern, with a focus on the particular challenges faced by fixed-term staff, including under-reporting of bullying and harassment or complaints.
- Finding measures to strengthen compliance with the **Dignity and Respect** policy, and as well as increasing the efficacy of, and confidence in, Research Misconduct, and Complaints and Whistleblowing procedures.
- Addressing key gaps in support for under-represented groups, including through supporting research into the experiences of these groups; and working with the University EDIC and the Staff Experience Committee to establish roles to champion and support Neurodiversity and Well-being across Colleges and Schools.
- Maintaining the Research Cultures Group as a representative advisory group and sounding board, and expand its membership to include PGR representation, to ensure accountability, voice and representation of key communities of the University. The Research Cultures Group will invite independent external evaluation of progress when appropriate.
- Sustaining the Research Cultures Group's role as a platform for reflection, analysis
 and learning on aspects of research culture across the University, convening experts
 and those with lived experience to support continual improvement of our research
 culture.
- Establishing a **Delivery Group** including leads for each of the drivers and from across the Colleges. The Delivery Group will be tasked with developing a Delivery Plan, and ensuring robust commitment to, and delivery of, the plan across the University.

their progress in implementing delivery of relevant aspects of the Action							

Devising a light-touch College-level process for Schools and Institutes to update on

6. List of common acronyms in this document

PI – Principal Investigator

CAM - Communications and Marketing department

CIG – Concordat Implementation Group

CoARA - The Coalition of Advancing Research Assessment

DORA - San Francisco Declaration on Research Assessment

DRA – Dignity and Respect Advisors

ECR – Early Career Researcher

EDI – Equality, Diversity and Inclusion

ERO – Edinburgh Research Office

HR – Human Resources department

IAD – The Institute for Academic Development

LERU – The League of European Research Universities

PGR – Postgraduate Research (students)

RCWG - Research Cultures Working Group

VP Research – the Vice-Principal for Research and Enterprise

REIRG – The Research Ethics and Integrity Review Group

RSG - Research Strategy Group

SRS – Social Responsibility and Sustainability department