

Research Student Skills and Career Development Training Needs Analysis Template

Research Student's Details

Full name, *in capital letters*

CALUM JOHN YOUNG

Research Institute/School

University of Glasgow / MVLS

Date of Completion of Form

At the start of their research degree, PGR students should undertake a 'Training Needs Analysis' and develop a training plan. Current skills levels should be assessed to indicate gaps – a current skill level of 5 indicates you are confident in that area; research students should examine the following areas/questions and give an *honest* appraisal of their skills in each area. Development needs should then be rated by priority as low (not needed immediately), medium (needed this year), or high (needed in next few months); this stage should take place in consultation with your supervisor team.

Details of training completed and planned should be included into your Researcher Development Log.

The sub-themed headings below may not be relevant for all students; these are designed to stimulate your thinking about your development within these generic skills training areas. Please read in conjunction with the Vitae-Researcher Development Framework document, available from the graduate school web site. We recognise that not all of these questions/areas are relevant to all students. These are intended to stimulate your thinking about your training and are not prescriptive.

Domain A – Knowledge and Intellectual Abilities (Knowledge Base)

This area concerns your knowledge base of your subject, from theoretical to practical, and covers your ability to both use and acquire knowledge. Consider your skills honestly and objectively under the following broad headings:	Current Skill Level					Priority		
	1	2	3	4	5	Low	Med	High
Subject Knowledge			X					X
Theoretical Knowledge			X					X
Practical application			X					X
Information acquisition and understanding				X			X	
Information literacy				X				X
Literacy and Numeracy skills			X				X	
Critical analytical ability			X				X	
Critical thinking			X				X	
Evaluation skills			X				X	
Creativity				X		X		

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Domain B – Personal Effectiveness

Here, you should examine your skills in areas relating to personal qualities and self-management skills that underpin any successful career. How would you rate your ability in the following broad areas?	Current Skill Level					Priority		
	1	2	3	4	5	Low	Med	High
Self-confidence/self-reliance/responsibility		X						X
Priority setting, time-management				X				X
Networking skills					X			X
Understands standards of good research practice in the institution and/or research area					X		X	
Makes time to reflect on practice and experience		X				X		
Demonstrates self-awareness and the ability to identify own development needs				X				X
Appreciates the need for and shows commitment to continuing professional development			X				X	

Domain C – Research Governance and Organisation

This domain contains the knowledge of the standards, requirements and professional conduct that are needed for the effective management of research. Do you...	Current Skill Level					Priority		
	1	2	3	4	5	Low	Med	High
Understand relevant health and safety issues and demonstrates responsible working practices?					X			X
Understand and apply the relevant codes of conduct and guidelines for the ethical conduct of research?					X		X	
Demonstrate awareness of issues relating to the rights of other researchers, of research subjects, and of others who may be affected by the research?					X			X
Have a basic understanding of legal requirements surrounding research – e.g., Data Protection Act, Freedom of Information Act, Equality Act, and equivalent legislation in other parts of the UK?					X			X
Understand the concept of attribution and applies it consistently and fairly to appropriately recognise contributions and co-authorship; seeks advice on local codes of conduct?				X				X
Understand and adheres to the rules and regulations concerning academic malpractice in the institution in which based and of professional body and funder if appropriate?				X				X
Are you aware of how own research aligns with the research strategy of the institution and strategic focus of the research area?				X		X		
Do you apply effective project management through the setting of research goals, intermediate milestones, and prioritisation of activities?			X				X	
Understand the processes for funding and evaluation of research?			X					X
Understand the basic principles of financial management?		X					X	
Have some commercial awareness?				X		X		

Domain D – Engagement, Influence, and Impact

This domain considers the knowledge, understanding and skills needed to engage with, influence and impact on the academic, social, cultural and economic context.	Current Skill Level					Priority		
	1	2	3	4	5	Low	Med	High
Effectively supports the learning of others when involved in teaching, mentoring, demonstrating, or other research activities				X			X	
Recognises the importance of mentorship and receiving mentoring					X	X		
Recognises implications of own research for real life contexts					X	X		
Understands the concept of research impact and can apply this to their research by identifying relevant communities of research users, the mechanisms necessary to engage with them, and the means to evidence any impacts generated.				X		X		
Understands equality and diversity requirements of institution					X			X
Constructs coherent arguments and articulates ideas clearly to a range of audiences, formally and informally, through a variety of techniques				X			X	
Develops skills in a range of communication means – such as face-to-face interaction, using interactive technologies, and/or textual and visual media			X				X	
Uses audio-visual aids effectively in presentations			X				X	
Understands the processes of publication and academic exploitation of research results			X			X		
Participates in research meetings (seminars, workshops, conferences, etc.); has a developing awareness of the ways research influences/interacts with teaching					X		X	
Understands the process of commercial exploitation of research results				X			X	
Learns of the value to academia of establishing relationships in business/commercial contexts				X			X	
Shows a broad understanding of the context in which own research takes place, at the national and international level					X	X		
Do you intend/have you explored possibilities for Graduate Teaching Assistant roles?					X		X	

Subject-specific skills training.

Elements of subject-specific training will be compulsory for different programs (e.g. 'Introduction to the Omics' for CMVLS studentships; subject-specific tutorial sessions for BBSRC cohorts, etc.). These should be noted below.

You need to discuss with your supervisor what subject-specific skills training you require and identify sources for this training. This may include skills training elements offered by CMVLS, training courses elsewhere in the University or external courses, conferences, workshops or study visits. These additional training elements should be detailed below, with an approximate indication of when you will undertake these.

- Bioinformatic Pipeline Training (Lab-group)
- Bioinformatics and R for Wet-Lab Biologists (CMVLS)
- Molecular Techniques – Primer design, HTS sequencing, (Lab-group)
- Model Building