

# **GRADnet Moving Forward for Second Year Students**

# Wednesday, 17 October 2018

ı Park Crescent, International Students House, 229 Great Portland Street, London  $\underline{\text{W1W 5PN}}$ 

# **Programme**

10:00	Arrival and registration: students to select 2 out of four workshops to attend, 1 in the morning and 1 in the afternoon	The Theatre Foyer
10:30	How to write a successful fellowship application: Professor Peter McDonald, University of Surrey	Gulbenkian
	<b>Practical innovation:</b> Julia Shalet, Product Doctor, Colin Hayhurst, University of Sussex & Gill Prosser, University of Portsmouth.	Club Room
	Research data management: Dr Alice Motes, University of Surrey & Dr Juan Bicarregui, Science & Technology Facilities Council	Portland
	<b>Understanding software for research:</b> Claire Hepwood, Royal Holloway, University of London	Theatre
13:00	Lunch	Common Room
14.00	4 Parallel Workshops afternoon session	
	How to write a successful fellowship application: Professor Peter McDonald, University of Surrey	Gulbenkian
	<b>Practical innovation:</b> Julia Shalet, Product Doctor, Colin Hayhurst, University of Sussex & Gill Prosser, University of Portsmouth.	Club Room
	<b>Research data management:</b> Dr Alice Motes, University of Surrey & Dr Juan Bicarregui, Science & Technology Facilities Council	Portland
	Understanding software for research: Claire Hepwood, Royal Holloway, University of London	Theatre
16.30	Tea, coffee & biscuits	Common Room
16:45	Close	



## Workshops Students to select 2 out of 4

# How to write a successful fellowship application

This workshop is aimed at those students who are considering an academic career. Most often this starts with a period of postdoctoral study during which the researcher is supported by a Fellowship. The workshop focusses on what is required to prepare a successful research council or similar fellowship application.

## Workshop Leader: Professor Peter McDonald, University of Surrey

Peter is currently the GRADnet Director of the collaborative physics graduate school of SEPnet, the South East Physics network. He is a former Head of Physics at Surrey and was the inaugural Director of the Surrey Materials Institute. He was awarded The Royal Society Brian Mercer Senior Award for Innovation in 2003. He is a past chair of BRSG: The Magnetic Resonance Group of the IoP and of The Magnetic Resonance in Porous Media Division within the Groupement Ampere.

#### **Practical Innovation**

Thinking about how to commercialise your research, or an idea, and turn it into a product or service? Perhaps you are interested in a career in business or knowing how businesses are created. Would you like to start thinking like an entrepreneur? Or as someone that wants to change the world through innovation.

In this workshop, you will learn and practise some real business thinking. We'll introduce you to a modern and practical tool-set for evaluating new business ideas and innovations and help you get off the starting block. If nothing else you will come away with a useful skill for your CV and any innovation challenge you take on.

Workshop Leaders: Julia Shalet, Product Doctor, Colin Hayhurst, Innovations Partnership Fellow, University of Sussex, Gill Prosser, Innovations Partnership Fellow, University of Portsmouth.

Julia spent the first 15 years of her career managing products – at one end of the scale generating new revenues of £1m per annum for a start-up and at the other managing a product portfolio of £350m per annum in Corporate. In 2006 she set up independently as Product Doctor providing user and revenue-centric product coaching for innovators – often helping them to apply tried and tested toolkits to make successful products. She runs courses at UCL, coaches at Pearson Education and has worked with many funded start-ups including Fitbug.

Colin helps researchers develop and commercialise deep technology innovations. He has cofounded, built and sold technology start-ups and helped many others in academia and the private sector to do the same.

Gill works with academics to develop innovation and impact from their research by building collaboration between academia and industry.

## Research data management

Research data management and principles of Open Science are increasingly important in all fields of research. Presented by Research Council and University experts, this workshop asks what does good research data management look like and why is it important? What does Open Science mean for your research, publications, and career? We'll dive into the motivating forces behind policies about research data management, provide some practical tips for managing research data from planning to publication to preservation, and discuss ways you can make your research more open.



Workshop Leader: Dr Alice Motes, Research Data and Preservation Manager Library and Learning Support Services, University of Surrey and Dr Juan Bicarregui, Head of the Data Services Division, Scientific Computing Department, Science & Technology Facilities Council

Alice received her PhD in sociology from the University of California, Irvine in 2014. Embedded within the Open Research team at the University of Surrey's Library, she works on the open data side of things, providing advice and training to researchers on how to better manage, share, and preserve research data.

Juan is Head of the Data Division in the Scientific Computing Department at STFC. Juan's division has responsibility for research and development of the data systems that handle much of the huge volume of scientific data that is produced by the STFC research facilities. Juan has played a key role in formulating UK policy on opening up access to research outputs and was UK representative on the GSO Data Working Group. Juan holds a BSc on Mathematics from Imperial College London and a PhD in Computer Science from Manchester University. He has over 100 publications in Software Engineering and Data Management.

## **Understanding software for research**

This workshop introduces computing concepts necessary to support your research. You can find out more about the types of national computing facilities available and the programming languages used to produce quality research. The workshop offers a general understanding of computing with an introduction to parallel computing along with practical tools and techniques that will help you write and maintain better code more efficiently.

#### Outline:

Introduction: Understanding different types of computing

Hardware options for running research code: laptops, local institutions, clouds and HPC centres, pros and cons.

Qualities of good research code, and blockers to using and writing good research code (group discussion).

Skills, tools and techniques for writing and managing good research code.

Online services and training resources.

# Workshop Leader: Claire Hepwood, Royal Holloway, University of London Claire Hepwood

Claire has a BSC Hons in Computer Science and French and started her career as a software systems programmer for Cray Research writing network software. She was involved in international software product design, customer trials and training before moving into specialising product support. Claire later became a software consultant in parallel computing supporting customers with Computational Fluid codes as well as being based at the Edinburgh Parallel Computer Centre as an on-site analyst, solving technical issues and developing training material. She worked as a consultant at the European Weather Centre where she developed a java simulator of a systems partition manager. Claire went on to work at AWE as a user support analyst and developed an interest in collaboration with their French counterparts and strengthening relationships with other HPC sites within the UK. She worked as the High Performance Computing collaborator before taking on the position of strategic outreach officer working for the chief scientist. Claire is passionate about enabling science and assisting scientists and currently works as a SEPnet employer engagement officer at Royal Holloway. She is a member of the BSC, WiHPC and WISE.