

Re-imagining Research Culture

Monday 2 September 2019

Event Report

Background

As a sector we spend a lot of time assessing and obsessing about the inputs and the outputs of our research — the funds we attract and how our outputs advance knowledge and change society. But attention is now turning to how research is done, which includes the standards we adopt, how we incentivise and reward good practice, and how we interact with each other in the research community.

Our event brought together around 60 researchers, funders, policy makers, research managers and representatives from the publishing industry to share the practical actions that promote a positive research culture, that is, one in which good practice and collegiality are the norm.

Aim for the event

We are reminded constantly — by funders, by policy makers, and by our own researchers — of the need to incentivise a positive research culture. There is no question that we all want this, but how do we make it happen in practice? Changing culture requires a range of aligned approaches, a lot of patience, as well as creative ways of measuring whether we are moving in the right direction.

This event aimed to raise awareness of policies and new developments, celebrate case studies (including the winners of our recent <u>Research Culture Awards</u>), share findings from our recent <u>research culture survey</u>, and generate new ideas through structured discussion.

In shaping the event we drew inspiration from the 2018 Research Culture event at the Royal Society, the Academy of Medical Sciences work on Team Science and the 2014 Nuffield report on scientific culture. We have started to make some changes at the University of Glasgow (view the research culture infographic) and wanted to broaden the conversation to hear your feedback and fresh perspectives at a critical point in our journey.

Universities cannot, on their own, address the challenges involved. This is why we invited participants from a broad range of academic disciplines and career stages, as well as professional services colleagues — including policy and library experts, Human Resources and research managers and representatives from funders, journals and professional bodies. Our event was designed to be interactive, with participation in the panel discussion and small group discussion.

Key themes and discussion points

The programme of the day can be found at Appendix 1. <u>Presentations</u> from the event are available on the web and key points from the panel Q&A and the group discussions can be found below.

The plenary talks highlighted the need to ensure a whole ecosystem approach to changing culture, including a wide range of stakeholders, including the public. The theme of 'public trust in research' came up throughout the day, with reference to scientists being one of the 'most trusted' professions but there being a need to continue to build bridges and promote communication of research and its impact (and complexity) in clear language. There was much discussion of the need to collect robust data, evidence, and examples of good practice (or where things have not worked), and for this information to be considered in context in order to make informed choices on how to improve the culture.

Anne-Marie Coriat presented some of the work that Wellcome is undertaking in response to their Review of biomedical research training and Tanita Casci shared results from the recent survey on research culture at the University of Glasgow as well as some key steps that the University has taken to improve culture. These include:

- Celebrating and rewarding collegiality through revised promotions criteria and the research culture awards
- Recognition of credit and contribution, through the introduction of a specialist technical career pathway and implementation of the <u>CRediT taxonomy</u> (with opportunity to record contributions in the University's online repository, Enlighten)
- Promotion of open research and responsible use of metrics
- Communication and tracking of culture initiatives, through <u>webpages</u>, surveys, culture and careers group, and the publication of an annual assurance statement

The <u>question set from the research culture survey</u> is available on the web for use by other institutions.

"What do I want the culture to look like in 10 years?"

We asked the winners of our Research Culture awards to reflect on this statement. They threw out the following challenges to the audience:

- Expanding the pool of mentors to include peer—peer mentoring and professional services colleagues
- Training postgraduate researchers (PGR) and Postdoctoral researchers to prepare them for post-academic careers
- Identifying the support that Early Career Researchers (ECRs) need to marry high-quality research AND foster a positive research culture
- Making sure that researchers on short-term contracts feel connected to the institution; otherwise why would they invest in its culture?
- Ensuring reward and recognition of collegiate behaviours and genuine contributions (and not the contribution of colleagues who might 'on paper' sit on Athena Swan groups but then leave a small number of individuals to do the work)
- Making sure that discussions around research culture become a regular thing

Questions from the audience related to funder incentives for busy people to spend time on fostering a positive culture, how you might track PGR and Postdoc career destinations (referencing the <u>Next</u>

<u>Gen Life Sciences</u> project in the US), whether discussions on culture are too STEM-focussed, how we might translate it to different contexts, and if STEM might also have things to learn from approaches in the Arts and Humanities. There was a lot of discussion in the Q&A and also the small groups on the importance of both formal and informal mentoring and needing a variety of different perspectives or types of mentoring for different aspects or career stages. This was echoed in the survey results presented later by Tanita Casci.

It was suggested that, where good practice exists, it is important to write this up and share it more widely with the sector.

The roundtable discussions focussed on the themes of collegiality, career development, open research, and research integrity. Participants were given opportunity to attend three small group discussions and were asked to focus on practical actions:

- What have you seen working well? What good practice can we implement right now?
- How can we innovate to address any challenges?
- How do we track our progress or set targets towards getting there?

Key points and suggested actions are captured below, with full details provided in Appendix 2.

Collegiality

- III NERDS group (ECR network in two Research Institutes) and <u>ArtsLab</u> are good examples of where optional semi-formal structures work well. These groups identify shared challenges of ECRs, who learn from each other. Share good practice across institution.
- Technician commitment working to support collegiality and inclusion
- Break down research group silos to allow collegiality and support between groups.
 The Glasgow Crucible programme is a good example of this. Transdisciplinary research groups and joint appointments would also help.
- Create a mentoring culture & work with other universities on this.
- This topic speaks to researchers' sense of fairness. It is emotive and can be gendered. Important to address these issues in language used in forms (which trickle down from institutional structures and processes).
- Consider measuring collegiality at School rather than individual level. Use social network analysis to look at effectiveness of collaborative networks at School level.

Open Research

- Recognise that openness in research helps build trust in research outcomes
- Embed <u>CRediT taxonomy</u> in principle and practice.
- Use lay abstracts and press releases
- Avoid subject-specific jargon, which inhibits collaboration.
- Reward openness & recognise that it is not 'one size', e.g. in 'non-science' based subjects.
- Make services available locally, e.g. arrange open access and data support visits to Colleges, have local contact points embedded within schools, and ensure training & guidance tailored to subjects.

Alternative Career Tracks

- Build a 'Team Science' culture & ensure credit and recognition for specialist skills.
- Consider ways to promote inclusion in wider research culture (e.g. conferences, team meetings, public engagement, decision making, Athena Swan).
- Need clear language to describe the contribution and career development possibilities of different staff roles. Ensure consistency between institutions and funders.
- Manage expectations for those on alternative track contracts (e.g. address differences in whether you can be promoted in this type of role vs academic / research career track). Need to ensure that line managers are also aware of career structures and progression.

Research Integrity

- Build public trust in research through better use of plain language statements & more critical oversight of press releases.
- Support science communication training for researchers but also for the media.
- Share some of the complexity and human factors associated with communicating research.
- Have dedicated support staff for research integrity and best practice e.g. data management, statistics.
- Make sure grant assessors are trained to look for good practice in project set-up.
- REF 2028 should foreground good research culture and reproducibility.
- Provide statistics training and in-house statisticians, involved in all key stages of project.
- Track progress with number of pre-prints converting into full papers.

Career Development

- Recruitment / promotion forms to ask for evidence of how you have supported the career development of others.
- P&DR [Performance and Development Review] cycles to be longer & include 360' feedback from peers.
- Track and make visible(on web) how Supervisors & PIs support researchers into a variety of careers.
- Share & celebrate failure & near misses. Account for this in P&DR.
- Clearly communicate as an institution how responsible metrics will be implemented.
- Provide consistent advice on what is needed for career progression, P&DR and promotion. Need diversity of panels to ensure progression is not based on someone's own experience as a more junior researcher.
- Provide support for ECRs on writing / publication strategy
- Include requirement for collegiality in lower Grade promotion criteria to reward collegial behaviour at all levels (e.g. supervisors introducing their PhD students to wider networks or passing on opportunities).

Event Feedback

Participants found the event useful for learning and for having a greater understanding of sector and local developments. When asked what they would do differently as a result of attending, a variety of responses was given, with "talking to colleagues" being the most frequent:

Take into account the talks and discussions [I heard here today] when thinking of what to do to support improvements in research culture

- As a service, we will use the feedback we received to further improve our support of researchers.
- Think more about the many different ways in which our processes can be adapted to leverage positive culture change.
- I liked the information about the results of the staff survey and that will inform events that I plan myself. I met one person who I will engage with further.
- Ensure that Research Culture is a regular topic of discussion at College Research
 Committee meetings and further promote dissemination and awareness of various
 activities that promote good research culture. Find out more about CRediT
 taxonomies.
- I will complete the CRediT authorship section for all enlighten submissions.
- I have been inspired to think more strategically about the research culture in my School and about the positive contributions I can make.
- I will think about the ways in which I can support junior researchers to develop them as excellent researchers, rather than recruiting new staff.
- I will read some of the articles mentioned by Anne-Marie Coriat.
- I have already shared some thoughts with colleagues. Actions will be planned when the survey results are shared.

We also asked what the University should focus on next, to continue to drive this agenda. Again, communication with staff at all levels and across all job families was of key importance. Suggestions from the feedback survey will be taken into account alongside the survey results. A selection of responses is presented below.

- Exit interview of PhD students.
- Train fewer students to reduce overpopulation of the research landscape and the subsequent practices that emerge from unhealthy levels of competition for jobs and resources!
- Maintain its profile as an issue by keeping talking about it!
- Training of P&DR reviewers about what the University wants to value. I just found out that there actually isn't any mandatory training for these reviewers and they are very inconsistent in what they tell reviewees about how to spend their time.
- Professional Service staff can be a key factor to help drive and reinforce a positive research culture - need more engagement/training and involvement from MPA [Management, Professional and Administrative] and Technical staff as well as the academics.

- Appoint specific research culture experts in each unit to develop and communicate discipline-specific resources (and build this into the workload model).
- More actively encourage interdisciplinary work.
- Invest in existing staff rather than always trying to bring in new.
- Ensure that positive culture is championed at the senior and mid senior management levels
- Create permanent positions for early career researchers. The temporary contract postdoc position is demoralising,
- Address line manager behaviour if they are not supportive.
- Going beyond metrics
- There was a sense of 'preaching to the converted' at the event. I hope that the survey results are not just shared with teams in Colleges, but actively steered from top-down to change any negative cultures that exist.

Next steps

This event is one part in a much longer-term initiative, which seeks to link together existing culture change projects and agendas. In the near future, we anticipate the publication of updated Concordats on Research Integrity and on the Career Development of Research Staff, as well as conclusions from the review of the Athena SWAN Charter.

As such, the thinking and recommendations from this event will not sit in isolation but will be made available to Institutional and local groups and contacts to support contextualised thinking and data analysis, as well as feeding into Institutional-level policy and targets (such as our institutional HR Excellence in Research action plan).

- 1. The graphic representation of the event will be shared on social media, on the wall on Level 3 of the University of Glasgow library in late October (with opportunity for passers by to add comments) and a smaller version will be taken to relevant meetings
- 2. This report will be shared, alongside our Research Culture survey results, with:
 - a. A nominated point of contact in each School / Research Institute, to embed into existing initiatives (e.g. Athena Swan Self-Assessment teams, REF2021 preparations, analysis of the PGR experience survey, PRES)
 - b. College Research committees
 - c. Key professional services contacts, including research managers, Human Resources and the Library
 - d. The University's Postdoctoral Researcher Forum
 - e. The Heads of School Forum (November 2019 at which point they will also receive a series of recommendations, suggestions for action and examples of good practice).
- 3. We will work together with external organisations and other Universities to share our findings more widely (including through blogs) and engage in a wider sector conversation

- 4. The University's Culture and Careers Group will be responsible for working with the groups above to identify and drive forward key actions, as well as monitoring and reporting on progress.
- 5. We will publish an annual research culture assurance statement in November 2019 to share our approach and priorities.
- 6. Finally, we will post our approved institutional action plan on research culture on our website, share it with our event participants, and with our research leadership in the University.

Contacts

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Appendix 1: Programme, Re-imagining Research Culture, 2 September 2019

10.20	Welsons
10.30	Welcome
	Miles Padgett, Vice Principal (Research), University of Glasgow
	Research Culture, a funder perspective
	Anne Marie Coriat, Head, UK and Europe Research Landscape, Wellcome Trust
	What do we want the research culture to look like in 10 years' time?
	Lightning talks from the winners of our 2019 Research Culture Awards
	Lilach Sheiner, Institute of Infection, Immunity and Inflammation
	Amy Nimegeer, Institute of Health and Wellbeing
	Faye Hammill, School of Critical Studies
	 Nick Kamenos, School of Geographical & Earth Sciences
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	Panel discussion, Chaired by Nigel Leask, Research Integrity Champion for the
	College of Arts, University of Glasgow
11 10	Coffee break
11.40	Соптее втеак
12.10	Roundtable discussion on the themes of collegiality, career development,
	open research, and research integrity.
	Discussions will focus on:
	 What have you seen working well? What good practice can we
	implement right now?
	How can we innovate to address any challenges?
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	 How do we track our progress or set targets towards getting there?
13.00	Lunch
12.50	
13.50	Positive steps towards a positive culture. Supporting, rewarding and
	celebrating. How do we know it's making a difference? Tanita Casci, Head of
	Research Policy, University of Glasgow
1110	
14.10	Continuation of roundtable discussions
14.40	Roadmap to the future
	Table facilitators will present a short summary of discussions
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	Building a culture that promotes research integrity – the challenges and
	opportunities ahead
	lan Boyd, Chair of the UK Research Integrity Office
	is so to the or research integrity office
15.30	Close
	Miles Padgett, Vice Principal (Research), University of Glasgow