

# 7 Steps to: **Building a Research Management Portfolio**

## Overview

In an increasingly competitive labour market, how can early career researchers demonstrate a broad range of skills above and beyond conducting research? This question has been of increasing prominence as the employability and value that research trained individuals bring to the economy has been recognised (Smith et al, 2010), and the emphasis placed on the career development of researchers across the public and private sectors has increased. In particular, researchers should be able to adapt and adjust to a variety of contexts; successfully navigate a diverse range of roles and responsibilities; demonstrate understanding of the increasingly fluid research environment at a national and global level; and take a pro-active approach to their own personal and professional development. In turn, Higher Education Institutions, funding bodies, and employers are recognising the importance of career development, and supporting researchers in broadening and developing their research management skills (Vitae, 2011).

This guide is an introduction to developing a portfolio of research management by fostering key transferable skills valued by employers within and beyond academia, such as integrity, teamwork, communication, leadership, planning and organisation, management, life-long learning, and self-reflection (Vitae, 2010). It serves as a starting point for early career researchers and those responsible for their management in beginning to build and develop a record of research-related skills and researcher development. Not only will this improve the quality and impact of their research outputs, it will also help early career researchers to gain a competitive edge in progressing their careers.

## 1. Collaborate

The research environment can be lonely and isolated, yet it inherently involves collaboration. Early career researchers may work closely with supervisors and line managers, but wider collaboration is crucial to furthering development. Networking is key, whether this be internal or international. Participating in multi-level or multi-disciplinary research groups is a good starting point and researchers should attend or organise internal and external events and make a conscious effort to connect with others. Collaborating demonstrates a researcher's abilities to co-operate, compromise, and operate within teams. Pitfalls such as disagreements over responsibilities or ownership should be avoided by establishing trust and clearly communicating accountabilities and expectations from project inception (Latour, Dismore, and Cotton, 2016).

## 2. Be an ethical researcher

Ethical practice is an essential research skill. Researchers should demonstrate honesty and transparency in the conduct and representation of their work; respect for collaborators, stakeholders, and participants; and accountability for the management of their projects. Research ethics can be understood in terms of broad perspectives (e.g. honesty) and 'microethics' (concerning day-to-day conduct) (Guillemin and Gillam, 2004). Both dimensions should be considered when applying for approval from University Ethics Committees. Researchers should consider: are their research questions ethically acceptable? How can data be collected and analysed in a fair and transparent manner? How can misinterpretation and misrepresentation of research outputs be avoided? (ALLEA, 2017). Familiarity with discipline-specific ethical frameworks/practice and implementation of recommendations and regulations from design through to publication will ensure that ethics and integrity remain at the forefront of the research process. Be aware that ethical dilemmas cannot always be anticipated. Researchers should be mindful and reflexive in order to identify issues and learn from experience (Guillemin and Gillam, 2004).

## 3. Apply for funding

Obtaining research funding is a milestone in transitioning from early-career researcher to established academic. Vitae (2017) encourages researchers to apply for funding as early in their careers as possible such as small grants for conference travel, equipment, public engagement, or research-related activities. Working closely with experienced colleagues can help in identifying suitable internal and external opportunities. Newly qualified PhD students and post-doctoral researchers may want to apply for large grants to fund full-time research posts. The major sources of larger grants for specific research projects are the seven discipline-specific UK research councils. Looking out for suitable opportunities on Research Professional or the UK Research Office (UKRO) portal, and obtaining discipline-specific advice from relevant departments are good starting points. Having applications reviewed by experienced colleagues and seeking help from in-house experts on costing, ethics, and impact will maximise the likelihood of success (Vitae, 2017). Applying for funding will help hone important skills such as writing concisely and persuasively, budgeting and defining measurable outcomes, all of which are essential in order to both sell a researcher and the research.

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## 4. Aim to publish

Publishing work for the first time can be a daunting prospect, but it is a reliable and worthwhile way to demonstrate research management and develop an academic reputation (Elmes, 2014). Researchers should be aware of the differences between writing for publication and academic writing (e.g. an essay, dissertation or thesis): papers that are too long, try to cover too much ground, or are incoherent without the rest of the thesis are unlikely to be published (Heyman and Cronin, 2005). Choosing the right journal is essential: its impact factor; aims and scope; target audience; and guidelines for authors should all be scrutinised before submitting (Hutchinson and Howard, 2015). Resilience to criticism and rejection is an essential quality for researchers and will be gained through experience, but persistence pays off – many papers are rejected by two or more different journals before being accepted for publication.

## 5. Be REF ready

The Research Excellence Framework (REF) assesses the quality of research produced by UK Higher Education Institutions by assessing indices such as international recognition, research impact, interdisciplinarity, and public engagement. Its purpose is to benchmark research quality and allocate funding accordingly. As it entails the assessment of research outputs, it is the responsibility of individual researchers to consider their contribution, particularly with regards to the innovation, quality, implications, and impact of their research (Hutchinson and Howard, 2015). Due to the international importance of increasing access to research, a stipulation of the REF is that research outputs are openly accessible (HEFCE, 2017), so ensure outputs are submitted to university repositories as soon as possible.

## 6. Make an impact

Impact can be academic or applied. Academic impact concerns the advancement of understanding, methods, theory, and / or application of knowledge and can be demonstrated through metrics such as number of publications or the number of citations (RCUK, 2014). Applied impact concerns economic, political, societal, cultural or environmental improvements to public health or quality of life resulting from research. Mastering research communication enables researchers to take charge of how their work is understood and received, helping them to avoid pitfalls such as misinterpretation or oversimplification. The impact of research can be improved through public engagement such as media presence and outreach activities. A relatively quick, easy, and low-cost starting point would be to create blogs, websites, or podcasts, or to engage with stakeholders through social media; Altmetrics can quantify resulting impact such as tweets, likes and shares (Altmetric, 2017). To facilitate research impact, consider its stakeholders as early as possible and target the platform, language, and level of research communication accordingly.

## 7. Continue to learn and develop

Learning should be a lifelong commitment, rather than a means to an end or something that stops post-PhD. To engage in continuing development throughout and beyond doctoral study, early career researchers should continue refining discipline (e.g. methods) and transferable skills (such as organisation, communication, and leadership). Teaching is an excellent way to develop and demonstrate skills (Vitae, 2010) and can enhance research by broadening knowledge, deepening understanding, and providing inspiration (Brew, 2006). Co-supervising undergraduate or postgraduate research improves skills such as mentoring, project management, multi-tasking, and leadership (Gallagher, 2013). Further opportunities for development include attending conferences, workshops, training events, or university researcher development sessions. More informally, critical correspondence with peers and supervisors can provide invaluable opportunities to receive and respond to feedback. However, researchers should not rely solely on external evaluation: self-reflection is a crucial skill for early career researchers in any discipline to facilitate continuing personal and professional development.

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