DCU

Ollscoil Chathair
Bhaile Átha Cliath
Dublin City University

DCU Researcher Development Guide

For Postdoctoral Researchers

Contents

Welcome from the VP for Research and Innovation

On behalf of the Office of the VP for Research and Innovation, I'd like to welcome you to the next stage of your career in DCU. This Researcher Development Guide is an invaluable guide to assisting you in navigating the supports and career development opportunities that the university provides for postdoctoral researchers. The personal testimonies in the guide give a great sense of the varied career paths that postdoctoral researchers have pursued and clearly demonstrates that there are many destinations for individuals with the transferable skills that are the focus of the Researcher Development Framework. Therefore, taking advantage of the opportunity to avail of the personal development supports will maximise your prospects of subsequent career choice. Finally, I'd like to wish you every success in your postdoctoral research project and I hope that your time spent in DCU will be an important part of your research journey as you develop towards fulfilling your career potential.

Prof Greg Hughes,
Vice President of Research
and Innovation

Welcome from DCU HR Learning and Organisational Development

We're delighted to bring you this valuable resource to support your career as a Researcher here at DCU. The first section of this guide you'll share the lived experiences and guidance of Research colleagues and alumni at DCU, which will help you to navigate your role as a Researcher. They share their 'insider knowledge' on how to get the most from being a Researcher at DCU, with pragmatic and innovative ideas.

The second section focuses on great ways to take ownership of your own professional development at DCU. A helpful concept to keep in mind can be the 70/20/10 model. That states that 70% of the learning you do should be experiential through your role, 20% should be through mentoring and coaching and 10% should be formal learning events or eLearning. It's a useful tool when trying to make a development action plan. This section of the guide will help you to identify development needs or capability gaps, put plans in place to work on those areas, and prepare you for job applications and interviews.

Above all, I would encourage you to be creative with how you develop your capabilities during your time here at DCU. This is an organisation committed to the development of colleagues and nothing says this more than our "People First" pillar of the DCU Strategy. I would encourage you to take every opportunity to develop your technical and professional capabilities to develop and enhance your career. If you're not sure where to start just contact us in Learning and Organisational Development and we will be happy to guide you.

Barry Mulcahy,
Head of Learning and
Organisational Development

Equality, Diversity and Inclusion at DCU

We are proud of an increasingly diverse researcher community at DCU both from a gender perspective and its intersectionality with race and ethnicity. A key focus of our journey towards a genuinely inclusive University is the delivery of the DCU EDI Action Plan which was first developed as part of our successful Athena SWAN Bronze Award in 2017 and retained in 2020. The plan incorporates actions specific to the challenges that you encounter, as a member of the researcher community at DCU, including training and career supports. I encourage you to actively engage with the range of supports and resources available to you.

As a University driven by 'People First' principles, DCU is deeply committed to promoting Equality, Diversity and Inclusion (EDI). We consistently strive towards a genuinely inclusive university community, in which each one of us can thrive and be valued for our unique perspectives and contributions. Every member of the community has a right to contribute and flourish regardless of gender, civil status, family status, sexual orientation, religion, age, disability, race and membership of the traveller community.

Delivering an action plan is only the first step. Achieving diversity and inclusion is everybody's job. We all share a responsibility to make those around us feel welcome, included and valued. We must challenge our thinking and the potential impact of long held beliefs on our behaviours towards others. Creating a sense of belonging for marginalised colleagues, or those from minority groups, is built through day to day interactions and a concerted effort by all. Together we will build a community where every member can attest to a work environment that is equal and respectful.

We would be delighted to hear from you at **equalitydiversityinclusion@dcu.ie** if you have ideas or suggestions for building inclusivity at DCU.

Fiona Carvill,
Deputy Head of Learning and Organisational Development and EDI Lead

Key Contacts

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helena.mccanney@dcu.ie

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Fiona Brennan
Research Support Manager
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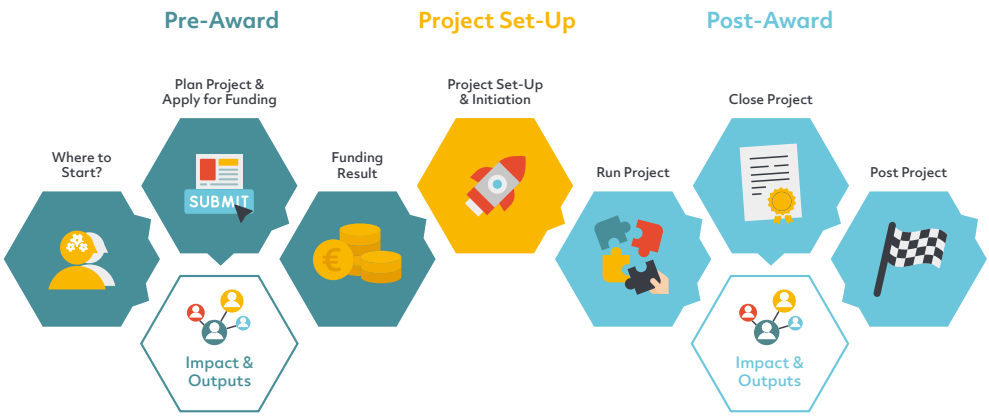
Getting Started at DCU

Orientation for Researchers and Academics

Getting to know DCU is the first step in your professional journey at the university. HR Learning and Organisational Development's Orientation programme is designed to provide you with an introduction to the DCU community, our history, strategy values and structures. Check out our Orientation Programme to find out more about the university and sign up for a workshop.

DCU Research Lifecycle resource

Understanding the complexity of the research funding lifecycle can be challenging for early stage researchers. To assist you, DCU Research have mapped the seven stages of an externally-funded research project – from defining your project idea and applying for funding, through to running and finishing your project. The Research Lifecycle resource clarifies research processes and provides researchers with information on where to access relevant supports and services at each stage. The content has been informed through engagements with over a hundred stakeholders across the university, including researchers and research support staff from all faculties and relevant professional support units. This resource is available via the DCU Research Lifecycle webpages and will be reviewed on an ongoing basis to ensure it continues to meet researcher needs.



Learning and Organisational Development, HR

Learning and Organisational Development provide a broad range of courses, events and resources designed to support your personal and professional development, nurture your creativity, and enhance your leadership, management, and technical skills.

The unit works collaboratively with the Research Support Team, the Teaching Enhancement Unit, and the Graduate Studies Office, as well as engaging regularly with our researcher and academic colleagues, to design our courses and workshop. Our courses for researchers target particular needs specific to researcher professional development and equip you with important transferable skills.

USEFUL LINKS

Visit the Researcher Development Hub

Explore our Learning Catalogue

@DCULearningDev

Professional Skills for Research Leaders Programme

Professional Skills for Research Leaders (PSRL) is a bespoke programme that provides skills-based training opportunities to encourage your personal and professional growth as a researcher.

The PSRL will help you:

— develop your career strategy within a broader research context

— advance your grant writing skills

— build on your capabilities as a team leader

— establish and maintain fruitful research collaborations

— develop your communication skills in a variety of capacities (including presenting at conferences, publishing your research and presenting your research on radio, TV and to industry)

The programme runs over a number of months with and is fully aligned with the DCU Researcher Career Framework (see later section).

Find out more about the Professional Skills for Research Leaders (PSRL) Programme.

HR Excellence in Research

The HR Strategy for Researchers (HRS4R) was launched by the European Commission in order to support the implementation of the principles and requirements of the European Charter for Researchers and Code of Conduct for Recruitment of Researchers. The principles specify the roles, responsibilities and entitlements of researchers, as well as of employers and funders of researchers. The overarching aim is to develop an attractive, open and sustainable European labour market for researchers.

HR EXCELLENCE IN RESEARCH

In July 2015, DCU was awarded the right to use the 'HR Excellence in Research' logo by the European Commission. This significant award was achieved by participating in and successfully completing the HRS4R process, which involves embedding the Charter and Code in our policies and practices.

Find out more about HR Excellence in Research.

Researcher Career Framework

The Researcher Development Framework (RCF) supports the professional and career development of our researchers by explicitly identifying the competencies and behaviours needed for success and progression.

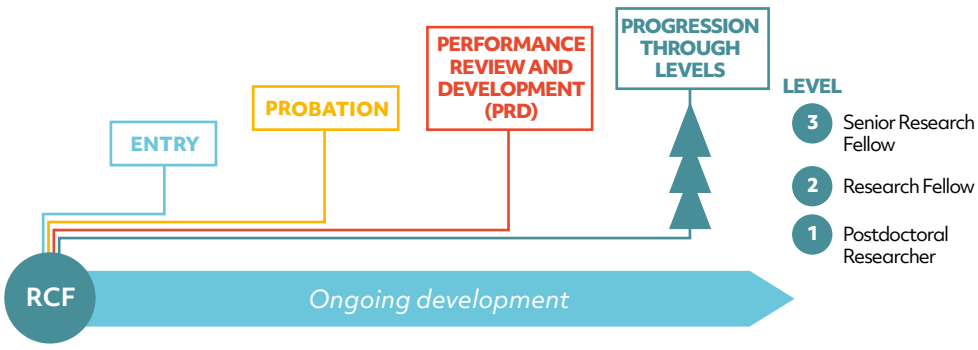
As a participating researcher, you are supported to develop a set of valuable and transferable skills that enhance your career opportunities.

The framework has three levels:

— Level 1 – Postdoctoral Researcher

— Level 2 – Research Fellow

— Level 3 – Senior Research Fellow



Senior Research Fellows who successfully complete Level 3 are better placed to secure longer-term positions as senior researchers or academics in DCU, positions in industry or within the wider public service.

Find out more about the Research Career Framework.

The RCF and Researcher Development at DCU – A Researcher's Perspective

Dr Prince Anandarajah is an assistant professor at the School of Electronic Engineering, DCU. He is an avid researcher who has published over 200 scientific articles and is interested in the translation of research.

Things evolve continually in research and, as a result, researchers are embarking on increasingly diverse careers. This demands the mastery of a wide array of skills. Researchers acquire many skills during the course of their studies or research, but it is vital to realise the positive role of formal progression structures and training in enhancing your career in research.

"The framework… provided a clear path of how I could progress in my career, with solid metrics/ criteria and developmental opportunities."

I was enrolled on a pilot of DCU's Research Career Framework (RCF) when it was initially rolled out. One of the positive attributes of the framework was that it provided a clear path of how I could progress in my career, with solid metrics/criteria and developmental opportunities. As a preliminary step, I met with my mentor (not necessarily the PI) and the Learning and Development Officer to identify possible skill gaps, which led to my customised training needs analysis. This enabled the formulation of my personal Career Developmental Plan (CDP), which aligned training and workshops provided by Learning and Development to my specific current and future needs.

Through the framework and the programme, I greatly enhanced my skillset across a range of areas including management, communication, networking and interdisciplinarity, interviewing, and conflict resolution. Improving on these transferable skills has aided me in working more effectively in diverse work environments and with a broad range of people. So in summary, the Researcher Career Framework gave me a sense of requirement for progression and accomplishment in terms of my skills and development, and allowed me to review my career progression against set criteria.

Teaching and the RCF

In order to reap the benefits of professional development opportunities within mainstream academia, researchers are expected to undertake teaching activities at each level of the Researcher Development Framework. The activity, allocated by a Head of School, is under the supervision of a full-time academic member of that School.

Teaching includes tutoring, informal mentoring, lab supervision, supervision of students on projects and updating and design of course notes and materials.

In the event that a researcher is allocated lecturing, tutoring or lab supervision duties, hours spent on pre and post teaching activities count towards the 50 hours ceiling.

The activity can be undertaken at any time of the year, including outside term time – for example, tutorials for repeat examinations in the summer. Teaching activities are considered to be part of the role of the Researcher and no additional remuneration applies.

Teaching as a Postdoc – Why it Matters

Dr Grace Fox is currently an adjunct Senior Research Fellow at the Irish Institute for Digital Business, DCU. Her past roles include postdoctoral researcher at HIRSC at University College Cork and the Irish Centre for Cloud Computing at DCU Business School. She was also an Assistant professor in Digital Business at DCUBS. Her research interests are disciplinary in nature focusing on how technology is adopted and assimilated in organisation and consumer contexts.

"For me, teaching is a core aspect of the academic career and was an area I wanted to develop in, both in terms of gaining more experience but also to discover my teaching style and build confidence."

Upon commencing my career as a postdoctoral researcher, I was cognisant of the scarcity of academic positions in Ireland. For me, teaching is a core aspect of the academic career and was an area I wanted to develop in, both in terms of gaining more experience but also to discover my teaching style and build confidence. During my PhD, I had gained some teaching experience in the form of tutorials and guest lectures, but I was eager to broaden my experience.

While at UCC I taught an Undergraduate module on health information systems to Medical students and a blended E-commerce module to Undergraduates at the National Institute for Digital Learning (NIDL) in DCU. These opportunities provided me with the experience needed to teach three modules at Postgraduate level the following year whilst working at the Irish Centre for Cloud Computing and Commerce.

Over the past few years, I have taught full-time and part-time students at Undergraduate and Postgraduate level, both in face-to-face and blended formats. I have co-taught a module on research methods and been a part of a teaching team on the *Next Generation module (link)*. I also completed the PhD supervision course and have since supervised Postgraduate practicum projects and joined the supervisory panel for a PhD student. This varied experience has made my postdoctoral career more dynamic and enjoyable and has undoubtedly prepared me for the next step in my career.

"This varied experience has made my postdoctoral career more dynamic and enjoyable and has undoubtedly prepared me for the next step in my career."

I would strongly recommend all postdoctoral researchers considering an academic career to seek teaching opportunities. Discuss your availability and willingness to teach with your principal investigator, the head of group in your University and any other contacts you have.

I would also recommend seeking opportunities outside of your faculty and external to the University. Your expertise could likely be leveraged to deliver a module in another faculty or some guest lectures, not to mention the multitude of modules available in the various third level institutions in Dublin and further afield. There are various workshops and courses on offer in DCU related to teaching, which I'd recommend you attend. Finally, I would encourage postdocs to seek varied experience such as delivering online modules, managing research assistants or advising on Postgraduate practicum projects and dissertations. All of these experiences will be valuable in pursing an academic or research career.

Teaching Tips for Postdocs

Dr Fiona O'Riordan is an Academic Developer in the **Teaching Enhancement Unit.** She has vast experience in teaching in higher education across a host of programmes including Business, Computer Science and Education.

Teaching is a great privilege … and a responsibility. It's also very rewarding and exciting, particularly if you are research active. Teaching provides an opportunity to share your passion and inspire others, and to advance your profession and research interests.

Here are some tips and guidelines to help support your teaching:

1. The module learning outcomes and aligned assessment strategy are the 'contract' between you and the students. Be sure to use to both underpin and guide your teaching.
2. Module learning outcomes are the minimum intended learning that your students must demonstrate through the assessment. The language used in these outcomes can help you to 'pitch' your teaching at an appropriate level.
3. Teaching is about effectively communicating concepts and theories so that your audience can comprehend and evaluate meaning. To this end, it's up to you to use the most appropriate and engaging vehicles to transmit the material, i.e., teaching techniques and resources. The most important element of teaching and learning is the feedback loop – allowing student feedback continually inform how you teach is essential.
4. Maximise learning by generating opportunities for students to interact with the material and each other. This ensures they are active rather than passive learners – for ideas, see the Teachers Toolkit Guide.
5. Remember the old adage by Benjamin Franklin 'By failing to prepare, you are preparing to fail'. Be sure to prepare well and structure your sessions. A suggested structure is to break your class into 20-minute segments. An example of a structure might be as follows:

SEGMENTS	ACTIVITY	RESOURCES
1.00 - 11.20	Preview the topic Introduce theory/ concept/principle	Handout Presentation
11.20-11.40	Paired student activity (see Teachers Toolkit Guide for ideas)	Worksheet with instructions
11.40-12.00	Student feedback on activity Review the topic Outline next session topic	Whiteboard/ flipchart Presentation Outline handout

6. Use DCU Loop to encourage students to engage with your material outside of class. Some ideas of how to use Loop are included in the DCU Teachers Toolkit Guide reference.

Additional guides and supports are available through the Teaching and Enhancement Unit and keep an eye out on the TEU events calendar as we offer a wide range of workshops to support the enhancement of teaching and learning across our programmes.

DG11, Bea Orpen Building, Glasnevin Campus

Dublin City University, Dublin 9, Ireland

TEU events calendar | www.dcu.ie/teu | teu@dcu.ie

Inclusive Teaching and Working

Lorna Greene is the Equality, Diversity and Inclusion Co-ordinator at DCU. With a professional background in health policy, Lorna is passionate about person centred outcomes and ensuring that policy reflects lived experience.

Inclusive working/teaching is about taking account of the diversity of your audience/students:

— The TEU at DCU have a range of excellent resources on Universal Design for Learning, which includes guidance on how to ensure your learning materials, as well as the delivery of your teaching, is accessible and inclusive for as many people as possible.

— The DCU EDI Unit have also developed guidance on how to begin to embed accessible ways of working into your work practices.

— Making your learning materials inclusive by ensuring diverse representation through your images, videos, reading lists etc. can help foster a culture of dignity, respect and inclusion for all students.

— Inclusive language can go a long way to making your teaching space feel safe and inclusive for all students an example of this might be including your pronouns in your email signature, Zoom and Loop. Read more about pronouns at work.

— Being flexible in response to students' caring responsibilities can help to ensure that your learning environment is supportive of people of all family status and may help to foster a more inclusive culture for those balancing family and study.

LinkedIn Learning

All DCU colleagues have free access to LinkedIn Learning, which is an on-demand library of instructional video and audio courses covering the latest business, technology and creative skills. Dozens of video-based courses are added each week, teaching the leading-edge skills in multiple languages, including German, Spanish, Japanese and French. LinkedIn Learning creates personalised recommendations, so you can efficiently discover which courses are most relevant to your goals or job functions.

As a researcher, LinkedIn should be your go-to for building transferable and leading-edge skills. It will also give you different perspectives across a range of subjects.

USEFUL LINKS

DCU's LinkedIn Learning

Document aligning each level of the framework with available Courses (including LinkedIn)

Mentoring

With its potential to have a transformative effect on your career, mentoring is well worth engaging with. Researchers who integrate ideas and techniques from multiple mentors are the more likely to succeed in academia. Indeed, mentoring can have enormous benefits in terms of overall career direction whether you end up inside or outside academia.

Questions mentoring can help you address:

— How can I raise my profile, within and outside DCU?

— How can I transition into my new role?

— How can I advance my communication and influencing skills?

— What are my career goals and priorities? How can I achieve them?

— How can I improve my chances of getting more funding?

— How can I get recognition for my achievements at work?

— Which experiences are most valuable to my career?

DCU Staff Mentoring Programme

The DCU staff mentoring programme is available to all staff across the University, including researchers. The mentoring relationship provides possibilities for learning and growth for both the mentee and the mentor, bringing together experienced mentors with less experienced mentees. The mentoring conversations are a balance between knowledge transfer and genuine open discussion between two people who have mutual respect. The outcome you can expect from mentoring is advanced knowledge and a greater recognition of your own potential and capabilities, essential in your ability to flourish throughout your career.

Find out more about DCU Staff Mentoring Programme

Group Mentoring

Offered as part of the Professional Skills for Research Leaders (PRSL) programme, group mentoring is an excellent mechanism for fostering successful career development and nurturing long-lasting relationships and collaborations. As part of the Professional Skills for Research Leaders programme, groups of up to eight postdocs are led by a mentor who is an academic staff member with experience of supervising postdoctoral fellows.

The advantages of group mentoring, compared to 1:1 mentoring, are that more ground can be covered, which means increased knowledge, many viewpoints and ideas can be accessed allowing you to leverage the experiences of your peers and that of a senior researcher. The approach also offers more flexibility in a busy academic environment.

Find out more about Group Mentoring at DCU

Reverse Mentoring

Reverse Mentoring provides a platform for students to share their experience of using technology and how they learn with you – what works, what doesn't, and what their challenges and chief concerns are. A reverse-mentoring partnership also gives you an opportunity to be introduced to the broad range of apps and websites that students use to acquire and create learning and knowledge.

Find out more about Reverse Mentoring

Research Funding – What You Need to Know

Dr Tríona O'Hanlon is the Research Development Officer for the Institute of Education. Tríona obtained her PhD from Dublin Institute of Technology (now Technological University Dublin), and has been awarded several funded research fellowships including a Marie Sklodowska-Curie Individual Fellowship completed at Queen's University Belfast.

Applying for research funding may prove an important step towards career development, whether you plan to work in academia or industry. As an early career researcher, there is a range of national and international funding opportunities available to you.

The Irish Research Council supports researchers working in all disciplines and is the only national funding agency to support basic research in arts, humanities, and social science fields. Funding programmes include postdoctoral fellowships, principal investigator-led schemes, and networking grants. The following list highlights key IRC calls for early career researchers: Government of Ireland Postdoctoral Fellowship Programme, Enterprise Partnership Scheme, New Foundations, Ulysses and Laureate Starting Grant. Science Foundation Ireland (SFI) supports basic and applied research in science, technology, engineering and mathematics. SFI funding promotes a broad range of research activity and collaboration across academia, industry and enterprise. SFI have implemented the following funding schemes to support the work of early career researchers: SFI Starting Investigator Research Grant, Royal Society SFI University Research Fellowship, SFI-HRB-Wellcome Research Partnership Programme, SFI Career Development Award, and the SFI-ERC Development and Support Programmes. Other national funders offering a variety of schemes include the Health Research Board, Environmental Protection Agency, Irish Cancer Society, Sustainable Energy Authority of Ireland, Enterprise Ireland, Teagasc, Fulbright and The Marine Institute. Early career researchers based in Ireland are also eligible to apply for a select number of Wellcome Trust postdoctoral fellowships and the European Research Council Starting Grant.

When applying for research funding, seek advice from more senior academic colleagues who can provide you with invaluable mentorship, leadership and guidance. You may find it helpful to discuss your future funding plans with your Principal Investigator or Head of School. Speak to colleagues to gain insights into their 'real-life' experiences and the lessons learnt from applying for research funding. It's a good idea to develop a clear funding strategy; this will enable you to identify and target calls that align with your area of expertise and are appropriate to your career stage.

A number of resources are available to you at DCU, which will help you to identify suitable funding opportunities. These include **Research Professional** – an online searchable database of research funding opportunities. DCU's Research Newsletter is issued monthly, and if you are interested in learning more about Horizon Europe you can also sign-up to the **thematic mailing list**. Information sessions and workshops linked to key funding calls are delivered regularly by DCU's Research Support and Research Development Teams.

You may find it useful to attend the Learning and Organisational Development's workshops on *Developing your Research Funding Plan* and *Grant Writing*. Resources for preparing funding applications are available on the **Research Development website**. If you're interested in applying for research funding or developing a research funding plan, contact the **Research Development Officer in your faculty**.

The **Research Lifecycle resource** will guide you through the various stages of the funding process.

Grant Writing – Tips on Writing your Funding Application

Dr Eamonn McConnon is the Research Development Officer for DCU Business School. He has a PhD in Politics and International Studies and has published extensively in the area of conflict, security and international development. Eamonn has project managed several EU funded research projects and has a track record of supporting successful funding applications to a range of national and international funders.

Dr Gareth Whiting is the Research Development Officer for the Faculty of Computing and Engineering. Gareth is an expert in research grant writing, having successfully obtained prestigious independent and collaborative research funding in his previous role as an academic and through his experience in supporting researchers with grant applications in his current role.

First things first….

Once you have identified a funding call that you are interested in, the first thing you should do is read the call document in detail and find out the following:

— **Are you eligible to apply?** Make sure that you meet the core eligibility criteria of the call before proceeding. You do not want to waste time pursuing a call that you are not eligible to apply for.

— **The objective of the particular call.** Funding calls are essentially problem statements from the funder. Think of your application as a solution to this problem.

— **Evaluation criteria.** Be clear on the criteria on which your track record and idea will be assessed.

— **Project duration and funding.** Establish how long the project can run for and the minimum and maximum budget available.

Essential ingredients of a competitive grant:

— Your **aims and objectives must align with the funder's** research priorities and nature of the funding call. Tip: Familiarise yourself with the funding body (e.g., strategy documents), including, if possible, topics they have previously funded.

— The project is **worth funding** – highlight the importance and timeliness of the challenge/problem you are going to address and the significance of funding your solution, i.e., the broader impacts (e.g., to society and the economy).

— That you (and your team) are the **right person (people)** to carry out the project – articulate your strengths and experience that are relevant to specific call and project. Be sure to highlight that you have the **right facilities and infrastructure** at DCU to successfully complete the project.

— Grant writing is a skill, with **communication style** being key to exciting the reader. Use clear and engaging language (i.e., positive action verbs; no jargon!) and ensure your abstract is well-rounded and captures the reader's attention, as it often makes the first (and often last) impression! Make it easy for the reviewer by breaking it into digestible nuggets of essential information. Do not use long, complex sentences and endless paragraphs.

Last but not least…. plan ahead…

Do not leave it until the last minute. Start writing your research proposal well in advance of the call deadline and be sure **to utilise the expertise and support of colleagues** and the Research Development Team in providing feedback on your drafts. Do not let the first person to review your proposal be the official reviewer!

Advice for Working in Industry

Dr Clare Higgins, Innovation Analyst at Fenergo, a client lifecycle management solutions company based in Dublin. Clare completed her PhD at DCU and research fellowship at Trinity College, Dublin.

I studied Applied Physics in DCU to PhD level, where I focused on optical oxygen sensors. A Research fellowship at TCD followed, which allowed me to explore what I really excelled at – data analysis, interpretation and presentation. I started to pay attention to those activities I enjoyed most and align these with industry – but jumping from academia to industry wasn't that easy. The key obstacle is that most recruiters have little idea what's involved in a research postgrad or postdoc. My advice – target hiring managers directly and, if you can, avoid recruitment agencies. Many researcher skills translate exceptionally well to industry: problem definition, problem solving, business writing, and working in groups and on teams. Remember, a PhD opens doors and gives you instant credibility albeit with the occasional assumption that you may not have real-world acumen!

"Many researcher skills translate exceptionally well to industry: problem definition, problem solving, business writing, and working in groups and on teams."

I eventually landed a great role at Genworth, now AXA partners, and worked as an Analyst on their Commercial Actuarial team developing new products. Developing insurance products gave me the real-world access I'd been seeking. Software engineering has always been an interest of mine but I'd assumed I didn't have the skills to secure a job in industry. More recently I've worked as an Innovation Analyst at Fenergo, reimagining software solutions for corporate banking clients – so don't make assumptions about the application of your skills.

Ignore the myths

I heard lots of scary myths about industry while working in universities. Most people's views were based on some 1980s image of office life where everyone dresses formally, obeys a strict 9am start under the watchful eye of their boss, and leaves independent thought at the door. That view couldn't be further from the truth.

Advantages to working in industry

— Being solely responsible for your research creates a mindset that understands accountability and delivering reliable results.

— When developing a new product or feature I track my success by the adoption of that product by customers. Difficult to find in research.

— More structure, great flexibility and more sociable hours.

"Being solely responsible for your research creates a mindset that understands accountability and delivering reliable results."

My advice for postdocs

— Ask questions about career prospects in the industry you're targeting. Don't just form opinions on what you read – connect those experiencing life in that role or industry.

— Try to prioritise your own development – improve your communications and public speaking; hone your skills at writing proposals.

— Ensure you have quantifiable achievements, for example X number of awards for presentations or Y number of publications. Future employers, who might not understand the details of your research achievements, will appreciate that you can set and achieve goals.

— Don't worry too much about where a certain contract fits on your plan for your career. The plan is going to change a lot, just pile up the experience and make sure to learn from each piece.

— Take all the opportunities you get, travel where possible, chat to everyone.

— Be coachable and approachable!

Working in Higher Education Administration

Dr Sumona Mukherjee is a Research Support Officer at DCU. An Irish Research Council Postdoctoral Fellowship awardee, Sumona subsequently interned with the Council working on their pilot Laureate funding scheme.

I work as a Research Support Officer in DCU. I completed my undergraduate and masters degrees at the University of Calcutta, India, in Chemistry and Environmental Systems Management, respectively. In 2015, I graduated with a PhD from University of Malaya (UM), Malaysia, in Environmental Sciences. After completing PhD, I served as a postdoc research fellow in UM. In 2016 I moved to Ireland and joined NUI Galway, having being awarded the Irish Research Council Postdoctoral Fellowship.

As an academic professional, I had contributed to eight national and internationally funded projects and published 16 research articles in the field of wastewater treatment, with an h-index of 10. In addition to research, during my PhD and postdoctoral work I was always involved in the management of grant, reporting, liaising with different partners and stakeholders, organising national and international workshops, training programmes and coordinate meetings.

"The internship was invaluable in terms of developing my interpersonal communication skills and knowledge of the Irish and EU funding syste..."

When the opportunity to work as an Irish Research Council postdoc intern in the pilot Laureate award scheme came up, I decided to take the internship for a break from academia and to see if I liked working in the administrative environment. To my surprise I really liked working in the administrative side of research. The internship was invaluable in terms of developing my interpersonal communication skills and knowledge of the Irish and EU funding system and also helped me to broaden my network.

Research and the Wider Community

Dr Sheila Castilho is an Irish Research Council Research Fellow currently researching Machine Translation evaluation in the School of computing at the Adapt Centre in DCU.

Education and Public Engagement (EPE)

What is Education and Public Engagement (EPE) and Why is it Good for Researchers?

Public Engagement has been growing in importance every year, and is a hot topic at the moment. Researchers are encouraged to develop communication skills that are needed for them to become effective researchers and highly-skilled professionals. According to Euraxess, "researchers should ensure that their research activities are made known to society at large in such a way that they can be understood by non-specialists, thereby improving the public's understanding of science. Direct engagement with the public will help researchers to better understand public interest in priorities for science and technology and also the public's concerns".

What are Education and Public Engagement activities?

EPE activities encompass a wide range of activities, from writing a press release, delivering lab tours, to presenting at public lectures, or visiting schools. Science Foundation Ireland has developed a list of activities that are considered an EPE, which includes:

- Contribution to a website/online portal, creation of blog/social media profile/preparation of information leaflets, newsletters or articles – for a lay audience
- Development of small scale school interactions and open lab days
- Creation of teaching materials or methods to support teachers and students at primary and post primary level
- Collaboration or participation in festivals and events run within your research institution
- Contribution to broadcast or media productions, including TV, film, animation or radio helping embed research and discovery in the everyday lexicon of Irish culture

— Facilitation of dialogue with policy makers and wider stakeholders to ensure research informs or influences changes in policy and legislation

— Provision of opportunities to engage the public and wider stakeholders to ensure research informs or influences changes in behaviour or practice

Why participating in EPE activities is of benefit to postdocs

First of all, participating in public engagement can be super fun. From my experience, these activities allow you to think of your research in a completely different way. This is because you must communicate it to an audience that sometimes has absolutely no idea of what it is that you do. At the end of 2018, I participated in *I'm a Scientist – Get Me Out of Here*, which is a series of online chats with students in primary and secondary schools where they get to ask you any questions about science. You may or may not know the answer to the questions! I was asked everything from "will computers take over?" to "why do cats purr?"! At the end, the students voted for their favourite scientist or research, which received a prize.

As the winner of the Smart Data Zone, 2018 edition, I was awarded 500 euros to spend in any kind of science-related engagement I wanted. That's when I decided to run a *Girls in STEM* day. With the help of the DCU Access Office and my research group, The Adapt Centre, we organised a full-day workshop with female students from secondary public schools in Ireland. Students came to DCU to participate in hands-on activities delivered by female researchers. The workshop was really well received, and it felt great to know that could have made a difference in some of those girls' lives!

The second reason why participation is beneficial is that EPE helps you to think about your own research. Public engagement benefits the researcher by exposing them to the "real needs" of people, and helps the general public to make sense of research and science, which is essential in a time when science denial has become amplified.

"EPE activities offer opportunities for the researcher to build their portfolio, network and reputation."

Finally, EPE activities offer opportunities for the researcher to build their portfolio, network and reputation. This is essential in order to progress in academia but also when seeking a job in industry where demonstrable engagement with such activities can distinguish you from other candidates. Having experience in EPE activities shows that you are able to present your topic to any audience, and that you have the communication and organisation skills required to make EPE activities successful.

So how do I start?

There are various ways to start engaging with the public. In DCU we have the DCU Access Office, which helps researchers to engage with the DCU community. You can also participate at the DCU Open Days by showing students visiting our campus what you do and why they should consider doing it too. If you are in a research group, members may be able to recommend EPE activities that you could get involved in.

Science Foundation Ireland also funds a few projects, such as Smart Futures, and I'm a Scientist, you can also apply for EPE funding with their SFI Discover Funding Programme.

Other opportunities are also available at Sense About Science, a charity that challenges the misrepresentation of science and evidence in public life. They run a number of campaigns such as VOICE OF YOUNG SCIENCE (VoYS), where "a network of early career researchers across Europe committed to playing an active role in public discussions about science". Inspiring the Future is a network that aims to bring professionals to schools to inspire students. Finally, RTÉ Brainstorm, is a partnership between RTÉ and Irish third level institutions, to engage researchers and the public to contribute to public debate.

Public engagement is a mutually beneficial process. It allows you to demonstrate a broad awareness of current issues in higher education, a commitment to research, and that you have acquired skills that enhance your teaching and research profile. You also gain different insights into your research, and learn how to communicate your research in a simple, straight-forward way. From my experience, engaging with the public has been extremely beneficial. Indeed, by writing this piece, I am contributing to an EPE activity!

Public and Patient Involvement (PPI) in Research

Dr Lucy Whiston is a Research Fellow in the School of Nursing, Psychotherapy and Community Health in Dublin City University (DCU). Her background is in social policy having completed an undergraduate degree in Sociology and Social Policy and a Masters in Applied Social Research.

Public and patient involvement is where members of the public and patients are actively and meaningfully involved in research decisions throughout the entire research process. It is commonly defined as 'research being carried out 'with' or 'by' members of the public rather than 'to', 'about' or 'for' them' (1). This could be where members of the public or patients are active partners in the following steps:

— Deciding what research is funded

— Deciding what questions research answers

— Being a member of a research team or steering committee

— Deciding what methods are used

— Developing documents, leaflets or articles

— Interviewing research participants

— Developing research findings

— Telling people about research results

PPI has become a mainstream activity recognised by organisations in the research process from funders to conference organisers and publishers (2). For example, internationally the European Commission research funding and nationally the Health Research Board (HRB) have taken steps to encourage and promote PPI such as the inclusion of a specific question on PPI in HRB application forms. Similarly, the British Medical Journal request details of PPI from authors of research papers. Moral and ethical arguments for PPI propose that those who are affected by research have a right to have a say in what and how research is undertaken (3) providing compelling ethical rationale for PPI (3,4). PPI can lead to more credible and higher quality research (3-7). This stems from more appropriate and relevant research being conducted with improvements in recruitment, better quality data collection and enhanced implementation and dissemination of findings (3-8).

"Planning for PPI takes time and needs to be thought about within the context of each individual piece of research."

Planning for PPI in Your Research

Planning for PPI takes time and needs to be thought about within the context of each individual piece of research. You need to think about the purpose of PPI, who will be involved, what PPI will look like and how you will assess the impact of PPI at each stage of the research process.

The PPI Ignite Network at DCU is a Health Research Board (HRB), Irish Research Council and university co-funded project to support and promote capacity building for high-quality PPI in research. Included in this is the provision of support and advice to projects or research teams planning for or employing PPI in their DCU health and social care research.

The PPI Ignite Network at DCU team is here to help you in your thinking on how PPI can be meaningfully achieved within your work. It's important that this is done on a project-by-project basis.

USEFUL LINKS

For further information or support contact:

www.dcu.ie/ppi | dcu@ppi.ie | @PPI_Ignite_DCU

Reflect Eportfolio for Postdoc Researchers

Lisa Donaldson a Learning Technologist working in Higher Education for the last 15 years. Currently, she is focused on leading the team to leverage e-Portfolios to best support the student learning experience at DCU and is responsible for the integration of Mahara learning portfolios in many contexts.

The use of e-Portfolios in higher education has grown significantly over the last ten years. They are seen as a dynamic medium for recording and showcasing learning as well as a powerful tool for reflection. e-Portfolios offer an online space to collect, reflect, and share work and experiences. They can be defined as a collection of digital artefacts articulating experiences, achievements and learning (p. 6 JISC, 2008) or perhaps in a broader way by Corley and Zubizarreta (2012) "The learning portfolio… becomes more than a product, a simple repository of artefacts; it becomes a process of reflection, of organizing, prioritizing, analysing, and communicating one's work and its value, which may prompt insights and goals."

Viewed in this way, e-Portfolios can offer a number of benefits to researchers:

They can

— Support a wide variety of media to evidence research and learning, such as PDFs, Infographics, video, podcasts and text-based outputs

— Enable critical reflection through reflective logs and diaries

— Support critical thinking and connection making in the curation and selection of artefacts included

— Increase digital literacies

e-Portfolios can support postdocs in exploring and documenting where they are now, where they're going and how they plan to get there. They may contain all or some of the following:

— Evidence related to courses/CPD taken, programs of study, etc.

— Details around research projects

— Writing samples

— Teaching diary

— Evidence of creativity and performance

— Evidence of extracurricular or co-curricular activities, including examples of leadership

The Reflect e-Portfolio is available to all students and colleagues at DCU. To find more details, please visit **Reflect Support**.

Getting the Most From Your Relationship With Your PI

Professor Sharon O'Brien works in the School of Applied Language and Intercultural Studies in the domain of Translation Studies. In 2020 she stepped into the role of Associate Dean for Research in the Faculty of Humanities and Social Sciences. She has experience mentoring post-doctoral researchers funded through Science Foundation Ireland, the Irish Research Council, and the Swiss Government.

The postdoc/mentor relationship is a mutually beneficial one. The postdoc normally conducts research in an area that is of considerable interest to the mentor, they collaborate and sometimes co-author articles. As a senior academic, the mentor can assist greatly in the postdoc's career development, above and beyond the conduct of research. Some of the areas where the mentor can help include publishing, grant writing, teaching, networking, soft skills development and career planning, all of which are elaborated on here.

Publishing

While postdocs frequently already have experience in publishing journal articles and book chapters, they may not have had the experience of editing a special issue of a journal, publishing a monograph, or editing a book. The mentor can advise the postdoc on how to go about making a book proposal, which publishers to target, how to propose special issues for a journal and what's involved in the process of calling for articles, securing reviewers, managing the review cycle and editing content.

"Moving from PhD to postdoctoral level is a significant step towards independence, which entails sourcing opportunities for longer-term research funding, writing grants, considering resources and budgets."

Grant writing

Moving from PhD to postdoctoral level is a significant step towards independence, which entails sourcing opportunities for longer-term research funding, writing grants, considering resources and budgets. While the mentor will not normally write these grant applications, they can provide advice and guidance on funding opportunities, on how to pitch a funding proposal, and on how research financing is managed in the university sector.

Teaching

For career development purposes, a postdoc might be interested in gaining experience in teaching at third level. The mentor can advise on modules to which the postdoc might be able to contribute, on how to go about creating content for a lecture, planning a class, thinking about learning outcomes, interaction in the classroom etc. Postdocs may also be involved in assisting with assignment evaluations in order to learn about how this is done at third level.

Networking

Often a mentor has access to a wide network of researchers who might be relevant to the postdoctoral researcher. In addition, guidance can be provided on how to build a network and how to access existing networks. Direction can also be given on the importance of networking skills and building social capital, which takes time and experience.

Soft skills development

As an independent researcher the postdoc is expected to develop their own relationships throughout the University and beyond. This can be daunting if you don't know the organisation, its structures and how it works. The mentor can really assist here in advising on who needs to be contacted, when etc. Research projects often require interaction with third parties such as industry partners, not-for-profit organisations and the lay public. Interactions with such organisations can be challenging, especially if there are no pre-existing relationships between the researcher and the third party. The mentor can advise the researcher on how to approach this kind of communication and how to deal with the silence or rejection that sometimes occurs when we are trying to build relationships.

Career planning

You should not plan to be a postdoc forever! Again the mentor can really be of assistance here in helping the postdoc researcher to think one to three years ahead and to incorporate career planning into the activities from the very start of the postdoctoral research.

Collaborating with an NGO as a Postdoc

Dr Wine Tesseur is a Marie Skłodowska and Irish Research Council postdoctoral Fellow in the School of Applied Language and Intercultural Studies. For her project 'Translation as Empowerment: Translation as a contributor to human rights in the Global South', she collaborated with the Irish humanitarian NGO GOAL as an official project partner.

Why consider collaborating with a Non-Governmental Organisation (NGO)?

1) Maximise social impact

Collaborating with an NGO will ensure that your research aims and goals are directly related to the real-life challenges that NGOs meet in their work. Your research will contribute to positive change in the work of your partner organisation, and potentially in the wider NGO sector. This can be a very satisfying outcome of your research.

2) New working experience

You will gain first-hand work experience with an NGO. Firstly, it will make you an even better collaborator in future, because you will understand the NGO context better. Secondly, it will give you a glimpse of a potential alternative career outside academia in which research skills are of high value.

3) New skills

You will learn and enhance a range of skills, including negotiation skills, adapting to new working environments, learning to communicate your research ideas clearly and convincingly, etc.

What are the challenges of collaborating with an NGO?

Time consuming: Finding a research partner and setting up the collaboration can be very time intensive. Throughout your research project as well, you may lose time because your NGO partner may be busy with more urgent tasks. This can lead to delays in your own project.

Collaboration is negotiation: You won't be able to pick and choose what you want to work on – your partner will only get on board if they can see value in your project. Negotiation will be a constant part of your collaboration.

Managing expectations: NGOs tend to work to shorter timescales and expect very practical research outputs. It will be up to you to understand what your partner's expectations are and to make clear if you can meet these or not, and why.

How to do it

1) Finding an NGO partner

Networking is the most important way in. Try to gradually grow your network – for example, by participating in events that NGOs you are interested in will also attend, and follow up with e-mails or LinkedIn invitations to people you have met. Another important way in is through the network of your colleagues: does anyone have good connections with NGOs already? In my experience, these types of introductions are the most effective. Finally, for some research grants that encourage intersectoral collaborations, the funder may have a list of interested organisations available. For example, the Irish Research Council often has lists like this available for grants where collaboration with civic partners is required.

2) Convincing an NGO to collaborate and establishing credibility

Once you have identified an NGO that you would like to collaborate with and you have found a way to connect with them, the next challenge is to convince them to become your partner. Before contacting the NGO, consider carefully how you want to pitch your idea, how you can show credibility, and what the NGO would gain from collaborating with you. Prepare an A4 sheet that outlines these three points and send it along when you establish contact.

3) Maintaining a good relationship

Every collaboration comes with its challenges, and it is important to recognise this from the outset. Carefully define the responsibilities and expectations from the beginning, and agree on for example what data can be shared and how you will handle publications (authorship by whom; process for approval). When there is a conflict, you will be able to reach back to this agreement as a basis for dialogue and to come to a consensus.

In Praise of Mixed Careers

Abel Polese is the author of "The SCOPUS Diaries and the (il)logics of Academic Survival", a reflection on academic life, research careers and the choices and obstacles young scholars face at the beginning of their career.

What to do if your dream job is not available when you're on the market? As Dalai Lama said, sometimes not getting what you want is a divine gift.

"What to do if your dream job is not available when you're on the market? As Dalai Lama said, sometimes not getting what you want is a divine gift."

My first years after my PhD I tried to build a career the conventional way. With several publications and a number of successful applications for research funding, I expected to be relatively competitive on the market. However, against all odds, I kept on collecting rejection over rejection. My record year was 2011, when I counted 56 rejection letters, two interviews and zero offers.

At first I asked myself, and my colleagues, what could possibly be wrong with me. Nobody seemed to know. In principle, I had all the qualities needed to get some kind of a decent job but I did not seem to be of interest to any employers.

When you think you want the job but your subconscious thinks differently

As it turns out, I believe the real problem was the gap between what I thought I wanted (a professorship) and what was my priority (freedom and do whatever interested me). What if employers can sense your desires better than yourself?

With no scholarship during my PhD years, I specialised in the art of fund-saving but also tested different money-making options: delivering trainings, studies, paid internships, teaching, playing music in bars, short fellowships, prizes, project evaluations. Some tasks were paid more, some less. Some tasks were not paid at all but I estimated that they would bring me the knowledge, expertise, and networks that I could then use at a later stage to get access to something else.

As a father of four, I needed money. But my strategy was to secure a base of income that I knew would pay my rent in any case. Anything on the top of that would be a bonus. Meanwhile, I prioritised tasks that were "fun and

useful". Fun means that I enjoyed doing something to a fair extent. Useful meant that both sides gained something from my action.

Just like with wine, some years were better than others. At times I would worry that I was not earning enough, some other times I would dream of a permanent job and even try some options. I tried working as a civil servant, only to understand that it was not my calling.

If nobody did it before you, you can still try and do it

You cannot get rid of your fears but you can learn to tame them. I still think "what if nobody needs me for the next month and I remain with little or no income? But in the end I've always been an active person with a good sense of initiative. I like research but I also like cooking, photography, writing, movies, and music. I like to manage projects with a wide variety of foci. When all goes bad, I can always reinvent myself as something else.

My priority is to be able to work with people with whom I like to go for dinner or drink after a business meeting. Not because I have to but because I like the people I work with. I like to come up with things that did not exist before.

"Did not exist before" is a leitmotiv in my life. If nobody has seen this happening and you believe it's possible, you could also try. At the end of the day you only need one person to believe in what you do and that person is you.

In praise of mixed careers

When I started my path I had no role models. I was just doing what I thought could lead me somewhere, moving my work online well before the expression "digital nomads" became so popular, taking up a variety of tasks well before discovering that, after all, many researchers work as lawyers, accountants, artists, consultants. After all, career trajectories are varied and each strategy and path is somehow unique.

Mixing a half-academic career with other professional activities is a reality and should receive full acknowledgment. Identifying a new path might be painful, involve falling and doubting yourself and your capacities many times. But your success is eventually the very by-product of all your attempts and failures.

This piece was originally published in a longer version as

Polese, A. (2021) "Jigsawing your salary – the happy and untenured researcher", Research Whisperer"

Does Academia Complement or Conflict with Who You Are?

Dr Gillian Lake is an Assistant Professor in Early Childhood Education and Chair of Postgraduate Studies by Research at DCU Institute of Education. She is also a Fellow of Advance HE, (FHEA) and works as a lecturer and a researcher in Early Childhood Education.

When planning the next stages of my academic career, ascertaining what my underlying value-system is, was crucial. It allowed me to:

— identify what is fulfilling work for me

— prioritise where to focus my time and energy, and

— be intrinsically motivated, thus increasing my productivity.

This Values Exercise might help you to complete this exercise. Once you have identified your underlying values, you can experiment with projects that might, at first glance, differ from them, but could be useful in achieving your longer-term career goals. Keeping the values close will ensure that you tailor your work to support them, even on projects that may not seem directly linked to them. In addition, you will need to consider how your value system can align with the strategic direction of the university. This will enable you to use your strengths and interests to strategically support the university's objectives.

I have found that it can be challenging as an academic when you are asked to work in areas that are not directly related to your underlying values. However, striking a balance between projects that align directly with them and projects that could be broadly linked to them is key to complementing who you are as an academic. If you take up the position of Assistant Professor, you will be asked to fulfil three main elements in your contract:

— Teaching;

— Research; and

— Service to university.

As a new entrant to academia, it's important that you take steps to facilitate development in all three areas from the beginning, while maintaining the values that you have identified as pertinent to you.

Reflecting on your value system while developing your teaching, you might decide to:

— Engage with up-to-date research and knowledge of the current landscape in higher education teaching

— Stay abreast of and attend training offered by the Teaching Enhancement Unit (TEU) and DCU Learning and Organisational Development

— Develop the modules you coordinate and teach a little every year

— Endeavour to teach across different programmes to widen your expertise

— Build in periods of time for reflection and evaluation of your modules and your teaching

With regard to your research, keeping your value system close, you might consider:

— Networking as much as possible – getting to know members of other faculties and external bodies through informal meetings, or formal events

— Scheduling time in your weekly diary specifically for research and writing and switching off technology momentarily during this period

— Making your research visible through non-research related mechanisms, e.g., social media or professional conferences

— Identifying key research supporters/mentors who also share your value system

— Continuing to learn and upskill on new research methods

Lastly, when working on your service you could try the following:

— Make links with and offering your expertise to external organisations, while considering the strategic objectives of the **DCU Strategy for Public Engagement**

— Examine how your value system can be useful to the overall strategic aims of the organisation

— Be open-minded about unusual projects that are put to you

— Be responsive to your colleagues and support them on projects

Balancing the three elements is challenging due to competing demands for your time. However, realising what fundamentally motivates you – that is, your value-system – and how that aligns with the university helps you to plan strategically for a fruitful and holistic career in academia.

Moving from Academia to Industry and Back Again

Stephen Daniels a Professor in the School of Electronic Engineering in DCU and leads a research team focussed on technological applications of plasma. Stephen has founded several technology companies and is formerly CTO of EI Electronics in Shannon.

Perspective is always a good thing. Several years ago I was presented with an opportunity to take a three-year sabbatical to lead an R&D department in a leading Irish electronics company. I had come to the natural end of a specific cycle of research that included a fruitful collaboration with a semiconductor multinational, and I felt the timing, as much as it can be, was right.

By traditional metrics, this was a questionable career decision. Particularly with regard to research, taking three years away from the core activities of conducting and managing research, developing a research team, and sourcing funding, has a serious short-term impact on traditional research outputs.

Momentum is also important and when momentum is lost it takes additional effort to get things moving. However, these challenges are surmountable and the experience gained and skills developed while working in industry were and are invaluable. I gained a new and deeper perspective on R&D in industry and an appreciation of the practicalities needed for a meaningful collaboration between academia and industrial partners.

I'm an engineer and I'm driven to find, design, and implement solutions to problems. Most of the time, for discovery or innovation to translate into impact, an industrial or enterprise partner is essential in order to deliver the solution or product into the marketplace.

> **"Truly understanding the motivations, perspectives, and operational dynamics of industrial collaborators is a major competitive advantage for an academic researcher…."**

Truly understanding the motivations, perspectives, and operational dynamics of industrial collaborators is a major competitive advantage for an academic researcher which ultimately leads to better and more informed research proposals, better problem definition, and more credibility when it comes to developing industrial collaborations. This is obviously very important, but even more important is the understanding of the industrial component of the innovation delivery chain, which is a tool that can be effectively used to ensure your research is meaningful and positively impacts the world and people's lives.

Spending a meaningful amount of time in industry in order to strengthen your personal development is both challenging and rewarding. You need to be clear on your motivations and immerse yourself fully in order to maximise the benefits of the experience. At the same time, it's important not to lose perspective and remember why you are there so that when you return you are better positioned to be a successful an impactful researcher.

Developing your Career Plan

What is a Career Development Plan?

"Fortune favours the prepared mind." — Louis Pasteur.

A career development plan works like a benchmark, helping you to identify specific, achievable career goals and implement strategies to reach these goals. It's a straightforward way of taking responsibility for your career goals and investing in yourself, which will help guide your decisions throughout your career and help you build the future you envisage.

A career development plan will help you to:

— Reflect on what's important to you in your life and work

— Recognise your unique strengths, abilities and talents

— Create a clear action plan for your career

— Take control of your professional journey

How Can a Career Development Plan Help Me as a Researcher?

As a postdoc researcher, you're likely to be at the point where questions about your overall direction – whether inside or outside academia – are surfacing. Career development is about building your future. It's a lifelong process that is most successful when it becomes a habit, something that you're mindful of in your everyday professional life.

With an increasing number of postdocs pursuing careers outside of academia, you need a broad base of transferable skills to be able to leverage your intellectual resources and thrive across the range of careers. While the focus for postdocs is often on scientific inquiry and research skills, there are a wide array of skills, such as leadership, communication, creativity, innovation, and networking that are a priority for success on many career paths.

This workbook will help you to reflect on your career so far, assess your preferences, needs, skills and abilities, and begin to devise a sustainable career strategy where you identify professional learning opportunities across the spectrum of what's available to you, both inside and outside DCU.

Your Career Development Plan

REVIEW YOUR CAREER AND EXPERIENCE

Taking the time to reflect on your previous work experience is the first step in creating a career development plan. It will help you to detect patterns, identify your strengths and weaknesses, and decide which career path you would like to take.

Start by analysing where you are now in your career journey.

Where are you now?

What led you to doing a PhD? Think back to what your reasons were and list them here.

What career did you want when you began your doctorate? Are you still pursuing that career?

Do you have particular skills or talents that led you to becoming a researcher? List them here.

Did you consider any other professions? If so, which ones and why?

If you could choose a different career right now, what would it be and why?

Consider the answers you've given to these questions and reflect on the career decisions you have made so far. Broadly identify the factors that have influenced your career choices – personality, skills, economic and cultural, etc.

JOB and CAREER analysis

Sketch brief notes on the last 3 jobs you have held.

POSITION	
KEY WORK DUTIES, TASKS, AND RESPONSIBILITIES	
ACTIVITIES I MOST ENJOYED	
RELATIONSHIP TO RESEARCH	
AREAS I DEVELOPED PROFESSIONALLY	
KEY ACHIEVEMENTS	
HOW THIS JOB HELPED MY OVERALL PROGRESS	

POSITION	
KEY WORK DUTIES, TASKS, AND RESPONSIBILITIES	
ACTIVITIES I MOST ENJOYED	
RELATIONSHIP TO RESEARCH	
AREAS I DEVELOPED PROFESSIONALLY	
KEY ACHIEVEMENTS	
HOW THIS JOB HELPED MY OVERALL PROGRESS	

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KEY WORK DUTIES, TASKS, AND RESPONSIBILITIES	
ACTIVITIES I MOST ENJOYED	
RELATIONSHIP TO RESEARCH	
AREAS I DEVELOPED PROFESSIONALLY	
KEY ACHIEVEMENTS	
HOW THIS JOB HELPED MY OVERALL PROGRESS	

List 3 activities you enjoyed most out of all your jobs to date.

Which work achievements are you most proud of and why?

Which position did you enjoy the most and why?

What do you like most and dislike most about working as a researcher?

LIKE	DISLIKE

What does all this information tell you about your career strengths and weaknesses, and skills?

WHAT ARE YOU GOOD AT?	WHAT DO YOU NEED TO WORK ON OR DO DIFFERENTLY?
WHAT COULD HELP YOU PROGRESS?	**WHAT MIGHT BE BARRIERS TO YOUR PROGRESS?**

TAKE A SELF-ASSESSMENT

When thinking about which career path to take, it can be helpful to carry out a self-assessment to identify skills, values, interests, and personality patterns. There are many tools available to you.

Personal SWOT Analysis

Have you ever taken the time to understand what you genuinely excel at or what barriers you have to your success? Completing a personal strengths, weaknesses, opportunities and threats analysis (SWOT) can help you to assess your individual profile as you go about creating a career plan. A SWOT looks at all the factors that can influence your success.

Strengths:

Your strengths are the things that differentiate you from your peers – the attributes that will most influence your future career. What are your strengths in your current role as a researcher? What abilities, skills, knowledge or qualifications do you have that your peers don't? Make sure to seek feedback from peers, friends, managers and relatives after you do your own assessment.

Weaknesses:

How can you improve your performance, knowledge or skills? Identify the areas you're weakest in and the kinds of activities or tasks you're not confident doing. Think about your behaviours and any barriers these might pose to success in your work. Reflect honestly on areas for improvement and in doing so consider what others might say about you.

Opportunities:

What opportunities do you have in the job market? What lies ahead in the future? How can you leverage your skills to particular opportunities in your field? Identify any technologies that can help you. Are there trends in your research area that you could take advantage of? Is there a particular area where your research or your skills might fulfil a need? Also consider what opportunities can be accessed via your network of contacts and indeed how this network might be extended.

Threats:

What are the biggest barriers to your success? Do others have skills you don't have that you need? Consider how your job might be changing and what this means for you. Are there any big technological changes on the way in your work that you need to keep pace with? Consider how your weaknesses might pose a threat.

Access the SWOT Analysis Worksheet to complete your SWOT.

Transferable Skills Analysis

Transferable skills are expertise or skills that may be used in a variety of roles or occupations. Examples include Teamwork, Problem Solving, Organisational skills, Leadership, Critical Thinking, Analytical Reasoning, Creativity, Writing, Networking, Management, Data Analysis, Commercial Awareness, Listening and Feedback, and Integrity.

Doing an analysis of your transferable skills will help you identify existing skills and aptitudes that could transfer to alternative occupations.

Look back at your job and career analysis. What skills helped you succeed in previous roles?

Of these skills examples, which ones are transferable to a new position?

Which of the transferable skills identified are most sought after in your chosen career path?

USEFUL LINKS

Find out more about transferable skills – Skills You Need: Transferable Skills

Competency Analysis

Competencies are the observable behaviours that successful performers demonstrate on the job.

The four DCU *Researcher Career Framework* competencies define the knowledge, skills, qualities and attributes that are key to effective performance at each of the three levels of the RCF, reflecting the increased capability at each level.

Review each of the competencies for Postdoctoral Researcher Level 1 and make notes of where you might improve.

COMPETENCY	ASK YOURSELF
Discipline specific knowledge and Research skills Demonstrates knowledge of a research discipline and the ability to conduct a specific programme of research within that discipline	How confident are you with your research methods? Do you keep up with developments in your field? Do you actively question and challenge your thinking? How familiar are you with different research methodologies? Can you analyse, manipulate and interpret your data effectively? How familiar are you with the peer review process? Are you working towards an original contribution to your field? Have you engaged in any inter-disciplinary research?
AREAS FOR IMPROVEMENT	

COMPETENCY	ASK YOURSELF
Communicating Research Demonstrates the ability to communicate their research with their peers and the wider research community (for example presenting at conferences and publishing research in relevant journals) and the potential to teach and tutor students	How good are your presentation skills? Have you used social media to publicise your research? Are you publishing in many journals? Can you increase this? Have you much experience in teaching and tutoring? Do you engage in best methods for teaching? Do you actively seek ways to broaden your network?
AREAS FOR IMPROVEMENT	

COMPETENCY	ASK YOURSELF
Managing and Leadership skills Demonstrates the potential to manage a research project including the supervision of undergraduate students	What experience do you have of managing a research team? Do you have any formal project management qualification? Can you recognise the strengths of each of the individuals on your team? Do you apply explicit organisational methods to your work? Do you thank people for their contributions to your work? How good are your budgeting skills? Do you own your own career progression by setting career goals? Have you experience co-supervising students?
AREAS FOR IMPROVEMENT	

COMPETENCY	ASK YOURSELF
Understanding the Research Environment Demonstrates an awareness of the research environment (for example funding bodies) and the ability to contribute to grant applications	Is your knowledge of funding bodies extensive and up-to-date? Are you practiced in grant applications? How keen is your knowledge of the Irish and national research environments? What can you do to wider your knowledge? Do you understand how IP relates to research and the researcher's activities? Have you taken the DCU IP compliance course? Do you understand the principles behind IP integrity? Are you aware of the major ethical issues in conducting research? Do you appreciate how potential research findings might be exploited commercially?
AREAS FOR IMPROVEMENT	

Personality Tests

Personality tests can be useful in transitional moments of your career, helping you to broadly assess aspects of your individual personality that make you suited or unsuited to different kinds of work. While they can't provide you with a scientific analysis of your profile, they do offer insights that can help you choose a direction.

USEFUL LINKS

VA Institute Character Strengths Survey identifies positive parts of your personality that impact how you think, feel and behave. Scientists have identified 24 character strengths that you have the capacity to express.

16 personalities – a Myers-Briggs Type Indicator (MBTI) online assessment to help you identify what motivates you and how you interact with the world around you.

Reflect and Take Note

Using the results of your personal SWOT, a review of your transferable skills and postdoc competencies and the insights you've garnered about your personality, reflect on your skills, abilities and how you see yourself. Consider what you're good at and where you might need to improve through the lens of your career direction.

I am naturally good at these skills/behaviours	I need to work to improve these skills/behaviours

EXPLORE YOUR OPTIONS

There are a variety of options open to you once you complete your postdoc, including research, teaching, educational and public administration, policy, communication, consulting and entrepreneurship. Postdocs can contribute hugely in industry, non-profit organisations, and the public sector. But they often run into barriers to exploring options.

Myths pervade about working outside academia. If you've been solely on an academic career path, you might wrongly assume you don't have the skills or experience to pursue a career in industry, or that your skills won't transfer. However, it's often a lot easier and less time intensive to enter a career in industry than it is in academia. Industry and other sectors need people who can solve problems and formulate inventive solutions. The skills you've acquired are in great demand.

Tips for Exploring Your Options

TALK TO YOUR PI/ MENTOR	Talk to your PI about career choices of researchers they know. Your PI can help you reach your career goals by providing professional development advice and support.
CHECK OUT JOB ADVERTS	Make a habit of reviewing job advertisements and become aware of what's out there in terms of your interests, skills and experience.
EXPLORE WHAT OTHER POSTDOCS DO	Learn from the experiences of others by studying the wide-range of careers pursued by researchers in these real-life accounts.
USE YOUR NETWORK	Identify people in careers similar to what you're considering using your network of mentors, colleagues, relatives and friends; If there's nobody in your direct circle, reach out via LinkedIn, Twitter or at a conference.
CREATE A LINKEDIN PROFILE	Set up a professional LinkedIn profile. The platform provides a great way to network with others in your field. It's also a good way to get noticed and to showcase your areas of interest.

WRITE A PERSONAL ELEVATOR PITCH	A personal elevator pitch is a quick summary of yourself that engages others by being interesting and memorable. It can be used on social media profiles, your CV, job applications and in other career settings. Focus on the 3-5 main messages that you'd want someone to remember about you.
SOCIAL MEDIA	Search Twitter for hashtags such as #postdoc and #withaPhD to network and join a wider discussion about postdoc careers.
CONNECT WITH MENTORS	Connect with a mentor or join a postdoc mentoring group. These are ideal forums to discuss your professional challenges and opportunities.
INFORMATIONAL INTERVIEWS	Meet up with people who are currently in career areas that you're interested in and find out more about what that career path really entails.

USEFUL LINKS

The Vitae website provides a comprehensive career options section.

Taking Stock – What Are My Options?

What does your career research data so far say to you about you and your career?

What patterns do you see?

Make a shortlist of your preferred career options.

Professional Development Options

Now that you have analysed your skills and competencies and reflected on the kinds of careers that might interest you, consider the gaps you may have. Explore DCU learning and development workshops and activities and identify those that may align with your professional and career goals.

Discipline-specific knowledge and Research skills	Communicating Research
Professional Skills for Research Leaders Programme	Professional Skills for Research Leaders
Orientation to DCU	Finance for Researchers
Critical Thinking	Developing and Managing your Research Career
Design Thinking	Developing your Research Funding Plan
SPSS Training	Grant Writing Workshop for Researchers and Academics
Maximising your Research Impact	Editing and Writing for Professionals
Intellectual Property	
Research Integrity	

USEFUL LINKS

A to Z of Courses

Managing and Leadership skills	Understanding the Research Environment
Professional Skills for Research Leaders Programme Project Management – A Toolkit of Ideas, Questions, Models and Thoughts Scrum Project Management Managing a Research Team Supervising the PhD Process Time Management Becoming and Staying Confident Building Your Resilience	Communicating with Increased Influence Design Thinking Design and Develop Training like a Pro Developing your professional portfolio in Teaching and Learning Communicating Your Research Project Management for Researchers and Academics Scrum Project Management Introduction to Bibliometrics Supervising the PhD Process Intellectual Property Presentation skills for Professionals CV Clinic for Researchers and Academics Preparing to Attend an Interview Researchers and Academics

USEFUL LINKS
A to Z of Courses

Develop an Action Plan

It's now time to consider what you want to achieve in terms of your professional development and career and to commit.

A development and career action plan defines the tasks you must complete in order to accomplish your goals. It breaks down goals into actionable activities, which can be added to a timeline and schedule.

1. **Think about the career you're focused on and create smart goals that will motivate you to action.**

   SMART stands for:

   Specific – define a single outcome for your goal.

   Measurable – the goal should have a distinct end point and definite outcome.

   Achievable – you should be able to achieve the goal; don't set yourself up for failure or this will demotivate you.

   Relevant – goals should have significance, they must matter, or else you won't take them seriously. They should relate to your abilities, needs and interests.

   Time-based – Fix set deadlines for each goal.

2. **Create a list of tasks that fall out of these goals. Make these very specific and granular.**
3. **Create a timeline for completion of each task. If you have a calendar, add these tasks and subtasks to it to keep you on track.**
4. **Review your progress periodically.**

My key career goals

My Career Tasks

Now	Medium Term	Long Term

CVs and Interviewing

CV Golden Rules

Whether you're applying for a research, academic or industry position, there are a three 'golden rules' that apply to CVs:

— **Stand Out** – your CV should demonstrate your unique blend of skills and experience.

— **Keep it simple** – your choice of prose, font and layout are key to making sure a would-be employer carries on reading your CV. Simple formats work best.

— **Check and check again** – avoid errors at all costs. This means spelling mistakes, dates which conflict with one another and incorrect email address and phone number.

Preparing to Write a CV

KEEP A MASTER CV	The most important thing to remember when writing a CV is to adapt it for each position you apply for.
REVIEW JOB DESCRIPTION THOROUGHLY	Read through the job description carefully and highlight key words that indicate what the employer is looking for.
IDENTIFY THE SELECTION CRITERIA	Selection criteria are the skills, experience, and educational qualifications that employer is seeking in candidates. Applicants who satisfy all the essential selection criteria and the greatest number of preferred criteria are considered most suitable for the position.
GATHER EVIDENCE – YOUR SKILLS, EXPERIENCE, QUALIFICATIONS V CRITERIA	A CV should not be a series of vague claims but should be grounded in evidence that proves you are an excellent candidate. Time spent gathering your evidence before writing your CV will pay dividends. Write down your evidence against the selection criteria. You may not be able to use all this evidence in a CV but write it down for the moment.
SELECT WHAT IS RELEVANT	Go back over the evidence gathered and pick what is the relevant for the role.
BE SPECIFIC	Avoid bland generalisations in favour of more specific evidence.

SUMMARISE YOUR EVIDENCE	You will have gathered more evidence than you will ever get on to a 2-page CV. This is no bad thing, as the process of gathering your evidence helps to build up your confidence. It is good to know that you have evidence in reserve and you can afford to select the most relevant demonstrations of your competence. Before constructing your CV, go back over your evidence and highlight those items that are most appropriate for inclusion.

Getting Ready for Your Interview

Preparation is key to success in any interview, be that academic or in industry. The panel nature of academic interviews can be intimidating, but nothing that can't be overcome with good preparation.

REVIEW JOB DESCRIPTION	Review the research you've done into your own capabilities so that you have plenty of evidence to support your suitability for the job when answering academic interview questions.
REVIEW YOUR CV	It goes without saying, but know the contents of your CV.
IDENTIFY SKILLS AND EXPERIENCES	Be clear how each of your skills and work experiences align with the requirements of the job.
RESEARCH SCHOOL/ROLE/ INSTITUTION/ ORGANISATION	Find out as much as you can about the school, research centre, role, institution, organisation or company that you're being interviewed for.
THINK ABOUT LOGISTICS	Think about what to wear, location of interview, getting there, timings, interviewers names, dealing with your nerves etc. If it's online, make sure your tech is working and minimise distractions.

Types of Interview Questions

There are three main types of interview questions – biographical, competency, and situational. Be prepared to be able to answer questions in each category.

1. BIOGRAPHICAL – Based on facts: what, why, where, when

YOUR CV	YOUR CAREER
Tell me about your career to date? What role did you enjoy the most and why? What role was the most challenging? What aspects of your current role do you like best? You weren't working for 8 months in 2018, did you take time out?	What are your future career aspirations? Where does this role fit into your future career plans? What professional development plans do you have?
YOU	**THE ROLE/INSTITUTION**
What are your key strengths? Why do you think you are the best candidate for this role? How would your colleagues describe you? What are your development needs? What are your key achievements to date?	Why do you think you are the best person for this role? What would you do for the first 6 months in the role? What do you know about the school/faculty/institution/ company?

2. COMPETENCY – Can you give me an example of a time when....

Examples:

— Can you give me an example of a time when you had to collaborate externally on a research initiative?

— Can you give me an example of a time when you had to lead a team in a research initiative?

— Can you give me an example of a time when you were required to train or teach and what challenges you met?

Interview boards generally use the Funnel technique to structure competency-based interviews. Funnelling starts with asking a general question. A particular point is honed in on each time a question is asked, with each question becoming more specific as the interview progresses.

Situation

Specific example – *Can you give me an example of a time when you....?*

Task

Gather details – *Who?/Where?/When?/What?*

Action

Gather behavioural evidence – *How? Your role? Challenges?*

Result

Gather confidence – *Outcome/Feedback/Comparisons/Learning/Hard data?*

3. SITUATIONAL – What would you do if...?

Situational questions test your ability to think on your feet. During situational questions you're presented with a hypothetical situation. These types of questions often involve handling difficult issues or problem-solving. The most effective answers provide concrete examples of how you dealt a similar situation on the job.

Examples of situational questions:

— How would you react to....?

— How would you handle a situation where....?

— What do you think are the key challenges...?

On the day of the Interview

Give a positive impression – Smile and maintain eye contact whoever is asking the question. If online, make sure your tech works, look professional and minimise distractions.

Sell yourself – You must convince the interviewers that you are capable and motivated to do the job.

Forget modesty – If you are naturally humble you need to force yourself out of your comfort zone for the interview. You must sell yourself!

Believe in yourself – You have done your preparation. You can confidently handle any question that you are asked. It is good to be a little nervous – use the nerves to better your performance.

Use examples from life – Use as many real life examples as you can to ensure your skills and experience are credible.

USEFUL LINKS

Commonly Asked Questions in Academic Interviews

Vitae guide to Academic Cover Letters

Vitae list of Researcher CV examples

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For more information:

DCU Learning and Organisational Development

dcu.ie/hr/learning-and-organisational-development

DCU Research Support

dcu.ie/researchsupport