# THINKING ABOUT A PhD INTERNSHIP

## Why do a PhD Internship and how to make it happen
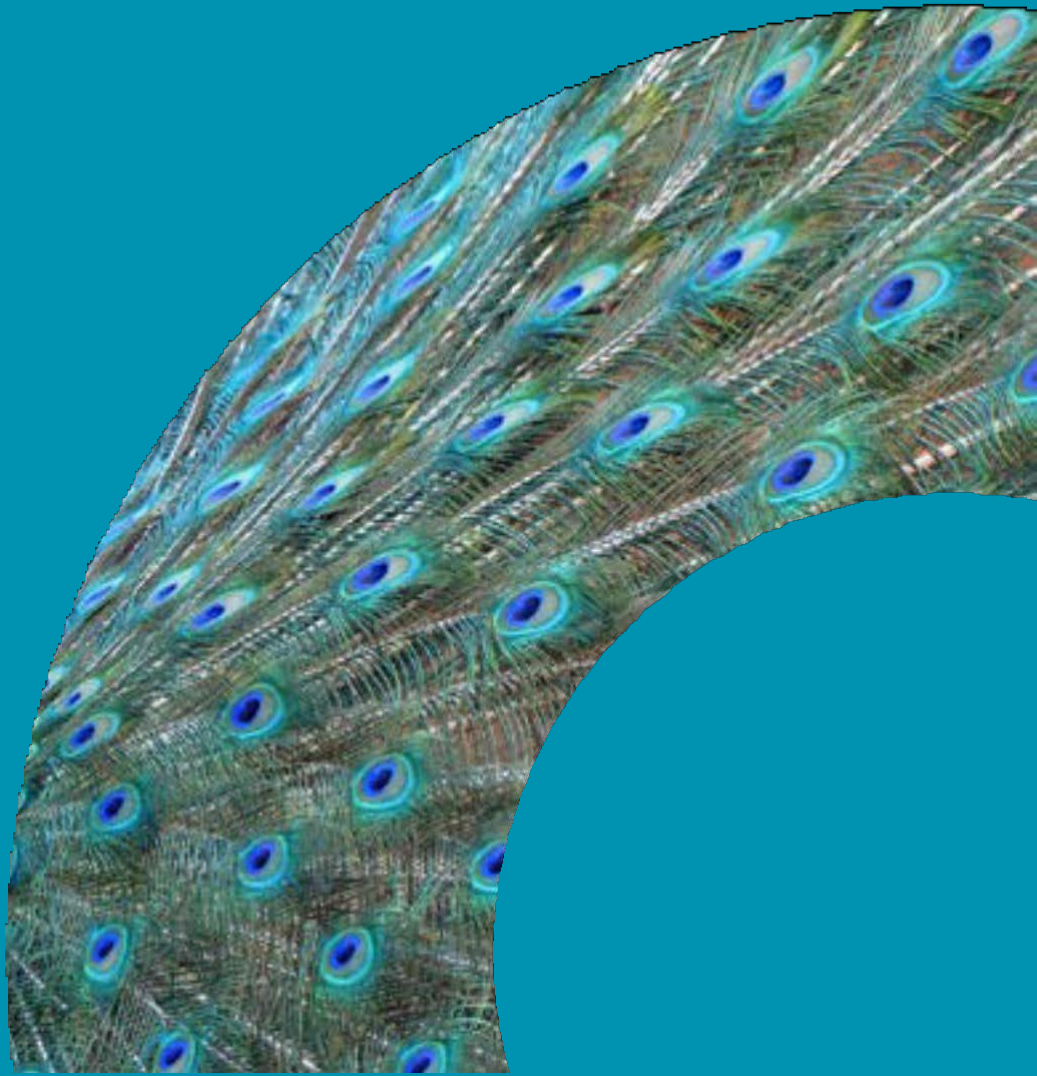
# Contents

# 1. Why do a PhD Internship?

PhD internships are becoming increasingly popular in today's competitive job market, providing PhD students with the opportunity to expand and diversify their skillset, establish new networks, and gain valuable experience of work outside academia. This growing popularity in part reflects the impetus amongst PhD students to differentiate themselves in an ever-crowded academic market, as well as signifying the increasing numbers of PhD students opting to pursue non-academic post-doctoral careers. In addition, interest and investment in PhD internships, from both universities and host organisations, has increased in recent years in line with a heightened emphasis on the university's so-called 'third mission'.

This 'third mission' refers to activities that facilitate university engagement with society and industry, in addition to the traditional responsibilities of teaching and research.

Increased emphasis on the impact that universities are expected to have in the social, political, and technological domains has had a significant impact on the framing and content of university research in line with this 'third mission' in recent decades. In the UK context, this is most clearly evidenced by the 2014 Research Excellence Framework (REF) in which 'impact' accounted for a substantial and unprecedented 20% of the evaluation of the quality and merit of university research. In line with this changing research environment, PhD internships provide a valuable link to the private, public, and third sectors, for both individual PhD students, and their university departments, opening up new channels of communication and opportunities for collaboration. As such, they  have become increasingly prioritised and promoted at all levels of the university and higher education infrastructure.
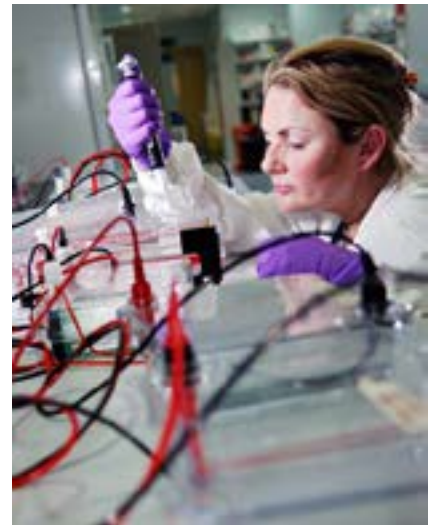
One notable example comes from the major UK government funding body, Research Councils UK, who launched a prominent new Policy Internship Scheme in 2015, encouraging research council funded PhD students to incorporate a three-month internship, with one of a selected number of influential policy organisations in the UK, into their PhD experience. With this precedent in place, smaller funding bodies and related organisations are likely to follow suit. Similarly, in a recent report commissioned by the UK Government and produced by Professor Sir Timothy Wilson, a leading thinker in the field of university-business collaboration, the benefits of PhD internships were prominently highlighted (Wilson Review, 2012). The report emphasises the value of internships to the individual intern, as well as to their university department and the host organisation, offering an official recommendation that, "All full-time PhD students should have an opportunity to experience at least one 8 to 12 week internship during their period of study" (Wilson Review, 2012, p.8).  With both major research council funding and clear government backing, more PhD students than ever are thinking about and taking part in PhD internships.

## 1.1 What's involved in a PhD Internship?

As interest in and demand for PhD internships increases, the opportunities are becoming ever more diverse. Correspondingly, the format of these short-term exchanges is increasingly flexible. Typically an internship of any form involves the short-term transfer of personnel from one organisation to another, allowing the personnel involved to work in a different environment, take on a different set of challenges, and develop new skills. A PhD internship consists of a particular form of this exchange between an academic department and another body within the institution or a third party in the private, public, or third sector. PhD internships focus on allowing PhD students to work in a non-academic role, taking on challenges arising outside of their research expertise, and developing skills relevant both to their academic research and to the world of work beyond.

A PhD internship may take the form of a short-term, full-time transfer, typically ranging between one to three months, or can be arranged on a part-time basis, with the student working within their host organisation on a regular weekly or even monthly basis. This time may be taken in addition to the time allocated for doctoral studies, particularly in the case of a full-time transfer. In the case of part-time internships, these may be undertaken alongside full-time doctoral studies. In this case the University of Edinburgh recommends a maximum of nine hours per week with the host organisation and the University will employ full-time PhD students for no more than an average of 9 hours per week across the academic year.

## 1.2 What are the benefits?

A PhD internship offers a wide range of **benefits for PhD students**. If you are thinking about whether or not to pursue an internship during your doctoral studies it is worth considering which of these may be particularly valuable for you:

An opportunity to work on a **'real world' project** defined by the host organisation's business needs. This is likely to represent a significant departure from your own research allowing you to utilise your skills and experience in new and unfamiliar ways.

An opportunity to put your research into a wider context and develop the ability to **explain your work to non-specialists**. This gives you a chance to take a step away from your project and appreciate how it fits into a **bigger picture**.

An opportunity to **develop your generic skills** in a new

setting, including communication, collaboration, and time management, in addition to enhancing your specific technical or written skills.

An opportunity to **network and raise your profile**. Contacts made during your internship could lead to joint research opportunities, academic-industry collaborations or future employment offers.

Insight into the organisation and the sector in which it operates which may be especially beneficial if you are considering **employment outside of academia** after your PhD.

Whatever career path you choose after your PhD, completing an internship will **enhance your employability** and provide you with unique material for your CV, application forms, and at interviews.

There are also a number of key **benefits for your supervisor and academic department** which are worth taking into account when you are considering a PhD internship. You may want to discuss these with your supervisor:

> **Expanding your department's networks** to organisations in the private, public, or third sector. This may lead to new contacts for guest lecturers, for undergraduate student work placements, or for funders of future research and departmental facilities as well as providing novel materials for use in teaching.

> **Knowledge of policy making and business practices** gained on an internship can be fed back to staff and students within your department.

Your PhD internship may provide **opportunities to access funding** specifically tied to knowledge exchange. It may also lead to **opportunities for generating impact case studies**, crucial for the Research Excellence Framework (REF).

## 2. How to plan a PhD Internship



There are a number of factors to consider when planning your internship including what you want to get out of the experience, who to approach and how to approach them, when to do your internship, and how best to organise your time in order to accommodate and complement your research. The following sections will help to identify key factors to consider when planning and applying for a PhD internship.

### 2.1 Clarifying what you want

A PhD internship should primarily be of value to you as a PhD student, and should complement, rather than conflict with your research. With this in mind, the benefits arising from doing an internship during the course of your doctoral studies can be varied, ranging from developing specific technical skills to expanding your professional network. In order to make the most of the opportunity it will be useful to clarify exactly what you want to get out of the experience before deciding how to structure your internship and who to approach. The

following questions are worth considering:

**Skills:** Are you aiming to develop any particular skills?

These may be personal, generic, and transferable skills such as effective collaboration and communication, time-management, and organisational or other administrative skills. Alternatively, they may be specific, professional, and/or technical skills such as learning to use a particular program, method, or piece of equipment.

**Knowledge:** Are you seeking any specialist knowledge?

This may be specific knowledge relevant to your research area, knowledge of real-world problems or issues connected to your research, or insights into a particular occupational area, employer or industry sector.

**Network:** Are you hoping to extend your network of professional contacts?

There may be a particular individual or organisation that you want to work with that has particular relevance to your doctoral research or future career aspirations. Alternatively, you may want to consider contacts that would be of interest to your supervisor or department.

**Career:** Are you hoping to explore or expand your career options?

You may be looking to explore potential career options either related to your research or in an alternative area. Alternatively, you may be aiming to gain either specific or generic experience which will help you to progress your career in a particular direction after your PhD.

**For more help try Exercise 1: Setting goals and Exercise 2: Evaluating and planning your professional development using the Researcher Development Framework in the Appendix.**

## 2.2 Finding a PhD Internship

Depending on what you are hoping to achieve through an internship you may decide to apply for an advertised internship vacancy or approach a particular individual or organisation to see if they would be willing and able to offer you an internship. In either case, **your supervisor** is a key person to seek advice from regarding whether you should take on an internship and where would be suitable as a host organisation. She/he will be able to offer advice on how to structure your internship around your doctoral studies and may also be aware of established internship schemes, with a Doctoral Training Centre or funding council, for example, or have contacts in an appropriate organisation that

you could approach. Also be prepared to explain some of the benefits of an internship.

The University of Edinburgh's **Careers Service** is also an excellent place to discuss your internship plans and explore what options are available. You can speak to a Careers Consultant, search for advertised internships on MyCareerHub, or access further information regarding organisations and sectors that may be suitable for you. The Careers Service also has an internal programme offering part-time internships for PhD students - Employ.ed for PhDs. See the useful links section at the end of this leaflet for more information.

## 2.3 Applying for an Internship

The same principles operate when **applying for an advertised internship** as when completing an application form or submitting a CV and covering letter for any job vacancy. The following short checklist will help to ensure you don't miss any important stages in the process:



Start with the **requirements and priorities of the employer**. These are usually clearly set out in the advert, job description, and applicant profile.

Work through the job specifics and **compile all the evidence** you have to demonstrate that you meet each of the employer's requirements. Use evidence from your PhD, undergraduate degree, work experience, voluntary work etc.

Once you have your evidence, consider where this fits into the application form provided or how you are going to include it in **your CV**. Be aware that a non-academic CV is very different in style and content from an academic CV. Visit the Careers Service website for tailored advice on writing CVs.

If you are **applying for an unadvertised internship** consider the following steps:

**Speak to your Supervisor, Director of Research or Head of Department** – What contacts does your department have with outside organisations? Are other PhD students conducting research sponsored by an industrial partner? Do any of the academics undertake consultancy work for policy making bodies? Did any of the academic staff previously work for an employer outside of academia? If so, ask for a contact and make an initial approach.

**Gain an overview of the sector which interests you.** The guide to occupations section of the Careers Service website provides a good starting point. You will find links to **job profiles** with information about different careers, links to **professional bodies** and **trade associations** which often provide lists of member companies, and specialist **careers sites.**

**Explore current graduate vacancies in the sector that interests you** to gain an insight into who is recruiting and for what types of roles. Even though you are not looking for an advertised job you can use these adverts to identify possible organisations to research further and also to gain a clearer picture of potential internship projects.

**Use social media sites**, such as LinkedIn, to search for groups of people who have a common interest. You

can also research other users and contact them directly. Alternatively, you can follow and participate in discussions before making direct contact.

**Edinburgh Innovations** is the primary point of contact for industry and business with an interest in the commercialisation of Edinburgh University's research activities. The organisations they work with are therefore likely to appreciate the advantages a PhD student can bring to their organisation. Contact this department to find out if the University is working with an organisation in your desired field and if they may be willing to speak with you.

**For more help with applying for an unadvertised internship, try completing:**

**Exercise 3: Researching the right host organisation for your internship in the Appendix.**

## 2.4 Negotiating your Internship

Once you have identified and approached a host organisation for your PhD internship, and the internship has been, at least informally, agreed upon, it's important that both you and your host take time to clearly establish the aims and terms of the internship. This will enable both parties to communicate their expectations and allow you to make the most of the opportunity from the outset. There are a number of **factors to consider when negotiating your internship:**

**Title, description, and scope of your project**: These may be proposed by you or your host organisation but should be discussed and agreed upon by both parties before the internship starts.

**Timeline for your project**: Establish a clear timeline for your project, which may include any significant meetings, presentations, or events that are due to take place in relation to the project.

**Working hours:** Ensure that you and your host organisation are agreed on the days and hours you will be working, particularly if your internship will be part-time to avoid conflicts with your PhD.

**Colleagues:** Find out who else will be involved in the project and who you will be reporting to and managed by during your time. Determine your role and responsibilities on the project from the outset, and the roles and responsibilities of others involved. You may also be paired with a mentor in the organisation who is someone other than your manager.

**Accommodation and equipment:** Find out where you will be working and if you will have a desk or office space. If you will need access to any technical or specialist equipment, this should also be discussed with your host.

**Pay:** Your pay should be formally agreed before you sign a contract. Organisations in the UK are now legally required to pay you at least the National Minimum Wage during your internship (unless this is covered by your PhD stipend).

**Intellectual Property & Confidentiality:** Establish where ownership over anything you produce will rest and whether you will be able to use any IP to enhance your own research back at the University of Edinburgh.

**Health and Safety implications of your project:** Determine what risks, if any, are associated with the project and what training will be given. Ask if your host organisation has Public Liability Insurance to cover you during your time.

**Make a record of some key points to consider in Exercise 4: Negotiating an Internship in the Appendix.**

# USEFUL LINKS:

## Your PhD Internship

| | | |
|---|---|---|
| **Looking for advertised internships** | Search Edinburgh University's **MyCareerHub** database which lists hundreds of full-time and part-time internships, as well as specialist websites for different employment sectors. | http://www.ed.ac.uk/careers/looking-for-work |
| **Looking for unadvertised internships** | Contact **Edinburgh Innovations** to find out of the university is working with any organisations in your desired field. | https://edinburgh-innovations.ed.ac.uk |
| **Part-time internships @ Edinburgh** | The Careers Service has launched an internal programme, **Employ.ed for PhDs**, offering part-time internships alongside your studies. | http://www.ed.ac.uk/careers/looking-for-work/internships/employed/employ-ed-for-phds |
| **Funding Councils** | Search for internship opportunities via the **Research Councils UK** website, partnership of the UK's seven Research Councils. | www.rcuk.ac.uk |
| **More search options** | The job sectors section of the **Prospects** website is another great source of information. | www.prospects.ac.uk |

## Your career after a PhD

| | | |
|---|---|---|
| **Careers for PhDs** | Overview of **career options** following your PhD and a guide to making career decisions. | www.ed.ac.uk/schools-departments/careers/postgrad/phd |
| **Career planning** | Advice from the University of Edinburgh's **Careers Service** on planning a post PhD career. | www.ed.ac.uk/schools-departments/careers/using-careers-service/ca-reer-planning |
| **Guide to occupations** | Useful resource for exploring **employment sectors** and potential roles in your field. | www.ed.ac.uk/schools-departments/careers/explore/occupations |
| **Guide to social media** | Guide to using **social media** in order to enhance your career prospects. | www.ed.ac.uk/schools-departments/careers/looking-for-work/social-media |
| **Book a consultation** | Discuss your plans for a PhD internship, or for your post PhD career, confidentially with a **Careers Consultant.** | www.ed.ac.uk/schools-departments/ca-reers/using-careers-service/talk-to-ad-viser |

# Appendix

## Exercises for thinking about a PhD Internship

### Exercise 1: Setting Goals

The table below is designed to help PhD students, who are planning to complete an internship, to identify personal goals they want to develop during their internship. To help you to do this, think about your goal setting based on your knowledge, skills, network and your future career plans. You will have the opportunity to review this exercise at the end of your internship ('Moving on from your PhD Internship' leaflet) and it will be interesting to compare your personal and professional development after you have completed your work experience.

| **Knowledge:** gaining knowledge of an occupational area, employer, or industry sector. | |
| --- | --- |
| Do you want to develop knowledge of a specific job role or gain a better understanding about the range of opportunities within the specific industry sector? Give details of how you could do this and what areas you are interested in investigating further. | |
| Are you interested in finding out if the workplace differs from academia and if so in what ways? | |
| Do you want to gain information or experience that will be relevant to your research area? If so, what? | |
| **Skills:** developing or improving specific technical or transferable skills | |
| Do you want to gain experience in a technical skill area (which may or may not be related to your research)? If so, what? | |
| Do you want to increase confidence in using certain transferable skills or applying them in a different context, e.g. leadership, team work, negotiation? *(Note: Exercise 2: Evaluating and planning your professional development using the Researcher Development Framework will help you to answer these questions and gain a deeper understanding of your personal goals in relation to your skills).* | |

| Network: extending your professional and social network | |
|---|---|
| Your new employer will be able to provide you with insights into new areas, and / or expose you to different ideas and perspectives on your research, working practices, or other topics. Is there anything in particular you would like to know? Do you want to record this and how may you utilise the information gained? | |
| People you meet during your internship may be useful contacts for now or in the future. What kind of information / support would you be looking for from contacts? How will you keep in touch with the people you meet? Do you need to set up a LinkedIn page before you start your internship? | |
| Experience: gaining work experience that may or may not be related to your future career direction. | |
| Do you want to explore how this work experience will be relevant to your future career direction? What ideas do you have for this? | |
| Is there specific technical and personal experience you would like to gain through your internship that would be a useful addition to your CV and could be discussed at future interviews. Do you want to record examples? Where will you record this?<br><br>*(Note: Reflection exercises provided in the next leaflets; 'Making the Most of your Internship,' exercise 5; 'Moving on from your internship', exercise 3, will help you with this).* | |

## Exercise 2: Evaluating and planning your professional development using the Researcher Development Framework

The Researcher Development Framework (RDF) was developed by Vitae, a UK-wide organisation that supports the professional and career development of researchers (www.vitae.ac.uk). The RDF is a framework which articulates the knowledge, behaviours and attributes of researchers and which can be used by researchers to evaluate and plan their own professional development.

The table below shows an abbreviated RDF, designed for PhD students completing an internship, which you can use to aid your awareness of your development needs and goals. Use the grid to take stock of how you have been developing as a researcher. In addition, you can use the grid to help you to identify areas you would like to strengthen during/after your internship and to record your progress. There is space in the grid for you to add any additional attributes or skills, you feel are not covered in the RDF, that you would like to review.

1. **Rate yourself:** Reflect honestly on your abilities and rate yourself from 1 – 4 where 1= not at all confident I can do this and 4 = very confident I can do this.

2. **Identify areas for development:** As part of goal setting for your internship identify areas that you would like to target for development.  You may choose just a small number to concentrate on although you may recognise that you also gain in confidence in other areas and are not as confident in some as you expected.

| | Rate Yourself (1 – 4) | | | Tick all that apply |
|---|---|---|---|---|
| | Before your internship | During your internship | After your internship | Target to develop during your internship |
| **Knowledge and intellectual abilities** | | | | |
| **Cognitive abilities** | | | | |
| Can critically analyse and evaluate own findings and those of others | | | | |
| Sees connections between own research and previous studies | | | | |
| Critically synthesises complex information from diverse sources | | | | |
| Recognises a range of problems, and can formulate and apply solutions | | | | |
| **Creativity** | | | | |
| Willingness and ability to learn and acquire knowledge | | | | |
| Identifies and asks useful and challenging questions | | | | |
| Creates ideas and opportunities by investigating / seeking information | | | | |
| Exercises critical judgement to create new or imaginative ways of understanding | | | | |
| Structures arguments clearly and concisely, producing evidence in defence of ideas | | | | |
| Is willing to expose ideas to a critical audience and to critically appraise other research | | | | |
| **Knowledge base** | | | | |
| Understands own and related areas of research, the advances within them | | | | |
| Knowledge of appropriate research methodologies and ability to apply them appropriately | | | | |
| Can identify and access suitable sources of information, assessing reliability and relevance | | | | |
| Ability to record, manage and handle information / data using appropriate software | | | | |
| Can write in a style appropriate to purpose for specialist and non-specialist audience | | | | |
| Understands and applies any statistics used in research area | | | | |
| **Personal effectiveness** | | | | |
| **Personal qualities** | | | | |
| Able to stay motivated and enthusiastic even when work is mundane | | | | |

| | | | | |
|---|---|---|---|---|
| Perseveres in face of obstacles and demonstrates resilience | | | | |
| Understands and demonstrates standards of good research practice, acting with professional integrity | | | | |
| Shows confidence in defending ideas in the face of challenge from others | | | | |
| Seeks and takes personal feedback on performance and acts on it | | | | |
| Takes responsibility for own project, demonstrating independence | | | | |
| **Self-management** | | | | |
| Prepares, plans and prioritises project to meet objectives | | | | |
| Shows dedication and determination in developing own research | | | | |
| Manages own time effectively to deliver projects on schedule | | | | |
| Demonstrates flexibility when dealing with the unexpected and adapts approach when necessary | | | | |
| **Professional and career development** | | | | |
| Seeks opportunities for professional and career development | | | | |
| Shows awareness of own skills and attributes, and identifies ways to improve employability | | | | |
| Develops and uses networks effectively for feedback and advice on work and to seek out opportunities | | | | |
| **Research governance and organisation** | | | | |
| **Professional conduct** | | | | |
| Understands, respects and applies appropriately policies relevant for own area of work, e.g. health and safety, ethics | | | | |
| Understands data ownership rules as they apply to research, ie. IPR and copyright | | | | |
| **Research management** | | | | |
| Has understanding of broader context of research in strategy of the institution and discipline area | | | | |
| Applies effective project management through setting research goals, defining milestones and prioritising activities | | | | |
| Can identify and manage risks associated with project | | | | |
| **Finance, funding and resources** | | | | |
| Understands the processes for funding and evaluation of research, and awareness of relevant funding sources | | | | |
| Knowledge of financial management systems and manages own grant | | | | |
| **Engagement, influence and impact** | | | | |
| **Working with others** | | | | |
| Gives and receives feedback appropriately | | | | |

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|---|---|---|---|---|
| Recognises impact on others when working in a team and able to contribute to team success | | | | |
| Manages relationships with supervisor and peers, and negotiates to set clear expectations of them and others | | | | |
| Effectively supports learning and advises others when appropriate, for example through teaching or demonstrating | | | | |
| Demonstrates ability to influence and lead, by communicating confidently and convincingly | | | | |
| Can build collaborative relationships with colleagues and stakeholders to benefit research and to maximise impact | | | | |
| **Communication and dissemination** | | | | |
| Constructs coherent arguments and articulates ideas clearly to a range of audiences, formally and informally | | | | |
| Can persuade effectively, asking timely and appropriate questions | | | | |
| Can produce high quality academic writing | | | | |
| **Engagement and impact** | | | | |
| Engages with and shares research through research-informed and student-focused teaching | | | | |
| Contributes to increasing public awareness, engagement and understanding of research | | | | |
| Is enterprising, creates ideas and identifies opportunities for commercial exploitation of research | | | | |
| Recognises and understands the wider impact of research on society, and is keen to make a contribution | | | | |
| **Other attributes and skills you would like to develop and review** | | | | |
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Reflecting on your completed assessment may help you to identify key areas that you would like to develop during your internship as well as what you have to offer a host organisation. If you do decide to take on a PhD internship, remember to take some time during your internship and after to reflect on your personal development using the RDF framework, and consider whether you think your level of confidence changes throughout. What have you discovered about yourself and what future goals and plans are you going to develop/implement in relation to your professional development? This table is provided in each of the three leaflets in this series to help you keep track of your development and progress.

## Exercise 3: Researching the Right Host Organisation for Your Internship

When researching an organisation, to apply speculatively, it may be useful to record some information to help you learn more about the organisation and construct a tailored CV and covering letter.

| Organisation: | Notes |
|---|---|
| Where do they have offices? | |
| What are their main products or services? | |
| Who are their main clients? | |
| What are their values? | |
| Have they recently won any large contracts, expanded or indeed reported a dip in profits? | |
| Has any recent legislation change affected their work? | |
| Who is most relevant contact? | |
| Job title, contact details of relevant contacts. | |

| | |
|---|---|
| How long have they worked in the organisation? | |
| What is their own educational and employment history? (*LinkedIn can help*) | |

## EXERCISE 4: Negotiating an Internship

**Factors to clarify with your host organisation before you start your PhD internship:**

| Things to clarify: | Notes |
|---|---|
| Title, description and scope of your internship | |
| Timeline for your project, including any meetings or events you will be attending | |
| Hours – Will you be working full-time or part-time hours? Will your hours be fixed or flexible? | |
| Support – Will you have an identified project supervisor and / or mentor within the company? | |
| Accommodation and equipment – Where will you be working? Will you have a desk? Do you need access to any technical or specialist equipment? | |
| Health and Safety – What risks are there and what training will be given? | |
| Insurance – Does the organisation have Public Liability Insurance to cover people working in their premises? | |

**You'll find more useful information about managing your PhD Internship in the next leaflet in this series, <u>Making the most of your PhD Internship...</u>**