

THE UNIVERSITY OF MANCHESTER

PARTICULARS OF APPOINTMENT

FACULTY OF BIOLOGY, MEDICINE & HEALTH

SCHOOL OF HEALTH SCIENCES

DIVISION OF POPULATION HEALTH, HEALTH SERVICES RESEARCH AND PRIMARY CARE

RESEARCH ASSOCIATE / FELLOW IN EPIDEMIOLOGY or BIOSTATISTICS

VACANCY REF: BM&H-11326

- Salary:** Grade 5, £26,495 to £30,688; Grade 6, £31,604 to £38,833; or grade 7, £39,992 to £49,149, per annum according to experience
- Hours:** Full-time
- Duration:** Appointment from 1st January 2018 until 31 December 2020
- Location:** Oxford Road, Manchester
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Enquiries about the vacancy, shortlisting and interviews:

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Background Information

The University of Manchester is the largest single-site university in the UK with around 38,000 students and more than 11,000 staff. We aim to become one of the top 25 research universities in the world by 2020 and are committed to delivering an outstanding teaching and learning experience; contributing to the social and economic success of local, national and international communities; producing the highest calibre graduates; and developing our staff to be amongst the very best of their peers.

To achieve our ambitious goals we aim to attract and retain the very best people to work across a range of academic disciplines and support functions.

Working for the University of Manchester

The University of Manchester strives to make our community a welcoming, caring and enthusiastic one, fuelling ambition with opportunities and support to help us all achieve our personal and professional goals.

Our diverse job opportunities include an attractive [benefits package](#) with family-friendly policies that provide for flexible working. We care deeply about career and personal development, offering a structured induction programme for new staff, an annual performance and development review, staff training for all career stages and mentoring opportunities to support your career development.

We have a genuine commitment to [equality of opportunity](#) for our staff and students, and are proud to employ a workforce that reflects the diverse community we serve.

As a global institution, situated at the heart of a lively, [culturally diverse city](#), we welcome applicants of all nationalities. To help international job applicants plan for life in the UK, we have put together some useful [information on passports and visas](#), travel to the UK, accommodation and a number of other practical considerations.

The Faculty of Biology, Medicine and Health (FBMH)

The Faculty of Biology, Medicine and Health was created on 1 August 2016 when the Faculty of Life Sciences and the Faculty of Medical and Human Sciences was brought together in a new, integrated structure to deliver a truly translational approach to the life sciences, ensuring smooth research pathways - from pure discovery science through to clinical application and patient care.

With a total annual income of over £300 million, and over 3,000 members of staff, the new Faculty is comparable in size to a medium-sized UK university. Thirty undergraduate and 90 postgraduate programmes offer our 11,000 students opportunities to develop the skills and knowledge they need for a successful career.

The Faculty's matrix structure will facilitate interdisciplinary working and enable us to learn from each other and share best practice; and our eight, strategic Research Domains will help to articulate our research strengths, drive large-scale, collaborative research activities and strengthen relationships with our research and healthcare partners.

The integration of discovery biology, clinical application and patient care within a single Faculty, particularly in a region with notable health inequality, provides us with a real opportunity to have a very significant and positive impact on people's lives.

Our strategic partnerships

The new Faculty inherits a number of key strategic partnerships that underpin its ambitions to develop ground-breaking research.

Working alongside six local NHS Trusts, the Faculty is a key member of the [Manchester Academic Health Science Centre \(MAHSC\)](#) - a federation of equal partners that unites leading healthcare providers with world-class academics and researchers. It aims to be a global centre for the delivery of applied health research and education and provide leadership for our local and regional health systems.

It will also play a leading role in [Health Innovation Manchester \(HInM\)](#), which was launched in September 2015, as part of the UK Government's decision to devolve health and social care responsibilities to Greater Manchester. HInM offers a unique opportunity to bring together health and social care, academic and life science related business resources across the region

to deliver an innovative health ecosystem that can help accelerate innovation into our local health and social care systems, enhance our global scientific standing and act as a magnet for inward investment.

Key partnerships in the charitable sector include Cancer Research UK; Diabetes UK; and the Wellcome Trust; and the Faculty will also have research and funding links to a number of commercial organisations including Unilever, AstraZeneca, GlaxoSmithKline and Boots, who will help us to bring new drugs and products to the market.

Division of Population Health, Health Services Research and Primary Care

The Division of Population Health, Health Services Research and Primary Care is home to staff undertaking world leading research and teaching alongside ambitious social responsibility activities in line with the University's 2020 Strategy. Our focus is on how interventions from policies to lab-based sciences impact on society more widely. This supports the Faculty's vision of empowering people from diverse backgrounds to transform their ideas in biology, medicine, and health for the benefit of society in Manchester, the UK and across the globe. Our Division includes cognate research disciplines - primary care, public/occupational/environmental health, clinical and molecular epidemiologists, social care - and methodologists including biostatistics, health economics, qualitative, policy, clinical trials and health service research. The Division (as at January 2017) is composed of 345 staff: 49 core academic staff (including 23 Professors), 120 honorary staff (including clinical academics), 116 contract research staff and 60 administrative, technical and other support staff. The Head of the Division is Dr Arpana Verma.

The Division's areas of internationally recognised research excellence include: **health policy and practice** focused broadly on: analysing government policy as it affects health and social care; exploring the impact of changing policy; describing, explaining and evaluating variations in health and care organisation and delivery; and developing and evaluating strategies to improve care, ranging from policy interventions to trials of complex interventions to improving patient outcomes; **methodological research** including advanced methodology in biostatistics and health economics; and **population health** which investigates areas such as the factors determining disease risk, variation in treatment response, clinical progression and outcome. It also applies **epidemiological approaches** to the analysis of biological samples and clinical data. Similar methodologies are deployed to describe, explain and evaluate inequalities in health and variations in care provision, exploiting the unique database resources generated by in drug misuse, trauma and occupational health.

We provide excellent, internationally recognised, undergraduate and postgraduate teaching and training to mobilise the application of our research into evidence based practice to improve health outcomes. The Division's staff contribute widely to key areas of the **undergraduate medical** (MBChB) curriculum. At postgraduate level, the Division provides **Masters programmes in Occupational Medicine, Occupational Hygiene, Public Health and Clinical Research** (Primary Care). Our Occupational **Medicine, Occupational Hygiene**, and Public Health programmes are delivered worldwide through distance learning. Through the international recruitment to our programmes we are able to work with students in many low and middle income countries and offer scholarships each year to a number of students in Nigeria, Tanzania, Uganda and Rwanda. Many of our Masters modules are also available as CPD units offering flexible learning opportunities. As of January 2017, the Division is supporting 47 **postgraduate research** students across a wide range of subject areas.

The Division incorporates five established research centres. The [Centre for Primary Care](#) is a leading research centre for primary care research in the United Kingdom, and a founder member of the prestigious NIHR School for Primary Care Research. The Centre has a truly multidisciplinary staff and very active patient and public involvement partners, working together on research in quality and safety, Health policy, politics and organisations, long-term conditions, and research methodology. The [Manchester Centre for Health Economics](#) develops and applies economic methods for studying behaviour and comparing alternative uses of resources. This critical mass of health economics expertise supports career development and a wide range of collaborative activity. The [Centre for Biostatistics](#) has developed an international reputation for innovative statistical research, excellent teaching and interdisciplinary collaboration since its inception as the Biostatistics Group in 1997. The Centre is the professional focus for all medical statisticians within the Faculty of Biology, Medicine and Health and holds half-yearly, half-day public seminars. The [Manchester Personal Social Services Research Unit's \(PSSRU\)](#) work has been innovative in changing the way we view the organisational arrangements for care and support and is a founder member of the prestigious NIHR School for Social Care Research. Its work is focused upon research in long term care, social care and community based services with a particular interest in the needs of older people and dementia care. The [Centre for Epidemiology](#) undertakes internationally recognised research into the determinants of health and disease to improve the health of human populations, through occupational and public health, molecular epidemiology and cognate disciplines. We make a substantive contribution across multiple University research beacons, and include the WHO Collaborating Centre in Health Indicators.

Job description

Overall Purpose of the Job

This position provides an exciting opportunity for a motivated epidemiologist/biostatistician to work jointly within the Centre for Epidemiology (and Centre for Occupational and Environmental Health) and the Centre for Biostatistics within the School of Health Sciences. The majority of the work (75%) will be on an important study investigating the health of workers employed in a facility in Namibia involved in the mining, processing and refining of uranium. Using a case cohort design we are investigating whether radiation exposure is linked to excess risk of cancer in this work force. The case ascertainment is near completion, and we are currently collecting and collating study subjects' occupational exposure (e.g. radiation, silica, acid mists) and non-exposure (e.g. lifestyle, medical) data. Next we will carry out the epidemiological analyses and report and paper writing. This position is intended to fulfil the remaining tasks of the whole research project. The remaining 25% of the work will be within the Biostatistics Collaboration Unit (BCU) of the Centre for Biostatistics. The BCU provides collaboration on the design, conduct, analysis and reporting of applied research across the Faculty, providing opportunities to gain experience across a wide range of activities according to the interests of the appointee. Members of the BCU contribute to the MAHSC Clinical Trials Unit and NIHR infrastructure including the Research Design Service, CLAHRC and Biomedical Research Centre.

The key responsibilities, accountabilities or duties of the post are to:

- Reporting on a day to day basis to Professor Martie van Tongeren (COEH), for the delivery of Rio Tinto project to the PI, Emeritus Professor Raymond Agius, and for work within the Biostatistics Collaboration Unit to Professor Andy Vail.

- Co-ordinate with the other investigators, and the external consultant (Prof S Jones) for the agreed and effective delivery of the project
- Manage the delivery of the research project; in particular:
 - Coordinate regular project meetings with the company, their Occupational Health providers and prepare regular progress reports
 - Oversee and quality assure data collection
 - Maintaining, developing and analysing the research database
 - Careful interpretation of results
 - Preparing of research report and scientific manuscripts for publication in peer-reviewed journals
 - Presentation of results at scientific conferences.
- Contribute actively to academic activities within the Centre for Epidemiology and Centre for Biostatistics, including
 - Present and attend seminars
 - Supervision of one or more MSc dissertations (in Occupational Health)
 - Collaborate with other academics, in particular in development of research proposals.
- Plan own day-to-day research activity within the framework of the agreed program.
- Undertake training and other duties appropriate to own skills and expertise in order to further personal development and contribute to related projects.
- Promoting public engagement in science by presenting at meetings and writing and disseminating reports updating stakeholders Familiarity with the University's Equality and Diversity policies and to actively support these wherever possible.
- Undertaking all the above in a manner which ensures the confidentiality of the data

Person specification

Essential knowledge, skills and experience:

Research Fellow (Grade 7)	Research Associate (Grade 6)	Research Assistant (Grade 5)
<ul style="list-style-type: none"> • A highly relevant PhD or equivalent research experience, such as (occupational or environmental health) epidemiology or biostatistics • Significant experience in epidemiologic and statistical research methods and techniques • Excellent and proven ability to collect, collate, analyse and interpret data in an orderly and accurate fashion • Proven ability to think independently • Strong ability to critique and synthesize research literature. • Excellent communication and interpersonal skills • Excellent time management and organizational skills • Proven ability to work independently and as part of a team • Proven ability to liaise confidently, professionally and effectively with a range of individuals • Flexible approach to dealing with research problems as they arise • Willingness to learn and develop • Proven and strong ability to present in both written and oral publications • Ability to contribute to broader management and administrative processes. 	<ul style="list-style-type: none"> • A relevant PhD or equivalent research experience in epidemiology or biostatistics • Experience in epidemiologic and statistical research methods and techniques • Ability to collect, collate, analyse and interpret data in an orderly and accurate fashion • Ability to think independently • Ability to critique and synthesize research literature. • Excellent communication and interpersonal skills • Excellent time management and organizational skills • Ability to work independently and as part of a team • Ability to liaise confidently, professionally and effectively with a range of individuals • Flexible approach to dealing with research problems as they arise • Willingness to learn and develop • Ability to present in both written and oral publications • Ability to contribute to broader management and administrative processes. • Ability to assess and organize 	<ul style="list-style-type: none"> • A relevant BSc or MSc • Some experience in epidemiologic and statistical research methods and techniques • Ability to collect, collate, analyse and interpret data in an orderly and accurate fashion • Excellent time management and organizational skills • Meticulous attention to detail • Ability to work independently and as part of a team • A proactive and flexible approach to work • Willingness to learn and develop • Experience in presenting results in both written and oral publications • Possess a high standard of IT literacy as well as bio-statistical competency • Some working knowledge of general purpose statistical software packages (such as STATA, SPSS, R), data linkage (such as Excel VBA) and statistical programming (such as STATA mata, SAS IML)

<ul style="list-style-type: none"> • Ability to assess and organize resources • Possess an outstandingly high standard of IT literacy as well as bio-statistical competency • Working knowledge of general purpose statistical software packages (such as STATA, SPSS, R), data linkage (such as Excel VBA) and statistical programming (such as STATA mata, SAS IML) 	<p>resources</p> <ul style="list-style-type: none"> • Possess a high standard of IT literacy as well as bio-statistical competency • Some working knowledge of general purpose statistical software packages (such as STATA, SPSS, R), data linkage (such as Excel VBA) and statistical programming (such as STATA mata, SAS IML) 	
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Desirable knowledge, skills and experience:

Research Fellow (Grade 7)	Research Associate (Grade 6)	Research Assistant (Grade 5)
<ul style="list-style-type: none"> • Extensive experience of managing research projects • Strong publication record • Knowledge of the epidemiology of ionizing radiation 	<ul style="list-style-type: none"> • Experience of managing research projects • Good publication record • Some knowledge of the epidemiology of ionizing radiation 	<ul style="list-style-type: none"> • Some experience in managing projects • Basic understanding of occupational epidemiology