

MANCHESTER
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The University of Manchester

Faculty of Biology, Medicine and Health
School of Health Sciences

Epidemiology International Summer School Summer 2019



www.manchester.ac.uk/epi-iss

Epidemiology International Summer School 2019

The University of Manchester

Welcome Message

The Division of Population Health, Health Services Research and Primary Care in the School of Health Sciences, Faculty of Biology, Medicine and Health at The University of Manchester is delighted to offer a four-week summer school in Epidemiology for students from our partner universities during July and August 2019.

The purpose of this summer course is to provide self-motivated international students who are interested in epidemiology and public health with an in-depth introduction to the subject, in a world class learning environment that is enriched with British culture. The University of Manchester has a high international standing and has been the home of 25 Nobel Prize winners.

During the 4-week summer school, students will be taught in small groups by experts in the fields of evidence synthesis, biostatistics, health economics and health inequalities, and will be supported to work together on group tasks to develop their epidemiology skills. Moreover, students will have the opportunity to practice their presentation skills in an academic setting to their peers and Manchester academics as well as having the opportunity to undertake situational learning where they can work with some of our academics and research staff on projects currently being undertaken.

In addition to the academic programme, there will also be plenty of opportunities for social activities. These will include a welcome reception and a farewell celebration (involving Manchester academics and students), and trips to local attractions including parks and local cities.

We are confident that the summer school programme will give every participant a fantastic experience that will have lasting impact for the rest of their studies and career.

We look forward to welcoming you to Manchester in July 2019.

The Epidemiology Summer School Team



Prof Arpana Verma

Head of the Division of Population Health,
Health Services Research and Primary Care.



Dr Hui Guo

Lead of the Epidemiology Summer School
and Biostatistics Lecturer



Dr Paula Whittaker

Co-director of Master of Public Health and
MRes in Public Health/Primary Care



Greg Williams

Lecturer in Public Health

The Academic Programme Outline

Over the course of the four weeks, you will have the opportunity to learn about a wide range of topics from our teaching staff, the details of which are outlined over the next two pages.

Evidence Synthesis

Students will learn about how to understand scientific evidence, how to identify the best evidence, how to implement evidence, and will get an understanding of critical appraisal. We will examine a range of study designs, sources of bias and examine the hierarchy of evidence. Students will be guided on how best to search for evidence that can be used for evidence-based practice, and we will develop techniques with referencing software.

The sessions will be a mixture of computer workshops and classroom based talks. With some more practical skills being developed as the students work in groups.

Biostatistics

After receiving an introduction to evidence, we will learn about conducting analysis of data. Students will be introduced to core statistical concepts and techniques that are essential for understanding, interpreting and undertaking biomedical research. Biostatistics sessions will demonstrate how powerful techniques can be used to investigate relationships between outcomes, patient characteristics and treatments, as well as making predictions about the prognosis of patients.

During the biostatistics sessions, students will have the chance to use the computer labs and will be guided through the use of some biostatistics software which may be new to them. Students will also be given the opportunity to run their own 'trial' and discuss the methodological issues.

Health Economics

Students will be given the opportunity to look at key concepts of economic evaluation and the evidence base behind health economic practice. We will examine the role that a rationalised health care system plays and how decisions based on the cost and clinical efficacy of treatment regimens improve population health. We will also set the scene for the practical application of horizontal and vertical equity on population health.

A wide variety of learning methodologies will be used to understand these key concepts and demonstrate their applicability in real-world settings.

The Academic Programme Outline

Health Inequalities

Using the Social Determinants of Health, students will explore inequalities and how they impact on health outcomes across the life-course. We will examine the principles and practice of good health promotion policies, and explore the importance of the 'Health in All Policies' movement advocated by the World Health Organization.

We will look at interventions to help reduce inequalities and examine the evidence base for delivering these in different socio-economic settings.

Intercultural public health

Students will examine culture, its impact on health and the potential impact of 'culturally competent' communities. Through group work, discussions and interactive activities, we will look at cultural models, frameworks and policies in relation to participants' personal and professional practice with the aim of improving health and wellbeing outcomes.

Situational learning

Students will be given the opportunity to work alongside some of our academic and research staff within the Division of Population Health, Health Services Management and Primary Care. This will allow them to see some of the projects that are being worked on first-hand and see where some of their learning is put into practice.

Group Project

Working in groups, the students will be able to demonstrate their learning by producing a joint project together looking at the application of their learning in the real world. They will be able to present their project to the group and the academic staff.

Each week there will also be a cultural activity and various workshops run by the International Office, please see the section "International Office Activities and Workshops" for further details.

Social Activities

We understand the importance of socialising with your fellow students during your time with us at the summer school. Although the main priority of the school is to develop students' knowledge, the summer school also provides the opportunity for students to experience a new culture.

As part of the summer school the division likes to run social activities for the students. This can include events such as going out for dinner and enjoying more practical activities. Last year, our students went out for Italian food, a British roast dinner, bowling and even went to a music concert!

These events involve the students, interns and tutors, specifically from the Epidemiology International Summer School. It creates the perfect opportunity for students to engage with their tutors to learn more about their research and teaching. It also allows students to explore the possibility of postgraduate study if this interested them, as they could ask questions regarding master's and PhD programmes.

Students last year thoroughly enjoyed these events, saying it made them feel closer as a group which in turn made the whole experience even more unforgettable.



International Office Activities and Workshops

Weekly Cultural Visits

One afternoon each week, cultural visits are organised to different locations in Manchester and the surrounding area. These locations often include parks and cities close to Manchester. These visits are optional but highly recommended and are included within the summer school. The visits give students time to explore and understand more about British culture. Examples of previous visits have included a trip to a National Trust site—a site important for British culture and heritage, and a visit to Chester to explore the rich history of the city.



English Writing Workshops

The International Office also runs English Writing Workshops for our Summer School students. These run within the normal times of the summer school and are specifically designed for International Students. They aim to further improve the English Language skills of the students in order to ensure their writing is able to precisely convey their knowledge.

The workshops go into depth about how to write a scientific article in English and focus on structure as well as spelling and grammar. This workshop has been shown to be useful for students with varying confidence in their English language skills.

Postgraduate Study Workshops



The summer school provides students with a great opportunity to explore postgraduate studies at the University. We run workshops to detail the options that students may wish to consider including PhD and master's programmes.

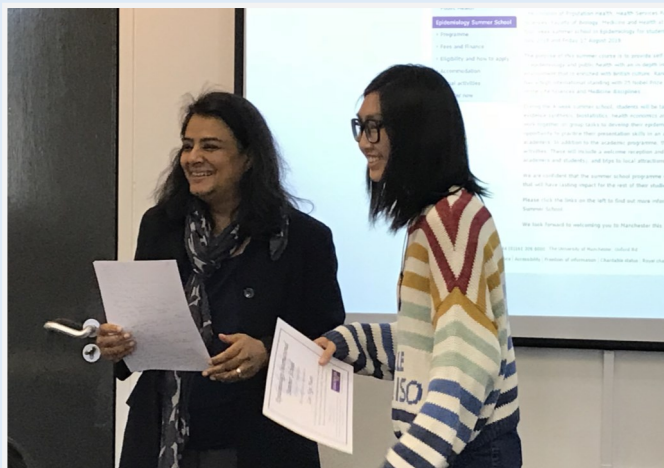
These workshops also go into detail about subject areas, applications and funding. Should any students wish to pursue postgraduate study at the University of Manchester, they will have lots of opportunities to discuss their options with members of staff during the course of the summer school, with some past students starting their application process during the Summer School.

Testimonies from Epi-ISS 2018 students

Our 2018 students had an incredible time, gaining new knowledge and new friends. Since the school, three students have already gone on to start their application to study for a PhD at The University of Manchester, while others have gone on to more firmly establish the path they want to take in their future studies and careers.

Read some of the quotes from last year's cohort below:

"A teacher listened to my topic, spent a lot of time with me to study the search strategy and then guided me step by step, and explained the various advantages and disadvantages."



"The best summer of my life!"

"Unforgettable experience"

"It seems that whatever I want to know, I can ask them [the staff] and they're willing to help us."



"I love Manchester, I love you all!"

Teaching Staff

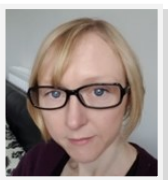
Prof Arpana Verma



Prof Arpana Verma is Head of the [Division of Population Health, Health Services Research and Primary Care](#). She is Director of Manchester Urban Collaboration on Health (MUCH), a WHO Collaborating Centre, and honorary Consultant in Public Health at PHE. MUCH is based within the School of Health Sciences in the Faculty of Biology, Medical and Human Sciences. MUCH performs high quality research, teaching and training, in the field of public health and has established links to local, national and international public health organisations (www.manchester.ac.uk/much). MUCH was recently designated the World Health Organisation Collaborating Centre for Health Indicators including working as part of the [European Health Information Initiative](#) and the [Global Report on Urban Health](#).

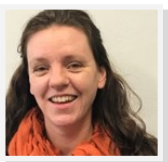
Prof Verma is the Programme Director for the [Masters in Public Health and MRes in Public Health/Primary Care](#) online/blended distance learning course, which offers an innovative approach to learning, meeting the training needs for health professionals interested in a career in public health or those seeking new skills in this area.

Dr Paula Whittaker



Dr Paula Whittaker is a Senior Clinical Lecturer in Public Health. She is the course unit lead for Evidence Based Practice on the MPH programme and the Director of Evidence Based Practice for the public health team. Paula is a qualified general practitioner and Consultant in Public Health with a wealth of experience of conducting evidence reviews and implementing evidence into practice in a range of NHS and local authority settings.

Clare Huish



Clare Huish is a Lecturer in Public Health at The University of Manchester where she leads on Implementation Sciences and Intercultural Public Health. Aside from her teaching role as part of the MPH team at The University of Manchester, she has a background in Early Years movement development, public health research, implementing sciences and training professionals in health and education. She has led on Intercultural training in the UK and South America. Her teaching style has been described as dynamic, warm and enabling. She has a keen interest in The Art of Public Health and facilitating the application of research into practice in new and creative ways.

Dr Jill Stocks



Dr Jill Stocks is a Lecturer in Public Health and the Course Unit Lead for Field Epidemiology on the MPH programme. Jill is an epidemiologist with a background in experimental science and a particular interest in evaluating occupational or population-level interventions and patient safety in primary care.

Lesley Patterson



Lesley Patterson is a Research Assistant in Public Health and has a background in frontline healthcare (nursing) and has been employed as an academic public health researcher for the last 20 years. She has extensive experience in both qualitative and quantitative research in the field. She has led several discreet projects and studies, and has recent experience of managing a substantial EU funded (DGSANCO) project.

Teaching Staff

Greg Williams



Greg Williams is a Lecturer in Public Health at The University of Manchester where he leads on Health Services Management and Global Health in the 21st Century. As well as teaching, Greg has an extensive background in public health research and has multiple peer-reviewed publications from local, national and international research projects. He has worked on and managed projects that have ranged from urban health indicator data collection to healthy ageing interventions, through to the evaluation of programmes aimed at reducing health inequalities. Most recently, Greg is working with the steering group of the European Health Information Initiative, which is an EU, WHO and OECD initiative.

Dr Julia Mueller



Dr Julia Mueller recently completed her PhD in Health Psychology at The University of Manchester, and works at the Division of Population Health, Health Services Research and Primary Care. Julia has developed an online intervention for those worried about lung cancer, which involved extensive qualitative evaluation by obtaining feedback from potential users. She is knowledgeable and proficient in designing, conducting and analysing qualitative and quantitative research, and has expertise in the area of cancer patient care.

Prof Andy Vail



Andy Vail is Professor of Clinical Biostatistics. He leads the Centre for Biostatistics. His main interests concern the application of statistical reasoning to clinical research, with a focus on pragmatic design of research projects and careful inference from results. Andy has major clinical collaborations in stroke, fertility, photo-dermatology and rheumatology.

Dr Hui Guo



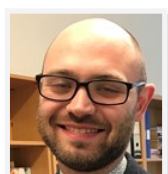
Hui is a Lecturer in Biostatistics at the Centre for Biostatistics. Her qualifications in Statistics include an MSc (University College London), and a PhD (University of Cambridge). Hui's current research focuses on development and applications of statistical methodology in genetics and disease causal mechanisms on the basis of large-scale multi-omics data.

Dr Jamie Sergeant



Jamie Sergeant is a Lecturer in Biostatistics at The University of Manchester's Centre for Biostatistics. His research is focused on the epidemiology of musculoskeletal diseases and he collaborates closely with colleagues in the Arthritis Research UK Centre for Epidemiology. Jamie has a keen interest in the teaching and learning of statistics and how statistics can be communicated effectively to all audiences.

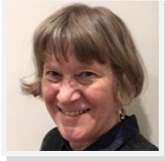
Dr Jack Wilkinson



Jack is a Biostatistician based at the Centre for Biostatistics at The University of Manchester. His research interests include study design and analysis in assisted reproduction. His PhD research looked at methods to analyse complex sequential data in in vitro fertilisation. Jack is a statistical editor for Cochrane Gynaecology and Fertility.

Teaching Staff

Dr Sarah Cotterill



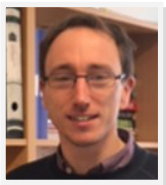
Sarah is a Research Fellow in the Centre for Biostatistics. She is interested in behaviour change research, and has extensive experience in the design of randomised controlled trials for the evaluation of health and public policy interventions. Current research includes evaluation of the UK diabetes prevention programme, a systematic review of social influences on health professional behaviour change, and an RCT of arthritis gloves on hand pain.

Sarah Rhodes



Sarah is a Research Associate from the Centre of Biostatistics. Sarah works mainly for the 'Research Design Service' where she gives advice to researchers looking to secure research funding. She has particular interests in trial retention, cluster randomised trials and meta-analysis. Her main collaborations are in the fields of Stroke, wounds and behaviour change, plus she provides statistical support to two Cochrane review groups.

Dr Matt Gittins



Matt is a lecturer in the Centre for Biostatistics focusing on observational epidemiology. Matt is specifically interested in developing and applying techniques to reduce sources of bias in observational data, recently focusing on air pollution, stroke, and occupational health. His PhD used case-only study designs and associated methods to reduce bias and misclassification in large scale air pollution studies. More recently he has been investigating methods to reduce overestimation in count data related to health surveillance schemes, and multilevel models to account for clustering characteristics observed in stroke patients during their inpatient care.

Dr Antonia Marsden



Antonia is a Research Associate in the Centre for Biostatistics. Her PhD focussed on methodology for the analysis of observational data to identify and evaluate markers associated with differential treatment response. She currently works in the Biostatistics Collaboration Unit providing statistical support to a variety of studies including those in dermatology and rheumatology.

The 4 week course will be £3,000.

This course fee will cover:

- Group airport transfers from Manchester Airport
- Programme fees
- Student accommodation (en-suite single room/shared kitchen)
- Orientation and farewell events and selected social activities

For eligibility criteria and details about how to apply, please visit www.manchester.ac.uk/epi-iss or email health@manchester.ac.uk

Master of Public Health (MPH) and Research (MRes Public Health and Primary Care)



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The MPH/MRes team at the University of Manchester (UK) is pleased to announce an exciting and novel suite of course units and studying opportunities available for students from across the world.

The MPH/MRes is available as a full masters programme, a shorter diploma/certificate, or single units for top-up training/CPD opportunities. We offer our students a larger range of options to maximise your future earning and career opportunities.

Both degrees give students an excellent grounding in global health, evidence based practice, epidemiology, biostatistics and critical analysis. Our teaching model encourages and supports your development as an all-round academic with skills in discussing, debating, analysing and evaluating aspects of global public health. You will study alongside doctors, researchers, health care managers, and others from around the world; many are experienced health care workers studying part time. You will gain insight into the world of research, including publishing and presenting at international conferences.

"The masters in Public Health gave me the opportunity to gain a deeper understanding of health issues related to a variety of health care in general, allowing me to expand my horizon and change my perspective."

Annemarie Wendicke – Research Support - Hawaii, USA

For more information e-mail pgt.medicine@manchester.ac.uk or call +44(0)161 275 1648

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