



MRC PHD STUDENTSHIPS

Summary: The Institute of Epidemiology & Health Care (formerly the Division of Population Health) invites applications for two Medical Research Council-funded PhD studentships to begin in October 2013. The Institute offers a unique environment to those wishing to undertake interdisciplinary study and gain exposure to research within departments pursuing a highly acclaimed international research agenda. Successful candidates will be based in one of the Research Departments of the Institute, namely Epidemiology and Public Health, Infection and Population Health, Applied Health Research or Primary Care and Population Health. They will also have the opportunity to benefit from expertise across the Institute and, depending on the nature of the project proposed, work across departments or with a co-supervisor from another institute in the Faculty of Population Health in UCL. Applicants should have (or expect to obtain) a first or upper second class degree in an appropriate discipline. An MSc in a relevant subject is desirable.

Eligibility: These MRC research studentships are for 3 years. They are restricted to candidates who have been resident in the UK for the past three years. If you do not fulfil this criterion, you are not eligible for this scheme.

INSTITUTE OF EPIDEMIOLOGY & HEALTH CARE

The research of the Institute takes place across five research departments and associated MRC Units. The broad areas covered include understanding the determinants of health and disease across the life course both in the general population and in patients in clinical settings; evaluating strategies for prevention and treatment of physical health, and teaching and capacity building in population health. The Institute is part of the Faculty of Population Health and members of the Institute are the Departments of Epidemiology and Public Health; Infection and Population Health; Applied Health Research; Primary Care and Population Health; the Centre for Health Informatics and Multiprofessional Education (CHIME); and the associated MRC Clinical Trials Unit (MRCCTU). Expertise in epidemiological, clinical, statistical and behavioural science provides the scientific basis to underpin an internationally competitive research programme. The Institute Director is Professor Andrew Steptoe. Full details of the individual departments and associated Unit can be found at:

CHIME	http://www.chime.ucl.ac.uk/
Epidemiology and Public Health	http://www.ucl.ac.uk/epidemiology/
Infection and Population health	http://www.ucl.ac.uk/iph/
Applied Health Research	http://www.ucl.ac.uk/dahr/
MRC Clinical Trials Unit	http://www.ctu.mrc.ac.uk/
Primary Care and Population Health	http://www.ucl.ac.uk/pcph/

The **Department of Epidemiology & Public Health** (<http://www.ucl.ac.uk/epidemiology/>) is chaired by Professor Richard Watt, and houses around 180 staff divided into twelve research groups, in addition to a cross-cutting medical and social statistics network. Around 90 people are currently undertaking PhD studies within the department. The Department is housed in comfortable and modern accommodation - 68 offices, 2 laboratories and 7 general purpose rooms - over five floors in one building – in close proximity to the main UCL buildings as well as other University of London colleges. The research groups are:

MRC Unit for Lifelong Health and Ageing (incorporating the National Survey of Health and Development, NSHD) (potential supervisors: Professor Diana Kuh, Professor Rebecca Hardy, Professor Marcus Richards, Dr Mai Stafford): The NSHD is the longest running of the British birth cohort studies, following a group of men and women born in 1946 until today. The study has informed UK health care, education and social policy for more than 60 years.

Health Behaviour Research Centre (potential supervisors: Professor Jane Wardle, Dr Jo Waller, Professor Robert West): The HBRC is the largest health psychology research group in the UK. It undertakes research aimed at advancing understanding of behaviours that have a major impact on health and contributing to the development of interventions to promote healthy lifestyles. The three main areas of research are dietary choice, participation in cancer screening, and tobacco smoking.

Psychobiology (potential supervisors: Professor Andrew Steptoe, Dr Mark Hamer): The Psychobiology Group is concerned with the pathways through which sociodemographic and psychosocial factors influence physical disease processes. A major aim of the group is to understand how factors such as socioeconomic status, social isolation, work stress and hostility 'get under the skin' and influence biological functions in health and disease.

Whitehall II Study (potential supervisors: Professor Michael Marmot, Professor Mika Kivimaki, Dr Eric Brunner, Dr Annie Britton, Dr Jenny Head, Dr Meena Kumari): Whitehall II is a longitudinal study of London-based civil servants which started in 1985. The study is credited with putting social class differences in health and disease on the map. In addition to the contribution of unhealthy behaviours and traditional risk factors, such as blood pressure, it has shown the importance of psychosocial factors such as work stress, unfairness, and work-family conflict to socioeconomic inequalities in heart disease and diabetes. Participants are now 60-80 years old and research is increasingly focused on differences in and determinants of ageing processes.

Clinical Epidemiology (potential supervisor: Professor Harry Hemingway): The work of this group aims to investigate the aetiology and prognosis of specific coronary phenotypes. There are three strands to this work: novel clinical cohorts, exploitation of linked electronic health records and methods development.

Health and Social Surveys Research Group (potential supervisors: Dr Nicola Shelton, Dr Jenny Mindell, Dr Emmanuel Stamatakis, Dr Jane Biddulph, Dr Panos Demakakos): This group studies population health (including health behaviours and outcomes), the determinants of population health, and inequalities in health. Much of the group's research is carried out using large population surveys that collect data on health, economic and social issues, using a variety of survey methods and statistical techniques, including: the Health Survey for England, the Scottish Health Survey, the English Longitudinal Study of Ageing, and the ONS Longitudinal Study, the 1% sample of the England & Wales Census. Opportunities for using the data sets linked to routine data on cause-specific mortality and cancer incidence are possible, as is additional public health research involving primary data collection.

Central and Eastern Europe (potential supervisors: Professor Martin Bobak, Dr Hynek Pikhart): This group focuses on health and its determinants in Central & Eastern Europe during the societal transition after the collapse of communism, which led to a dramatic mortality crisis in many countries of the region. The group coordinates a large cohort study (the HAPIEE project) of over 35,000 men and women aged 45-69 at baseline in Russia, Poland, Lithuania and the Czech Republic, with a wide range of measurements, including health status, nutrition, health behaviours, functional status and biomarkers. The group is participating in other activities, including a study of mass privatisation and health in former Soviet Union and collaborative projects on health and ageing.

Dental Public Health (potential supervisors: Professor Richard Watt, Dr Georges Tsakos): , The UCL Dental Public Health Group is one of the main dental public health research, teaching and service development centres in Europe. Professor Watt is supported by a friendly and approachable international team specialising in dental epidemiology, health promotion, nutrition, food policy, oral needs assessment, oral health related quality of life measures and oral health care services planning.

The International Centre for Life Course Studies (ICLS) (Potential supervisors: Professor Amanda Sacker, Professor Yvonne Kelly, Dr Anne McMunn, Dr Meena Kumari): ICLS uses longitudinal techniques to investigate processes by which social determinants relate to health and wellbeing across the life course. This research is possible due to the unique longitudinal birth cohort and panel studies that have been carried out in the UK, and the availability of comparative national and international data.

The Leonard Cheshire Disability and Inclusive Development Centre (Potential supervisor: Professor Nora Groce): The aims of the Centre are to undertake field research studies, in participation with Leonard Cheshire Disability programs implemented globally; to provide expertise for policy makers and other stakeholders (NGOs, UN agencies, other donor agencies) primarily in developing countries; and to participate in academic networks, and to share research experience and knowledge through field surveys, publications and teaching about disabled people, vulnerable groups and international development.

The **Department of Infection and Population Health** (<http://www.ucl.ac.uk/iph/>) is chaired by Professor Andrew Philips and focuses on research into strategies to reduce the population impacts of infection, and to promote individual health by means of the prevention and treatment of communicable and non-communicable disease. Staff and PhD students in the department work locally, nationally and internationally to realize this goal. The department includes around 80 staff and currently around 35 PhD students, and is based both in Bloomsbury and at the Royal Free Hospital site. The department has close links with the MRC Clinical Trials Unit (see below).

The department has four distinct research groups. Click on the links below to find out about the specific areas of research for each group, the people involved who could act as PhD supervisors, and a publications list.

Centre for Infectious Disease Epidemiology, led by Dr Andrew Hayward (<http://www.ucl.ac.uk/iph/research/cide/>): The Centre undertakes research on the epidemiology, prevention and treatment of infections including sexually transmitted diseases, influenza, tuberculosis, antimicrobial resistance and other common problems particularly among vulnerable populations in primary care. It has developed the UK Infectious Disease Research Network.

Centre for Sexual Health and HIV Research, led by Dr Richard Gilson (<http://www.ucl.ac.uk/iph/research/sexualhealthandhiv/>): The Centre is multidisciplinary, with broad interest in clinical, epidemiological and behavioural research related to sexually-transmitted infections and HIV. There is close collaboration with a large sexual health and HIV service based at Mortimer Market, the Margaret Pyke Centre and the Archway centre. Staff in the Centre lead the repeated National Survey of Sexual Attitudes and Lifestyles (NATSAL) project.

Health Psychology and Social Sciences Group, led by Professor Lorraine Sherr (<http://www.ucl.ac.uk/iph/research/hivpsychology/>): The Group has an active research programme spanning interests in reproductive issues, HIV infection, suicide and HIV, bereavement, and prevention of HIV transmission. International collaborations include the ethical and legal aspects of living with HIV, policy development related to HIV testing, and other psychological and social issues related to HIV infection and AIDS.

HIV Epidemiology and Biostatistics Group, led by Professors Andrew Philips & Caroline Sabin (<http://www.ucl.ac.uk/iph/research/hivbiostatistics/>): The Group has made major contributions through the analysis of large collaborative national and international cohorts to describing the impact of multi-drug anti-HIV therapy and understanding its underlying mechanisms of action. Recently it has played a leading part in evaluating the effects of HIV related therapies that have led to changes in treatment guidelines world-wide.

The **Department of Applied Health Research (DAHR)** (http://www.ucl.ac.uk/dahr/about_dahr/) is chaired by Professor Rosalind Raine. Currently, the department includes around 30 staff and 13 PhD students. DAHR focuses on research which will eventually have substantial impact on improving health and health services and on reducing inequalities in health and in access to health services. Research at DAHR spans all health care sectors and health care specialities including cardiology, intensive care, reproductive health care, mental health, palliative care, cancer, and public health genomics. DAHR has strengths in both quantitative and qualitative research.

The department is comprised of five research groups:

The Inequalities Research Group (potential supervisors: Professor Rosalind Raine, Dr Madhavi Bajekal): focuses on measuring and explaining inequalities in healthcare; assessing the association between use of health care and health inequalities.

The Evaluation Group (potential supervisors Professor Rosalind Raine, Dr Nora Pashayan, Dr Saffron Karlsen): examines how individual, organisational and contextual factors affect health outcomes and the use of and access to health care.

The Health Economics Group (potential supervisor: Professor Steve Morris): evaluates the cost and cost-effectiveness of health care interventions and public health programmes economic and investigates resource allocation in health care and public health.

The Surgical Outcomes Resource Centre (SOuRCe) (led by: Dr Ramani Moonsinghe): analysis of surgical outcomes and development and validation of post-operative morbidity score.

The Health Care Organisation and Management Group (potential supervisors: Professor Naomi Fulop, Professor Martin Marshall): evaluates re-organisations and service improvement and developing the knowledge base about the adoption, implementation and dissemination of evidence based health care and public health interventions.

The **Research Department of Primary Care and Population Health** (www.ucl.ac.uk/pcph) undertakes a programme of internationally competitive multi-disciplinary research addressing the management of disease in individuals and populations in areas of priority to the health of the public. We have a multidisciplinary approach to both research and teaching with expertise within the department in clinical primary care, epidemiology, medical statistics, medical sociology and health psychology. We have particular methodological strengths in quantitative and qualitative research and analysis of large clinical databases (i.e. GPRD and THIN) and trial methodology. The department works closely with the MRC Clinical Trials unit and together with the Department of Mental Health Sciences at UCL we run PRIMENT, a fully registered Clinical Trials Unit with expertise in the design, conduct and analysis of trials and other large, well designed studies in primary care and mental health research. At the 2008 RAE UCL made the largest submission in the UK under UoA 8 (Primary Care and other community subjects). Its submission was ranked second in the UK on the basis of the simple medal table.

The department is able to offer studentships based in one or more of the following research units.

British Regional Heart Study: The Cardiovascular Epidemiology Group includes major longitudinal research on risk factors for cardiovascular disease, in particular the British Regional Heart Study (BRHS) of over 7000 men recruited through general practice. The successful candidate will work within a team principally of statisticians and epidemiologists, with strong links to collaborators who are applied methodologists and experts in primary care. The projects will suit a candidate with a background in medical statistics or epidemiology and experience in analysing large datasets. Contact Professor Richard Morris (richard.morris@ucl.ac.uk).

Centre for Ageing Population Studies: Aging Population Health includes health services research on effective primary care for older people, and includes work on the integration between health and social care. Particular areas of interest are dementia, depression, physical activity promotion in later life, comprehensive needs assessment and palliative care. The group has particular strengths in health service research methodology and primary care nursing. Contact: Professor Steve Iliffe (s.iliffe@ucl.ac.uk).

PhD topics:

- 1) What are the biopsychosocial determinants of sustained change in activity levels in older people?
- 2) What factors inhibit or promote integrated palliative care for people with dementia?

E-Health Unit: The e-Health Unit focuses on the use of new technologies, such as the internet, to improve health and health care. Areas of interest include using the internet to deliver self-management programmes for patients with long term conditions (e.g. diabetes, heart disease) and for health promotion (e.g. alcohol, sexual health). The unit also undertakes research on implementation of new technologies in the NHS. Contact Dr Elizabeth Murray (elizabeth.murray@ucl.ac.uk).

Electronic Health Records Research: Areas of interest include epidemiological research on mental health of mother, father and child, prescribed medicine in pregnancy, development of new methods for analysis of longitudinal records, missing data. For further details of our work and specific PhD projects please see our website <http://www.ucl.ac.uk/pcph/research-groups-themes/thin-pub/>. Projects with this group would suit applicants with epidemiological/statistical background and some experience in handling large datasets. Contact Dr Irene Petersen (i.petersen@ucl.ac.uk).

Mental Health: The Primary Care Mental Health Research group is a multi-disciplinary research group with experienced researchers in primary care, epidemiology, psychiatry, medical statistics and health psychology. We can offer PhD opportunities on a range of topics in mental health (including severe mental illness / psychosis, common mental disorders such as anxiety and depression, medically unexplained symptoms and somatisation and health psychology interventions around smoking and obesity) and using a variety of methodologies including both quantitative research (e.g. Randomised Controlled Trials, primary epidemiological research, secondary analysis of large clinical datasets), and qualitative research. Contact Dr Marta Buszewicz (m.buszewicz@ucl.ac.uk).

The **Medical Research Council's Clinical Trials Unit** (<http://www.ctu.mrc.ac.uk/>) headed by Professor Mahesh Parmar is one of the UK's leading centres for clinical research. The unit specialises in cancer and HIV/AIDS, but also undertakes research in other areas, including rheumatoid arthritis, tuberculosis and mental health. The unit's research helps to improve healthcare in the UK and around the world.

Staff in the unit design and conduct **clinical trials**, and bring together the results of a number of trials which look at the same illness or condition (this is called a **systematic review** or **meta-analysis**). Staff also undertake **observational studies** to evaluate the impact of new **interventions** in routine care, and conduct methodological research.

The MRC Clinical Trials Unit employs around 200 staff based in Holborn and is currently co-ordinating around 60 trials and meta-analyses. There are around 10 PhD students based at the unit, and students are often registered at UCL with the Department of Infection and Population Health.

The unit's research areas are described in more detail here: http://www.ctu.mrc.ac.uk/research_areas.aspx,

and profiles for some of the staff who can act as PhD supervisor are given here: http://www.ctu.mrc.ac.uk/about_us/senior_staff_profiles.aspx

The **Centre for Health Informatics and Multiprofessional Education (CHIME)** is situated in UCL Medical School's Whittington Campus (Archway) in North Central London. It is an innovative and dynamic centre, bringing together a wide-ranging programme of research into health informatics, and associated issues of service development, alongside undergraduate and postgraduate teaching programmes on information, quality and governance for health. CHIME is founded on the principle that close contact with real healthcare requirements and services must underpin its research and teaching and our work is grounded in the implementation of practical information systems and services. We have a long track record in national (Research Councils, Department of Health) and international (European Framework Programme) research in areas such as electronic health records, image analysis and decision support and information security, as well as international standards development.

General

MRC Studentships cover UK home fees and full stipend for three years. The stipend is currently £15,740 pa. Two studentships will be available in 2013.

Applications: Applications should include a CV, an indication of the area of research for which the candidate is applying, and a statement of research experience and interests. Electronic submissions are preferred. Please include a contact telephone number and an email address. Applications should be addressed to: Andreas Opitz, Department of Infection and Public Health, University College London, Mortimer Market, London WC1E 6BT (a.opitz@ucl.ac.uk).

Application deadline: **5.00pm Friday 1 February 2013.**

If you wish to discuss possible research topics and opportunities, please contact Dr Andrew Copas (a.copas@ucl.ac.uk, 020 3108 2062) for studentships in the Department of Infection and Population Health or at the MRC Clinical Trials Unit, Dr Elizabeth Murray (elizabeth.murray@ucl.ac.uk, 020 7794 0500, internal x36747) for studentships in the Department of Primary Care & Population Health or Dr Anne McMunn (020 7679 1730, a.mcmunn@ucl.ac.uk) regarding studentships in the Department of Epidemiology & Public Health, Dr Nora Pashayan (n.pashayan@ucl.ac.uk, 020 3108 3255) regarding studentships in the Department of Applied Health Research.

Interviews: It is hoped that interviews will be held in the last week of February 2013.

Academic references will be taken up for all short-listed candidates and travel costs will be reimbursed up to the equivalent of the most economical train/air fare available within the UK.