

Successful Doctoral Student Training Scheme workshops

Previously successful projects for the GW4 Doctoral Student Training Scheme are listed below.

If you have any questions please get in contact with the project lead.

If you click on an Eventbrite link, please see 'view details' in the upper right-hand corner to see the programme for expired events.

2016/17

Digital Research Methods: Harnessing Social Media Data for Social Science Research

Project lead: Clarence Singleton (clarencesingleton@gmail.com)

This workshop will introduce participants to the study of social questions using digital methods tools, techniques and research principles to explore the web and social media platforms like Twitter and Facebook. Grounded in a critical understanding of the strengths and limitations of digital methods, participants will be taken through a series of research steps including data extraction and analysis in the context of a critical, reflexive framework. The aim of the workshop is to equip participants with the confidence to initiate a deeper engagement with these methods and to explore further learning for themselves in critical, reflexive ways. To gain the most from the one day event, participants will be asked to prepare for the workshop by reading a few foundational papers and installing relevant (free) software onto their laptops beforehand, although there will be alternative options provided for those who are unable to do this. Students will be provided with materials at the end of the day including a 'Toolkit for digital methods' that will include an extensive list of various tools and applications for extracting, analysing and visualising data from various social media platforms.

[Please click here to find out more about 'Digital Research Methods'](#)

This event took place on 19 May 2017 at the University of Bath

Postgraduate Training for Research at Cardiovascular-Engineering Interface

Project lead: Doyin Mansell (o.s.odunmbaku-mansell@bath.ac.uk)

There are many different disciplines all working towards the same goal: understanding and improving cardiovascular medicine. However, there is often little communication between similar research teams across various institutions, and a researcher from one discipline may find it hard to translate research conducted by another. The emphasis of this course is to give researchers information and training in aspects of cardiovascular medicine related to vascular disease, myocardial infarction, and heart failure at levels understandable to every participant. This is a one day course which will bring together students from multiple disciplines connected to cardiovascular health sciences, with a mixture of lectures, practical, and networking sessions, covering topics such as medical image analysis, cardiovascular pathologies, and clinical diagnostic practice.

[Please click here to find out more about 'Postgraduate Training for Research at Cardiovascular-Engineering Interface'](#)

This event took place on 18 May 2017, University of Bath

Fundamental Biological Techniques

Project lead: Rory Crean (r.crean@bath.ac.uk)

This student-led workshop will provide GW4 postgraduates with the opportunity to learn from experts across the GW4 about the key biological technique of protein manipulation and analysis. This workshop will therefore provide an A-Z guide to proteins, starting from the beginning with expression and purification, and ending with various analysis techniques. A dinner and poster session (all attendees are invited to present) will then be held, and the event will be capped off with a plenary lecture by Prof. Christian Soeller (Exeter). This event is free to attend, and a travel bursary, lunch, dinner, and refreshments will all be provided, so please do come along.

[Please click here to find out more about 'Fundamental Biological Techniques'](#)

This event took place on 26 July 2017 at the University of Bath

Arts and Humanities Editing Workshop

Project lead: Louise Benson James (louise.bensonjames@bristol.ac.uk)

A one-day editing training workshop at the University of Bristol for twenty-eight GW4 students from the arts, humanities and relevant social science disciplines. Attendees will learn valuable skills in peer-reviewing, proofreading and providing feedback in a friendly, nurturing environment. In addition, participants will benefit from two distinct sets of detailed constructive criticism to make improvements to their own work, and learn good editing practice, tips and frameworks to take away and implement in their own work. The event will encourage professional networks, learning about other projects among the new generation of GW4 doctoral researchers within these fields. Participants will be encouraged to maintain lasting editing and peer-review groups following the workshop.

[Please click here to find out more about the 'Arts and Humanity Editing Workshop'](#)

This event took place on 27 June 2017 at the University of Bristol

Methods for Reproducible Science Workshop

Project lead: David Mehler (GW4reproduciblescience@gmail.com)

Many scientific disciplines including Cancer research, Genetics and Psychology currently face the so-called [Replication Crisis](#): independent research groups fail to replicate a significant amount of previously published work.

This one-day training event is dedicated to the topic “reproducible science” and how we can make science more robust and replicable. The programme has been developed through conversations with experts in reproducible science who will provide theoretical background and demonstrate practical solutions.

Topics of preregistration, good data and code sharing practices, fallibility in science and statistical power will be covered. The training will be relevant to GW4 PhD students across disciplines that involve quantitative data analysis, including biomedical research, psychology, public health and related fields. More information will be provided on our [website](#).

[Please click here to find out more about 'Methods for Reproducible Science'](#)

This event took place on 7 July 2017 at Cardiff University

Taming the Theoretical Beast: Understanding, Selecting and Applying a Theoretical Framework to your Doctoral Research - A workshop for qualitative PhD researchers

Project lead: Carolyn Graham (grahamca1@cardiff.ac.uk)

“What is your theoretical framework?” The dreaded question for many PhD students. Does it matter? What does it mean to “apply” a theory in the social sciences? Do I really need to declare allegiance to a specific school of thought? What can I gain from using the right theory? Where do I begin?

This workshop provides a space for participants to engage with these issues freely and openly. At the end participants should have gained some knowledge and skills to not only confidently respond to the questions above, but to select and apply a theoretical framework to their doctoral research.

[Please click here to find out more about 'Taming the Theoretical Beast'](#)

This event took place on 30 June 2017 at Cardiff University

Methodological approaches to document analysis in Social Sciences

Project lead: Maria Pournara (PournaraM@cardiff.ac.uk)

This one-day workshop aims to introduce doctoral researchers to various approaches of analysing documents either on their own or as part of multimodal designs. Document analysis is one of the most widely used methods in Social Sciences research, yet many researchers do not feel entirely confident about analysing documents. This can be explained by a general attitude among social scientists that documents are merely ‘common sense’ versions of social phenomena that do not

necessitate any particularly sophisticated scientific analysis. Therefore, the training will provide attendees with an overview of main types and methodologies to documents; encouragement to experiment with different methodological approaches, and reflect on their relevance to their research questions; an opportunity to network with fellow researchers who share an interest on written texts.

[Please click here for more information about 'Methodological approaches to document analysis in Social Sciences'](#)

This event took place on 23 June 2017 at Cardiff University

Statistics for Quantitative Genetics and Genomics Research

Project leads: Denis Plotnikov (plotnikovd@cardiff.ac.uk) & Neema Ghorbani Mojarrad (ghorbanimojarradn@cardiff.ac.uk)

Recently, large genetic datasets are becoming more widely used and offer unprecedented opportunities to better understand disease and health. This one day event combines a lecture series by expert researchers in the field, as well as a practical workshop on genome-wide-association-studies (GWAS). Key statistics and principles of genetics will be covered, alongside post GWAS data analysis techniques and how to present results in a useful manner.

This event is aimed at novices in genetics, from any subject area, and is intended to give students confidence in using these resources in their research, and how to interpret their results.

[Please click here for more information about 'Statistics for Quantitative Genetics and Genomics Research'](#)

This event took place on 16 June 2017 at Cardiff University

Introductory workshop to Laban Movement Analysis

Project lead: Sinibaldo de Rosa (sd435@exeter.ac.uk)

During this one-day introductory training you will learn the basics of Laban Movement Analysis (LMA), a recognized system for describing, analysing and interpreting all varieties of movement of the human body. You will gain an embodied awareness of your own movements before acquiring some of the theoretical notions. In this sense you will be escorted into an embodied experiential appraisal of your own individual movement patterns as well as of group dynamics. The workshop will provide a space for the practical exploration of these emerging movement patterns, as well as for their discussion through the theoretical lenses of LMA. LMA was introduced by Rudolf Laban, one of the most important figures in contemporary dance history as well as a visual artist, and further developed in Europe, the UK and US by several scholars and movement practitioners (Irmgard Bartenieff, Warren Lamb, Peggy Hackney and Carol-Lynne Moore among others). It occupies a specific place among the wider methodologies for the study of human movement firstly originated by Laban, aiming at outlining tools to approach the qualities of movement above the sole scope of staged performance.

[Please click here for more information about 'Introductory workshop to Laban Movement Analysis'](#)

This event took place on 19 June 2017 at the University of Exeter

2015/16

Focus Groups in Education: Opportunities and Challenges

Project lead: Gihan Ismail (g.n.m.ismail@bath.ac.uk)

The use of 'focus groups' in education research is often underutilised as the methodology is often challenging and hazardous for novice and early-career researchers. With little in the way of recent publications in this field, it is particularly important for doctoral researchers to gain access to expertise and support as they develop skills in this area. This workshop explores the benefits and challenges of this qualitative technique as well as the practical demands. The aim is to encourage attendees to reflect on how the technique may benefit their research.

[Please click here for more information about 'Focus Groups in Education'](#)

This event took place on 10 May 2016 at the University of Bath.

Multimodal Methodologies in Education Training Day and Network

Project lead: Alison Douthwaite (A.Douthwaite@bath.ac.uk)

This one-day workshop, led by experts in the field, aims to introduce doctoral students to issues and approaches in multimodal data collection and analysis in education. With a strong focus on visual methods and data, sessions will explore multimodal data collection methods, approaches for transcribing and analysing multimodal data, and conceptual frameworks for measuring teaching, thinking and learning which can account for both traditional classroom interaction and interaction mediated by technology. The workshop aims to provide participants with: an overview of key methods; some space to discuss the relevance and application of these to their individual research projects; an opportunity to participate in developing an online network for further collaboration.

[Please click here for more information about 'Multimodal Methodologies in Education'](#)

This event took place on 10 November 2016 at the University of Bath.

Alison said: "This funding enabled me to organise some high-quality, specific training and to tailor the format of it to the participants. It has put me in touch with other researchers with related interests and created a basis for future collaboration, as well as providing all of us with new tools and approaches to dealing with multimodal data."

Surviving your Data: the Impact of Ageing, Death and Dying Studies on the Researcher

Project lead: Renske Visser (R.C.Visser@bath.ac.uk)

This is a one day workshop aiming to bring together doctoral students in the field of death, dying and ageing. Skills courses available often tend to focus on not harming the participants, yet the focus of the day will be on the emotional impact of doing research in these areas on the researcher. In this workshop day, practitioners, early career and senior academics will be invited to share their experiences and best practice with current doctoral students. Participants will be asked in advance to submit their 'top 3' issues and the broad issues which are identified will be addressed during the day.

[Please click here for more information about 'Surviving your Data'.](#)

This event took place on 20 June 2016 at the University of Bath.

Renske said: "The funding from the GW4 enabled us to gain experience in creating and organising an event that was relevant to our specific training needs. It was a great opportunity to be able to engage with PhD Students from other GW4 students working within the same area."

Methods in Neuroscience

Project lead: Catherine Beedie (c.beedie@bristol.ac.uk)

Neuroscientists face the challenge of understanding and integrating data across a spectrum of areas. Methods in neuroscience range from optogenetics to computational modelling, transgenics to in vivo electrophysiology.

This workshop will bring together experts from across the GW4 universities to share their experience of choosing and implementing the best methods for their research interests. During the day of talks, Q&A sessions and focus groups, postgraduate researchers will have the opportunity to place their specialist topic within the broader scope of neuroscience. Students will be given help to identify the strengths and limitations of their research, and to develop methods to increase the impact of their work.

[Please click here for more information about 'Methods in Neuroscience'.](#)

This event took place on 18 July 2016 at the University of Bristol.

Producing High Quality Figures in the Biological Sciences for Publication and your Thesis

Project lead: Adam Jellett (aj14484@bristol.ac.uk)

The ability to produce high-quality figures for theses and publications is a critical part of being a biomedical scientist. Furthermore, with the advent of post-publication peer review/comments (on sites such as PubMed and PubPeer), now more than ever, scientists need to adhere to strict guidelines for image integrity and standards. However, it is sometimes difficult to know what is and isn't allowed in terms of post-acquisition image editing and manipulation. This one day course will provide an introduction to the preparation of high quality figures whilst giving participants the confidence in the integrity of what they produce.

[Please click here for more information about 'Producing High Quality Figures'.](#)

This event took place on 25 July 2016 at the University of Bristol.

Adam said: "Having identified an area where PhD students lacked training, it was highly rewarding to create a new workshop to fill the gap. The feedback from the workshop was very positive and I'm happy that the participants found it useful."

Causal inference using causal diagrams: an introduction and recent advances

Project lead: Cheryl McGuire (mcquire1@cardiff.ac.uk)

Causal inference is a fundamental aim of scientific investigation. Yet it is a topic that has puzzled philosophers and researchers for centuries. This free training event will benefit students across the GW4 who are investigating cause-effect relationships – likely to be a significant proportion of students in epidemiology, medicine, psychology and related disciplines. Causal diagrams offer a practical solution to common problems in causal inference including variable selection for statistical modelling and bias reduction. Expert speaker, Dr Rhian Daniel (London School of Hygiene and Tropical Medicine), will lead this cutting-edge event with a mixture of lectures and practical sessions.

[Please click here for more information about 'Causal Diagrams'.](#)

This event took place on 17 June 2016 at Cardiff University.

Cheryl said: "The GW4 Researcher-Led Discipline-Specific Training Fund provided an excellent opportunity to access high-quality training and to share this with postgraduate researcher students from across the GW4. The students benefited from learning valuable skills that were applicable to their diverse projects and the occasion encouraged collaboration. As well as the expert-led training material, I gained valuable experience in applying for, and securing funding, and learning what it takes to organise a collaborative training day."

Incisive Individual Interviews: Techniques and Skills of Interviewing for Quality Qualitative Research

Project lead: Matthew Parry (ParryMJ2@cardiff.ac.uk)

Interview techniques are an essential part of qualitative research, yet the quality of the results will vary depending on the skill of the questioner. This training will consider ways of improving

interviewing techniques for research students, using Socratic discussion, gold-fish bowl examples, and group exercises to refine skills that are essential for any questioner. Led by a skills trainer with over thirty years' experience, the morning and afternoon sessions will discuss how to understand the best ways of interacting with your interviewee, to help them to help you get the best possible research material.

[Please click here for more information about 'Incisive Individual Interviews'.](#)

This event took place on 18 May 2016 at Cardiff University.

Matthew said: "I am grateful for GW4 funding this training day which allowed me to develop a skill that is both crucial to research skills and also of great interest to me academically and personally. The day was well received and inspired me to continue to develop the opportunity."