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Research Cultures

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What is Research Culture?

Royal Society definition: 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.

Good culture benefits everyone.

Bad culture disproportionately affects early career researchers, research support staff, technicians etc and PGR students.



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Research Cultures

- There is a lot work, now called *research culture*, that's happened across the sector for a long time...
 - Open Access publishing and Open Research agenda
 - Responsible metrics and evaluation (DORA, CoARA,...)
 - ED&I, Athena SWAN, Race Equality Charter...
 - Ethics, integrity, misconduct policies and processes
 - Supervision training, management and leadership training
 - Technician Commitment
 - Health & Safety legislation and actions
 - And more...



Why me?

I have had a long-standing commitment to improving the environment in which we conduct research, with the objectives of improving the research and improving the experience of research and research-enabling staff

- **Director of Research** in the School of Informatics in Edinburgh (2016-2018)
– “happy chickens lay more eggs”
- **Head of School** of Informatics (2018-2023) leading over 800 researchers (including ~ 450 PhD students)
- Seconded as **Deputy Vice Principal Research** (2020-2022), witnessing REF first hand and developing the Institutional Research Cultures Action Plan
- **Dean of Research Culture and REF** for the College of Science and Engineering (~3000 researchers)
- **Chair of UoA11 in the REF PCE Pilot** in 2025



Director of Research

There is sometimes confusion between a **Culture of Research** and **Research Culture**.

- As Director of Research my primary concern was promoting a Culture of Research, particularly in a landscape of every growing student numbers.
- The two are inextricably linked: poor research culture can serve as a disincentive for people to apply for funding, take on PhD students, produce their best research....
- For the institution, the culture of research is often favoured because it is easier to evaluate quantitatively.



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Head of School

- As Head of School, I had a responsibility to lead from the front and try to **exemplify the culture** I wanted to create.
- In contrast, at an operational level I was more often dealing with the consequences of poor (research) culture.
- To counteract this I created opportunities to:
 - Explicitly talk about rights and responsibilities for all members of our community, including **all** staff and students.
 - Acknowledge the tension between teaching and research.
 - To celebrate and highlight the positive things that were going on in the School.



School Values

After a period of consultation across all the different constituencies in the School we settled on five key values:

Civility	We treat everyone considerately, care for each other, and seek to influence society responsibly.
Collaboration	We share responsibilities across our community, work together to achieve our goals and help each other effect positive change.
Curiosity	We seek diverse evidence and opinions, and welcome things that challenge our views as an opportunity to learn.
Integrity	We make decisions as rationally and transparently as we can.
Humility	We acknowledge that our understanding of the world and each other is always incomplete, and revise continually.

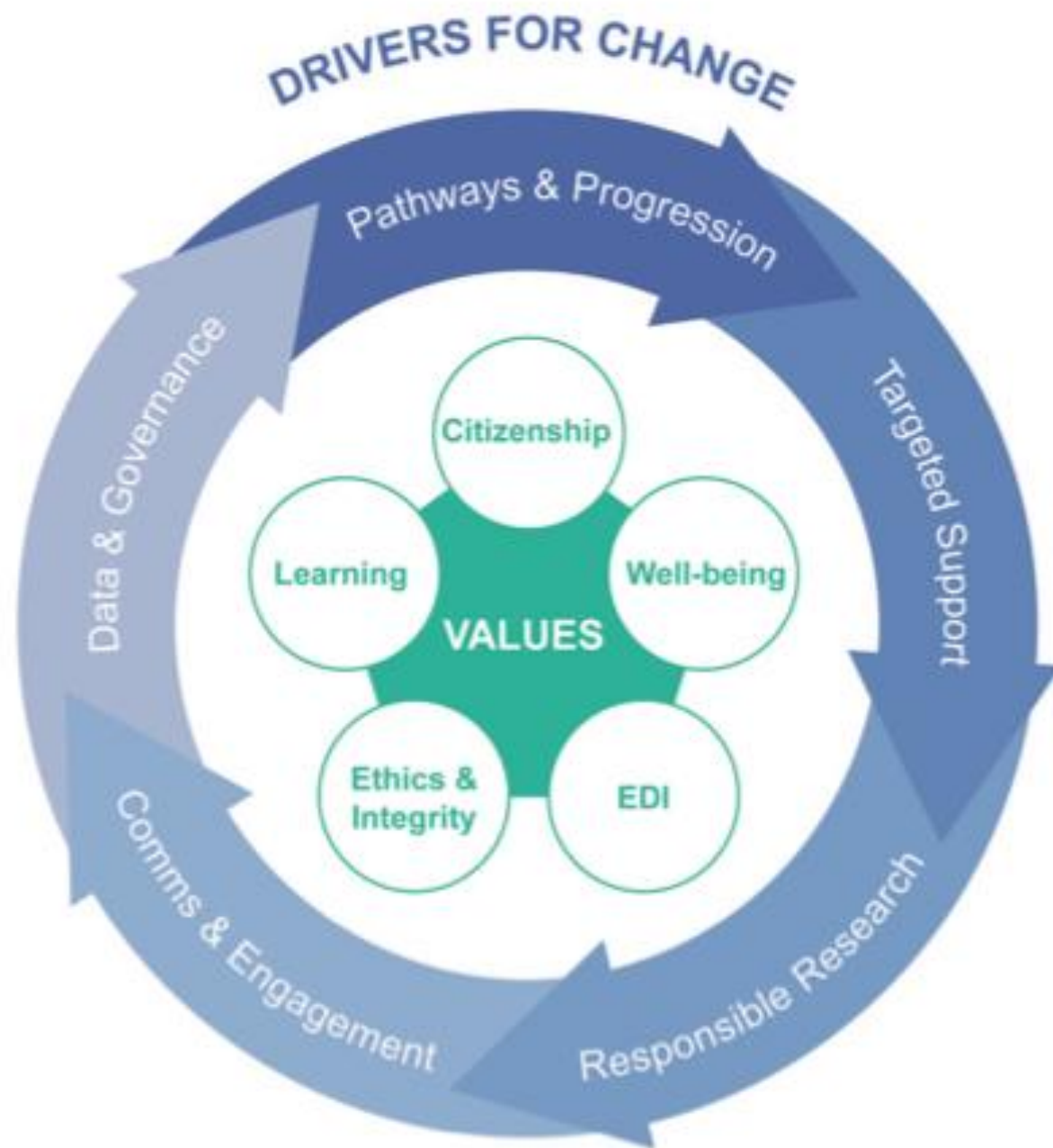
Deputy Vice Principal Research

As DVP Research I convened the **Research Cultures Working Group**, with the mission to develop the University's first **Research Cultures Action Plan**

- We heard evidence from different researchers about their lived experience working in the University.
- We consulted colleagues who had relevant expertise, for example, on how to support neurodiverse colleagues in the workplace.
- We took stock of the many concordats and policies the University was already committed too and sought to create alignment and additionality.
- Created an Action Plan and associated Delivery Plan build around core values and identified drivers for change.



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Dean of Research Culture and REF

- I have been raising awareness of research culture amongst Heads of School and collecting exemplars of good practice.
- I have also been finding the common issues that Heads feel are an impediment to a positive research culture – the lack of recognition for research and innovation in workload models is a recurring theme.
- I have reinvigorated the College Ethics and Integrity committee, introduced Integrity Officers in all schools and developed new training for School ethics panel members.
- We also now have a PDRA Forum, career planning sessions for PhD student, development workshops for research-enabling staff....



College Research Culture Delivery

- We use a number a number of different delivery mechanisms to improve research culture within the College
 - We convene different groups to share good practice and co-create future priorities and activities;
 - Where appropriate, we change policy and practice in the College through the College Strategy and Management Committee;
 - We seek to raise awareness through a sustained communication campaign;
 - We organize workshops, networking events and training sessions to empower others to adopt good research practice across a variety of research culture areas.



Example: CSE PDRA Forum

- Each School in the College now has a **PDRA Champion** (recognized in the workload model) and has set up a **research staff society**.
- We have worked with the HR team to make some recommendations around **annual appraisals** and **induction for postdoctoral staff**.
- The **PDRA Forum** brings together the research staff society leaders and PDRA Champions quarterly to discuss best practice and how to build strong support across the Schools.
- With support from the RC team, this group organizes an **annual Postdoc Symposium**.
- A key part of each Symposium is **consulting** with the community to ask what they would like to see as the priority for the coming year.



CSE Research Culture Calendar

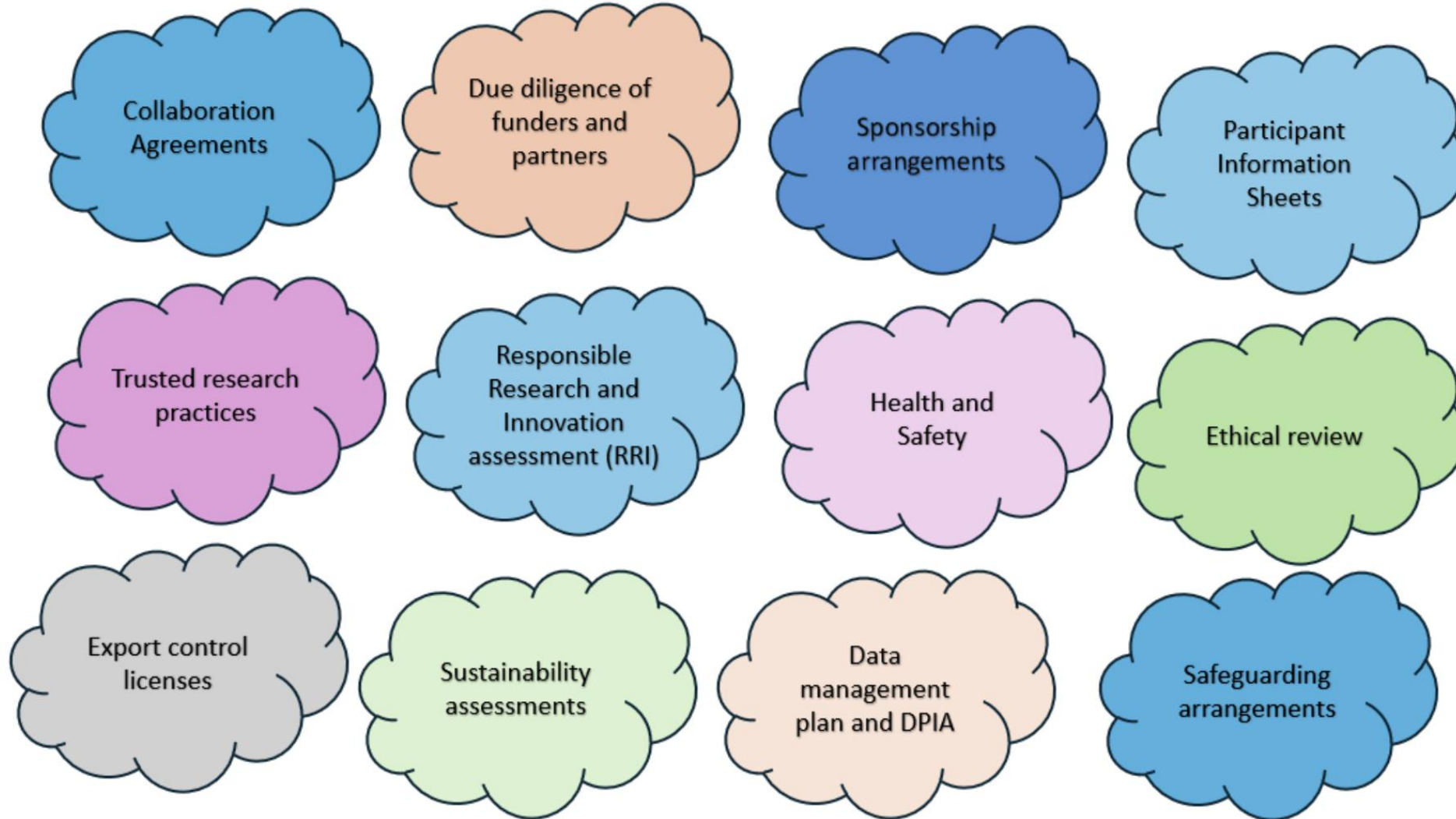
Activities in the College have been arranged around a number of different monthly themes

September:	Ethics and Integrity
October:	Interdisciplinary research and the College research themes
November:	Good practice in research culture
December:	Focus on postdoctoral researchers
January:	Open Research
February:	Technicians/Good Research Practice Week
March:	The College conversation: responsible research
April:	International collaborations
May:	Careers
June:	Sustainability in research



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College Conversation: Responsible Research



REF Pilot PCE Panel

In 2024 it was announced that the Environment statement from REF2021 would be replaced by **People, Culture and Environment (PCE)** statements in REF2029.

It was proposed that PCE would be worth 25% (cf 15% for Environment in 2021).

To test the feasibility of this approach a **Pilot exercise** was set up for Spring 2025.

A selection of institutions and a selection of units of assessment were included in the Pilot.

After an open call for participants, I co-chaired the **UoA11 (Computer Science) Pilot PCE** Panel with **Elena Gaura** from Coventry University.

REF Pilot PCE

For the purposes of the Pilot there were five elements of the assessment framework:

- **Strategy**
- **Responsibility**
- **Connectivity**
- **Inclusivity**
- **Development**

There were 16 institutions who made a submission to UoA11 for the Pilot, and 40 institutions in total.

Both unit and institution submissions were based on the same framework and criteria; both quantitative and qualitative evidence was encouraged.

Lessons from UoA11 Pilot PCE Assessment

- Like all disciplines there was lack of clarity about what was being assessed and how to evidence it. Perhaps as a consequence, **we did not see any 4* examples.**
- It was clear that there were some particular issues within CS, particularly related to the rapid expansion due to **high student demand** and the **high proportion of early career staff.**
- The role of UoA11 units within institutions in guiding and supporting the adoption of **AI creates both opportunities and additional burden.**
- High degree of interdisciplinarity and engagement with external stakeholders meant that there was often **very strong connectivity** but this was not always presented as a strategic opportunity.
- Issue such as trusted research, research co-design/PPIE, mid-career development and succession planning were barely mentioned.

PCE becomes SPRE

- After a pause in Autumn 2025, REF team announced that PCE would become SPRE – **Strategy, People, and Research Environment**.
- **SPRE** will be worth **20%** of the score, and of that **12%** will be for the **institutional SPRE**, just **8%** from the **unit level SPRE**.
- Guidance on the elements, word counts and evaluation of SPRE statements is expected in late summer or early autumn 2026.
- We do know that it will be a narrative supplemented with some quantitative data, with a greater emphasis on journey travelled (cf snapshot of REF2021 Environment statement).

Does this mean research culture no longer matters?

Does this mean research culture no longer matters?

Absolutely not!!

Leaders are crucial in Research Culture

- Everyone involved in research has a responsibility for establishing and maintaining a healthy research culture.
- However, there is a greater responsibility on research leaders because of their position of relative power and their greater experience.
- **“Leaders set the weather....”**
- Important to seek to understand and work with the incentives and motivations of those you work with.

CPHC/UKCRC can provide crucial leadership

- Opening up dialogue about research culture, especially at this time when many of our institutions are facing financial pressures.
- Highlighting the discipline specific issues.
- Sharing best practice and supporting all to improve wherever they are on their research culture journey.
- Helping to develop rigorous evaluation of research culture initiatives.
- Sharing existing resources such as the excellent infographics from the UK Research and Integrity Office (UKRIO)

UKRI Cultures Report 2023 Headlines



1. Facilitate collective effort, building on existing interest and action on research culture. This should be through:
 - The leveraging of existing initiatives and communities whose work has relevance to research culture.
 - The creation of more opportunities for the engagement of everyone involved in the research endeavour, from top-down to bottom-up.
 - More effective cross-sector working, including consideration of the contextual factors that are relevant for understanding research culture in different sectors and types of R&I organisations.



2. Enable robust evaluation of research culture initiatives to determine effectiveness across sectors and with different communities. This should be done through:
 - The expansion of support for the evaluation of research culture initiatives.
 - The promotion of tools and approaches for measuring the effectiveness of initiatives.
 - The development of research culture indicators and/or the adaption of existing sector-wide mechanisms.



3. Develop mechanisms to curate and share existing, emerging, and future practices. These should consider the role that evidence synthesis can play in building and making more visible the knowledge base on research culture, informing decision-making and avoiding duplication of effort.

Responsibilities of a Principal Investigator

As the group leader, you have overall responsibility for the design, administration, conduct and reporting of research projects. Your approach towards research practice will determine whether your team operates in a healthy or a toxic research environment.

1 Research and Career Success

- Nurture young researchers in your team and practice gradual continuous improvement through training and mentoring.
- Avoid unhealthy competition and encourage collaboration.
- Manage expectations around research career pathway and reassure your team that leaving research is not considered to be a failure.

Words describing the ideal Research Culture
(based on the 2020 Wellcome Trust and ARMA reports)



2 Local Research Environment

- Promote ethical conduct of research, ensure care a
- Have the right people in the correct roles, guard ag practices through education, training and adhering
- Encourage inclusivity during open group discussion without bias to avoid the prejudice that leads to ste
- Be a support pillar for the mental health and wellbe

3 Research Integrity and Ethics

- Encourage the dissemination of negative or null re
- Regularly assess whether your research design and beneficial and legal.
- Foster trust, respect and honesty but also critically i information.
- Take a positive approach to compliance and promc expectations are understood by team members.
- Support supervision and management training, gc communication to enhance research integrity.

4 Supervision

- Avoid hierarchical abuse of power, exploitation, and
- Critically reflect on your own behaviour and contini mentorship and leadership abilities.
- Balance your approach and empower your team.
- Be open to reverse mentoring, give recognition to s support them through mentoring, education and t
- Teach your team how to perform quality peer review

5 Support For You

- Expect explicit organisational support with good in
 - Clear guidance and policies, support from centra teams, integrity champions and advisors at the lo
 - Commitment to the Concordat to Support Rese:
 - An environment that facilitates the highest stand and value to your contributions to research, ensui development programmes with sufficient structu
 - Colleagues, welfare and wellbeing advisors who s

- https://ukrio.org/wp-content/uploads/FactSheet_1_Improving-Research-Culture_Responsibilities-of-a-PI.pdf

Responsibilities of a Postdoctoral Researcher

As a postdoctoral researcher, you are responsible for the design, conduct, collection and reporting of research data, material, information or production. Your approach towards research practice and teammates will influence the health of the culture within your local environment.

1 Research and Career Success

- Develop yourself professionally and personally through education, training and a continuous process of self-reflection and improvement.
- Gain independence and be proactive in establishing good collaborations, building your network and securing funding.
- Broaden your mind to a wide range of possibilities or career paths.
- Develop and keep a record of your transferable skills (e.g., a narrative CV).



2 Research Integrity, Quality, Ethics and Culture

- Promote ethical conduct in research and ensure honesty, care and respect.
- Guard against questionable research practices through education, training and adhering to guidance on good practice.
- Record negative/null results and failed methodologies or theories as these contribute to knowledge. For example, publish via platforms that promote open research practices such as Octopus or COS (registered reports).
- Regularly assess whether your research design and methodology are appropriate, beneficial and, if relevant, compliant with legal and ethical agreements.
- Foster trust and transparency by adopting open research practices (see discipline-specific guidance from UKRN).
- Critically review all research data, materials, creative contents or information.

3 Transitioning to Leadership and Building Trust with Others

- Your supervisor will expect many things from you and thereby indirectly acknowledge your expertise. However, some of these may not be feasible. Openly discuss and agree on mutually beneficial activities rather than accepting or rejecting every request/demand.
- Gaining trust and respect is a long-term commitment that is necessary for any aspiring leader. Start by being reliable and building rapport with others to gain credibility.
- Critically reflect on your own behaviour and continuously develop your interpersonal skills, mentorship and leadership abilities.
- When supervising others, be supportive, understanding and open to feedback.
- Seek leadership and supervision training, and find a mentor.



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By South London and Maudsley
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<https://www.wheelofwellbeing.org/>

4 Wellbeing

- Maintain a healthy work-life balance. Don't overburden yourself with extra work if it negatively affects your performance. Learn to prioritise and say no when required.
- Seek psychosocial support from your supervisor, colleagues or institutional support network if you are struggling to cope during difficult times.
- Do not dwell on rejection and disappointment - acknowledge and move on!
- Celebrate success with colleagues even if the progress is small.

Research Design and Conduct

Follow guidance from your organisation or UKRIO's Code of Practice for Research.

Create a dissemination plan in accordance with open research practice and trusted research guidelines.

Do not commence research until all legal agreements and/or ethical opinions are in place for the project.

Questionable Research Practices

These are breaches in good research practice that are very common and often unconsciously accepted by research communities. Be aware of and avoid questionable research practices as they can act as stepping stones to research misconduct.

Learn more about questionable research practices and how to report concerns about research misconduct on our website.

Using generative AI in research

There are advantages and disadvantages to using AI in research.

Whatever your discipline, apply good research practices when using generative AI. Improper use can result in breaches in research integrity or even research misconduct.

Check out our website for resources on AI in Research.

Responsibilities of a Postgraduate Research Student

As a postgraduate research student, you are responsible for the design, conduct, collection and reporting of research data, material, information or production. Your approach towards research practice and teammates will influence the health of the culture within your local environment.

1 Research and Career Success

- Develop yourself professionally and personally through education, training, and a continuous process of self-reflection and improvement.
- Avoid unhealthy competition and establish good collaborations.
- Set achievable goals followed by close monitoring of your progress against milestones and realistic deadlines.
- Broaden your mind to a wide range of possibilities or career paths.
- Develop and keep a record of your transferable skills (e.g., narrative CV).



2 Research Integrity, Quality and Ethics

- Record negative/null results and methodologies or theories that fail to generate desired outcome as these contribute to knowledge. For example, publish via platforms that promote open research practices, e.g., <https://www.octopus.ac> or <https://www.cos.io/initiatives/registered-reports>.
- Regularly assess whether your research design and methodology are appropriate, beneficial and compliant with legal or ethical agreements especially for emerging fields (e.g., AI in research).
- Keep an accurate record of your research activities and review these with your supervisor.
- Critically review all research data, material, information or creative content. Adopt open research strategies to foster trust and transparency about changes in the research plan.
- Seek advice from your supervisor or research governance team if in doubt.
- Regularly complete research integrity training courses to remain up-to-date with knowledge, best practice and what is expected of you as a researcher.

3 Working with Others

- Be caring and respectful towards your supervisor and avoid unrealistic expectations.
- Commit to building a good relationship with others and communicate effectively.
- Critically reflect on your own behaviour and continuously develop your interpersonal skills.
- Be open to constructive criticism and appreciative of guidance or advice from your supervisor, group members and other researchers.
- Request education and training from your supervisor on how to perform quality peer review and other training in skills necessary to complete your research with integrity (e.g., publication ethics; presentation skills; open research strategies etc).

4 Welfare and Wellbeing

- Avoid reacting emotionally when problems arise. Take a practical approach to resolving issues. Identify the root cause and learn preventative measures.
- You may often spend the majority of your research career alone and loneliness can negatively affect your mental well-being. Actively participate in social events and broaden your perspective.
- When you feel overwhelmed and struggle to cope, reach out for help and support - don't suffer in silence.
- Resist hard work at the expense of wellbeing and maintain a healthy work-life balance.

Resources on our website

- Questionable Research Practices: <https://doi.org/10.37672/UKRIO.2023.02.QRPs>
- Reporting Research Misconduct: <https://doi.org/10.37672/UKRIO.2023.03.reportingresearchmisconduct>
- Artificial Intelligence in Research: <https://ukrio.org/ukrio-resources/ai-in-research/>
- Mental Health and Wellbeing: <https://ukrio.org/ukrio-resources/mental-health-and-well-being/>

Research Design and Conduct

Follow guidance from your organisation or UKRIO's Code of Practice for Research.

Do not commence research until all agreements are in place for the project. Depending on the discipline and project these could include:

- collaboration agreements
- legal agreements
- favourable ethical opinion

Questionable Research Practices

These are breaches in good research practice that are very common and often unconsciously accepted by research communities. Be aware of and avoid questionable research practices as they can act as stepping stones to research misconduct.

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Final Remarks

- **Good communication is key**, and remember that listening is as important to communication as speaking – ask those that you are leading what is needed to create both a culture of research and good research culture.
- Most of us do not enjoy confrontation or conflict, but **leaving poor research culture unchallenged can be taken for condonement.**

Thank you!