Enhancing Research Culture
Summary report of Research England online event - 16 November 2021

1. Overall themes of the event

A positive change in research culture is underway, evidenced across the sector by many examples of good practice and a willingness to pilot and share initiatives. This event, along with various government agendas (People & Culture Strategy), was both a recognition of excellence in culture to date, and a call for greater and continued action.

The event considered some of the key challenges and the “traditional” characteristics of research culture that many institutions are seeking to change, including:

- competitive, rankings-driven, fast-paced, short-term
- closed, exclusive, insular, disconnected from society
- high workloads, career uncertainty and insecurity
- siloed disciplines, risk-averse, top-down leadership
- individual-focused, success defined by narrow metrics, “star” researchers.

Every individual and organisation has a role and responsibility in changing research culture. This includes leaders in institutions, funders, research-intensive businesses, and government. The time is right to increase efforts to collaborate, align and share best practice.

Government and funders need to accept and encourage more risk, novelty and uncertainty. This will require clear and strategic signals, providing longer and more flexible grants, changing the way applications are assessed, and broadening the assessment and rewarding of impact.

Institutions and researchers need to commit to collaboration and consider ways to reduce competition. Recognition and reward structures must be broadened to accommodate a wider range of success metrics, and research support roles must be given parity of esteem and equal training and career opportunities.

Looking to the future, we are aiming for a research culture with the following characteristics:

- Collaborative and strategically planned, bigger and longer-term research enabled
- Interdisciplinary and innovative, empowered to take research risks and express challenge
- Team-focused, with parity of esteem across roles, and more distributed leadership
- An equitable, diverse and inclusive workforce, more societal engagement and global thinking
- Success defined by a broader range of metrics with more focus on real-world impact
- Open and accessible, but with risks (such as privacy, IP and security) well-managed
- Providing identifiable, diverse and stable (but permeable) career paths for graduates
- Supporting generosity, trust and understanding between both individuals and organisations.

2. Summary of key points from the plenary presentations

George Freeman, Minister for Science, Research and Innovation

The Minister highlighted the importance of research culture in relation to a range of national agendas, including:

- Technology development - Areas, such as clean tech, life sciences, agri-tech and digital solutions, contain huge opportunities for the UK to be a powerhouse in solving global problems.
• **Science superpower** - Globally, we want to attract more investment in R&D and drive an open, rigorous and collaborative community.

• **Innovation Nation** - We need to optimise science in policymaking, harness innovation, provide better R&D funding and support for catapults.

• **Championing science** - The pandemic has rekindled public and government respect for science and the scientific process. The research environment must be conducive to enquiry, accidentalism, observation, and allowing that things to be discovered.

• **EDI** - We must ensure opportunities are spread more widely. EDI issues in research are a priority for BEIS.

• **Global open access** - We need to protect IP to extract its value while also encouraging free enquiry and data sharing internationally.

**Keynote address by Simone Buitendijk, VC of the University of Leeds**

Please click here to view Simone Buitendijk’s blog - [https://medium.com/university-of-leeds/a-place-on-the-podium-what-is-university-research-for-d4d03fd7bd28](https://medium.com/university-of-leeds/a-place-on-the-podium-what-is-university-research-for-d4d03fd7bd28)

Professor Buitendijk highlighted that a positive research culture is critical to enable people to do their best work. Universities are well-placed to make a difference to major global challenges. She challenged the sector to use its agency in the following ways:

• Work collaboratively and do more interdisciplinary research.

• Be strategic about reducing competition – where can we truly show leadership?

• Consider student communities beyond just school-leavers, and ensure students are well equipped to contribute to the world when they graduate.

• Create a range of sustainable R&D career paths which have parity of esteem.

• Be outward facing and consider the cultures and societies that will adopt scientific progress - research teams need to better reflect those societies.

• Larger universities should work with smaller universities and deprived parts of the population; integrity and inclusion are critical.

Success in teaching and research must be redefined away from rankings and towards collaboration and impact. Solving large, complex, global problems will require teams made up of SHAPE and STEM disciplines to think comprehensively and globally.

Support services, technicians, and ECRs must be more highly valued, recognised and put into positions of power to utilise their backgrounds and perspectives in research. Employment needs to move away from fixed term contracts so staff can be secure.

The UK needs to strengthen partnerships and extend education opportunities in the Global South. This will create the next generation of global leaders and problem solvers.

To enable universities to tackle EDI issues, funders need to take risks and incentivise research leaders to do things differently. Universities put star researchers on proposals because assessors will take notice, and they refer to traditional metrics because scorers are familiar with them.

Professor Buitendijk’s keynote speech resonated strongly with many in the audience. Comments from attendees included:

• “I agree collaboration is 100% the way forward, but that will require a big change in how we evaluate and reward researchers.”
• “I absolutely agree that the big challenges… require inter/trans/multi-disciplinarity - but there needs to be a change in the institutional architecture...”
• “There is a huge amount of Research and Innovation beyond the research intensives… maybe increased collaboration across those sector divides could be even more productive than collaboration within the group.”
• “This is the talk I needed to hear today! Thanks for this positive vision of how we can all collaborate to serve societies and address global challenges.”

Melanie Welham, UKRI People & Culture Champion / Executive Chair of BBSRC

BEIS’s People & Culture strategy sets out ambitions for research culture which resonate with UKRI’s vision. The strategy contains three priority areas – people, culture and talent – and identifies what success looks like.

Capacity, culture, capability and behaviour are all linked. To improve the productivity and sustainability of the system, we should focus on people-centred challenges such as skills, diversity, career paths, mobility, and restrictive selection criteria. Leadership skills vary across the sector, and the culture isn’t open and inclusive yet.

UKRI is focusing on a number of relevant workstreams, including:

• Using incentive structures and attracting and retaining talent from across the globe.
• Setting up a good practice exchange.
• The development of the New Deal for PGRs.
• BBSRC is currently trialling the Resume for Researchers.
• Working with partners to set evidence-based incentives, share information, and pilot initiatives.

Keynote address by Lisa Mooney, PVC (R&I) at Sheffield Hallam University

Please click here to view Lisa Mooney's blog

Dr Mooney drew on Sheffield Hallam’s research culture journey and described two pilot initiatives:

• Distributed leadership – Leading from the top locks other staff out of decision making. Leaders should get to know people’s skills then let them find their niche and agency. SHU staff collectively agreed key challenges and how to solve them. Now there are ten distinct discipline-based portfolios which include staff from all levels. Each portfolio will build an evidence-based dashboard so that there can be regular portfolio health checks.

• Building knowledge networks – Strength and innovation come from “collisions” between disciplines, and silos need to be removed to enable cross-sectoral working. Leaders discussed a small number of global challenges where SHU could build critical mass. Areas such as Net Zero and environment are not research strengths, but could uniquely collide with the institution’s strengths in innovative thinking. The “collision zone” is now discussed regularly among staff.

Leadership can change culture by empowering others to participate and co-produce the change. Organisations must allow staff to develop agency and open the line of sight to leaders.

A “whole scholar” must balance rigorous research, teaching, leading, and outreach, which requires pragmatic career frameworks and workload planning. UKRI should highlight the richness research brings to teaching, especially in non-research-intensive institutions.

Dr Mooney’s address attracted a lot of interest and comments from the audience, including:
“The idea of creating a distributed leadership model is really exciting…”

“Absolutely! A healthy research culture and healthy teaching and learning culture go hand in hand.”

“I feel that my efforts have been validated by these presentations thank you.”

3. Summary of key points from the discussion panel

Three projects funded by the Research England Development Fund were invited to participate in a discussion panel, showcasing different models of good practice in relation to research culture. The three panellists were Kelly Vere of the TALENT Project (Director of Technical Skills and Strategy, University of Nottingham), Emily Farran of the UK Reproducibility Network (Professor in Developmental Psychology, University of Surrey), and Anthony Hollander of Prosper (Pro-Vice Chancellor R&I, University of Liverpool).

Some of the key points arising from the discussion included:

- Parity of esteem for all research system roles is needed to understand and value currently hidden but vital people. The Talent Project has three strands: (i) generating sector insight and knowledge about other roles, (ii) culture change activities, such as a levy on technical training, decision making boards, and (iii) bespoke training for the Midlands technical community.
- A Women in Technical Leadership training programme was offered openly on a national basis. It was over-subscribed and the project is already sharing learning at only twenty months in.
- Many in the sector want to shift away from the “publish or perish” culture. This fits well with using a narrative CV and rewarding staff beyond journal publications.
- Culture change must go beyond just compliance to include incentives as well as changes in hiring and promotion practices.
- The UKRN brings together eighteen varied institutions to develop high-quality training in open research practice and an approach to sharing best practice. The main output will be a “train-the-trainer” model which can be adapted to fit various institutions and disciplines; then the most effective approaches can be widely rolled out and embedded.
- Very few post-docs will go into academic careers. Prosper works with post-docs to identify a wide range of career options beyond academia and highlight researcher talent to employers. The project will produce a suite of online tools which will be made widely available.
- EDI and co-creation have been areas of success for Prosper. The project has attracted diverse applications because of its advertising and application process, and the minimal requirements for specific times people had to be available. The project has co-created a robust suite of tools with post-docs. Co-creation with over ninety varied employers identified the skills they require and contributed to the formation of twelve career clusters.

4. Diversifying the PGR Community and Research Pipeline

Maisha Islam, Co-Chair of the Research England/Office for Students BAME PGR Expert Panel and Steering Group, and Steven Hill, Director of Research at Research England, made a short presentation following the recent funding call for projects that sought to increase the diversity of the PGR community.

BEIS’s People and Culture Strategy recognises that new and diverse talent is needed for UK research to thrive. This can only happen in a healthy system with clear career paths, but systemic racism and bias exist. BAME staff and students sometimes don’t feel they belong, or think they won’t get funding, and supervisors may be insensitive to cultural needs.
BAME people were well-represented on the RE/OfS BAME PGR expert panel, which will now continue to work on monitoring the thirteen successful projects. All thirteen were innovative and covered many BAME-related issues from data to institutional racism. The projects actively engaged with students and staff of colour rather than putting them in the "deficit" box. They also had encouraging letters of endorsement from senior leaders, which is critical to achieving structural and cultural change.

5. Some of the key points from the breakout sessions

In order to enable participants to have a frank and open conversation, none of the five breakout sessions were formally minuted or recorded. However, a few key points of each discussion were later collated for a flavour of the issues, questions, concerns and good practices raised.

**Trusted Research Taster Session**

- TR&I (Trusted Research and Innovation) awareness, questions, risks and considerations are increasing, and the landscape is saturated with activity.
- International collaboration is essential to research and integral to many government agendas, but there are tensions between security and international research collaboration.
- The sector needs a framework that can evolve as the risk changes, remove barriers which discourage risk taking, and encourage appropriate risk taking. UKRI has a responsibility to help universities navigate TR&I, but the framework needs to be developed by and embedded across the whole sector. UKRI is alert to the sector’s concerns about additional compliance burden.
- UUK’s report (October 2020) has helped inform the management of security-related risks and creating a culture where researchers feel supported and protected.
- RCAT (a new part of BEIS) will collaborate with the HE/research sector to better understand the nuances and develop its ways of working.

**Research Integrity**

- The quality of academic research quality is influenced by the culture in which it takes place. A culture that enables and supports academic challenge, while protecting those involved, is most likely to lead to robust research.
- Some good examples of mechanisms to report research integrity concerns in the HE sector were shared. The group discussed whether researchers genuinely feel able to raise and report research integrity concerns, and what mechanisms were most effective.
- Good policies and procedures are necessary and important, but people must feel safe to use them. There can be a fear of retribution, which is a deeper cultural issue and more challenging to solve. Responses are needed at national, disciplinary, institutional, and local departmental levels.
- A more coordinated and aligned approach from funders would enable standardisation of definitions and processes so institutions only have one set of rules to deal with. Sharing of best practice will mean it can be implemented widely and support sector wide culture change.
- The next version of the REF should have a stronger emphasis on research integrity and culture.

**Open Access Octopus Project**

- Regarding REF, there appears to be a self-perpetuating cycle where non-journal article outputs can be submitted, but RE can’t release statistics because non-journal submissions are so few they could be identifiable. This then perpetuates the idea that only journal articles count.
• The group noted that Octopus components must be linked to a problem or hypothesis, which is most common in “hard” sciences. This is a significant barrier to use in some other disciplines and makes it difficult for institutions to link the use of Octopus to staff assessment.
• Participants asked how Octopus will sit alongside current / traditional publishing processes such as conferences and journals. Octopus is designed to complement those processes.
• Noting that funders will probably require the use of Octopus to get high uptake, the issue of burden was raised. It could end up feeling like yet another system to interface with in a time constrained world. Ideally, research systems should strive for “enter once and use many times”.

Increasing opportunities for BAME PGRs

• Postgraduate Research Opportunities for the North East / Network for Equity (Pro:NE) was developed by staff and students of colour to improve wellbeing outcomes and increase the number of people of colour accessing and thriving in PGR work and study.
• The aim is to strengthen and diversify the talent pipeline. From school age, students may or may not get guidance on career opportunities. Pro:NE wants to change the landscape and attract people of colour to the North East of England.
• A proposal to develop fair selection models for historically marginalised postgraduate research students at Oxford and Cambridge considers the gap between white and underrepresented applicants. Sixteen pilots will select PGR students across the two institutions (eight in each), and across all subject areas.
• A toolkit of successful prototypes will be produced, informed by existing models of recruitment, looking beyond the UK for best practice and including an implementation plan, training kit, and model for evaluation. The project will be collecting socioeconomic data and looking at pathways, not just around ethnicity but also around other offer gaps.

Fostering an Open Research Culture

• The discussion emphasised the importance of joining both operational governance and strategic vision to achieve a more open culture.
• Culture change requires collective effort across the research organisation internally, as well as collective effort across the sector to push forward open research. Open research also needs to be connected to other aspects of research culture, including inclusion, and trusted research.
• The movement towards open access is largely led by junior academics, and there are discrepancies between different disciplines and career stages around practicing open research and furthering it. It was noted that some disciplines, notably the humanities, feel a disconnect with the open research agenda.
• Incentives are part of the strategy to enable culture change by making it rewarding. However, organisations should be careful to ensure they are not recreating the very situation that they are trying to fix e.g. where incentives become what researchers are focusing on.
• There is an opportunity to collectively invest in infrastructure that can support open scholarship and foster an open research culture: Octopus is one example of this. We need to invert spend towards community-owned infrastructure in particular. Participants noted that commercial interests led to open access being costly and become a barrier to publication.