



Nuffield Department of Population Health

Job description and selection criteria

Job title	Researcher in Health Economics
Division	Medical Sciences Division
Department	Nuffield Department of Population Health
Location	Old Road Campus, Headington, Oxford
Grade and salary	Grade 7: £32,817 - £40,322 per annum
Hours	Full time Part time ($\geq 50\%$ FTE) may be considered
Contract type	Fixed term until August 2022 in the first instance
Vacancy reference	148841

Introduction

The Health Economics Research Centre (HERC)

HERC is a thriving group of health economists and analysts, with a varied and innovative research programme. HERC at present consists of around 30 health economists/scientists, ten DPhil students and 3 administrators, plus research associates and senior visiting fellows. HERC has a well-established reputation as a centre of excellence in health economics.

HERC staff are involved in a wide range of methodological and applied research projects, both national and international, that currently emphasise the methodology and application of economic evaluation to health interventions, disease modelling, outcome measurement and valuation, econometric analyses of large and complex longitudinal datasets, assessment of socio-economic driven inequalities in various disease areas, economic assessment of novel genomic technologies, health care decision making, the economics of antimicrobial resistance and COVID-19, and health systems evaluation.

Staff also undertake undergraduate and graduate supervision and teaching. For example, HERC contributes to the Oxford University MSc in Global Health Science and Epidemiology, a one-year, full-time course, which aims to promote in-depth understanding of global health issues by study of a range of disciplines in biomedical and social sciences. Other teaching activities include the successful 'Applied Methods of Cost-effectiveness Analysis' course, which attracts an international enrolment and has been run in Oxford, Australia and Hong Kong. Further information on HERC is available from our website (<http://www.herc.ox.ac.uk>).

Nuffield Department of Population Health

The Nuffield Department of Population Health (NDPH) provides an excellent environment for multi-disciplinary research and teaching and in the 2014 REF (Research Excellence Framework) was ranked first for research in the area of public health, health services and primary care. NDPH has over 500 staff working in a number of world-renowned population health research groups, including the Clinical Trial Service Unit and Epidemiological Studies Unit (CTSU), the Cancer Epidemiology Unit (CEU), the National Perinatal Epidemiology Unit (NPEU) and other groups working on public health, health economics, ethics and health record linkage. It is also a key partner in the new Oxford University Big Data Institute.

The wide range of opportunities for research within the department includes access to very large datasets from clinical trials, meta-analyses and epidemiological cohorts. These research programmes are well supported by scientific teams which include clinicians, epidemiologists, statisticians, analyst programmers and research coordinators, and by excellent computing and laboratory facilities.

In addition to its research activities, the Department is home to the [MSc in Global Health Science and Epidemiology](#), [MSc in Clinical Trials](#), [MSc in Precision Cancer Medicine](#), and [PG Certificate in Statistics and Epidemiology](#). Students also come to undertake research for [DPhil degrees](#). Teaching is provided for undergraduates reading for Medicine and for Public Health doctors in specialist training.

For more information please visit: www.ndph.ox.ac.uk

The Medical Sciences Division

The Medical Sciences Division is an internationally recognised centre of excellence for biomedical and clinical research and teaching, and the largest academic division in the University of Oxford.

World-leading programmes, housed in state-of-the-art facilities, cover the full range of scientific endeavour from the molecule to the population. With our NHS partners we also foster the highest possible standards in patient care.

For more information please visit: <http://www.medsci.ox.ac.uk>

About the University of Oxford

Welcome to the University of Oxford. We aim to lead the world in research and education for the benefit of society both in the UK and globally. Oxford's researchers engage with academic, commercial and cultural partners across the world to stimulate high-quality research and enable innovation through a broad range of social, policy and economic impacts.

We believe our strengths lie both in empowering individuals and teams to address fundamental questions of global significance, while providing all our staff with a welcoming and inclusive workplace that enables everyone to develop and do their best work. Recognising that diversity is our strength, vital for innovation and creativity, we aspire to build a truly diverse community which values and respects every individual's unique contribution.

While we have long traditions of scholarship, we are also forward-looking, creative and cutting-edge. Oxford is one of Europe's most entrepreneurial universities. Income from external research contracts in 2016/17 exceeded £564m and we rank first in the UK for university spinouts, with more than 130 companies created to date. We are also recognised as leaders in support for social enterprise.

Join us and you will find a unique, democratic and international community, a great range of staff benefits and access to a vibrant array of cultural activities in the beautiful city of Oxford.

For more information, please visit www.ox.ac.uk/about/organisation.

Overview of the role

Due to continuing success in attracting research funding, HERC wishes to appoint two full-time (or more if part-time) researchers to join the existing group. The successful candidates will have some research experience and will be attracted to working in the research environment described above. The post-holders will each work on one or more of the projects listed in the 'Research project areas' section below and will also be expected to engage in HERC's teaching and other activities.

The posts will be supported by research grants funded principally from the National Institute for Health Research (NIHR), the NIHR Oxford Biomedical Research Centre, the Medical Research Council, the UK Department of Health and others on a more ad hoc basis. The people appointed will work for the majority of their time under the supervision of one or more of the relevant project managers (Dr Helen Dakin; Dr Laurence Roope; Dr Elizabeth Stokes; Assoc Prof Apostolos Tsiachristas; Assoc Prof Mara Violato), but may be asked to assist other Principal Investigators as and when required. We are looking for outstanding candidates with the drive and determination to develop new and existing skills in the health economics field, to work successfully as part of a project team, and subsequently to develop and to pursue their own areas of interest.

Responsibilities/duties

Successful applicants will assist with several projects involving different diseases and different areas of health economics. The roles will typically involve some or all of the following:

- Manage own academic research and administrative activities. This involves small scale project management, to co-ordinate multiple aspects of the work and to meet deadlines;
- Adapt existing and develop new research methodologies;
- Prepare health economics analysis plans for studies and contribute to the overall planning of studies;
- Conduct detailed analysis of datasets from a variety of sources (e.g. randomised controlled trials; large secondary datasets);
- Contribute ideas for new research projects;
- Develop ideas for generating research income, and present detailed research proposals to senior researchers;
- Collaborate in the preparation of research publications, and book chapters;
- Present papers at conferences or public meetings;
- Act as a source of information and advice to other members of the group on methodologies or procedures;
- Represent the research group at external meetings/seminars, either with other members of the group or alone;
- Carry out collaborative projects with colleagues in partner institutions, and research groups;
- Contribute, as required, to the wider academic activities of the Nuffield Department of Population Health (including teaching, student mentoring or supervision) and participate in appropriate training and quality assurance processes for such roles.

The successful candidate will also have the opportunity to contribute to HERC's varied programme of teaching.

Additionally, the projects will offer the opportunity for successful applicants to develop new skills in different health economic methodological approaches, such as trial-based economic evaluations, data collection through observational studies, and decision-analytic modelling. The post holders will be supported in their career progression and will be encouraged to identify and take forward their own research interests, with a view to eventually developing their own portfolios of work. Subject to passing selection criteria, there may be an opportunity for successful applicants to study for an NDPH DPhil.

Research project areas

Examples of the projects that the successful applicants may be required to work on are listed below:

Co-CAT study: Child Anxiety Treatment in the context of COVID-19: Enabling Child and Adolescent Mental Health Services (CAMHS) to provide efficient remote treatment for child anxiety problems

Funded by NIHR (<https://www.nihr.ac.uk/news/2-million-funding-boost-for-new-research-to-tackle-impact-of-covid-19-on-mental-health/25851>), the Co-CAT study addresses the need for evaluation of innovations in health and social care delivery, prompted by the pandemic, that can be generalised and actioned in the pandemic context. Specifically, this study sets out to mitigate the impact of the COVID19 outbreak on children, families and Child and Adolescent Mental Health Services (CAMHS) by evaluating an innovative, potentially cost-effective, digital intervention for child anxiety problems.

The work involves conducting an economic evaluation alongside a multi-site randomised non-inferiority trial to establish whether a novel online, parent-led cognitive behaviour therapy program (OSI; Online Support and Intervention for child anxiety) is as cost-effective as what CAMHS are currently delivering in the COVID-19 context, under the supervision of Assoc Prof Mara Violato,

Using big data to improve population health and resource allocation for people with diabetes in Malaysia

This project aims to inform public policies concerning diabetes in Malaysia and around the world by building a model that can be used for economic evaluations and policy evaluations tailored to different populations. In this project, we will calibrate the United Kingdom Prospective Diabetes Study Outcomes Model (UKPDS-OM) so that this individual patient simulation model accurately predicts cardiovascular events, life expectancy, costs and QALYs for different populations around the world. We will use the calibrated model to measure the impact and cost-effectiveness of interventions to improve the health of people with diabetes in Malaysia and present the results to the Malaysian Ministry of health.

The work involves using the UKPDS-OM to extrapolate data from international randomised controlled trials and Malaysian observational data. The post-holder will use econometric techniques to explore the extent to which the model predicts observed outcomes in different populations and work with colleagues to calibrate the UKPDS-OM in different populations and build a global version of the UKPDS-OM, under the supervision of Helen Dakin.

Programme of health economics work supporting The NIHR Oxford Biomedical Research Centre (BRC)

The NIHR Oxford BRC undertakes translational research. The overall aim of the Oxford BRC is to translate basic scientific developments and laboratory research into clinical benefits and the clinical setting (from the bench to the bedside). Oxford BRC is divided into 20 themes and four Clusters: Precision Medicine, Technology and Big Data, Immunity and Infection, and Chronic Diseases.

A successful applicant will be required to work on several projects across BRC themes.

Projects that a successful applicant may be required to work on include:

- Estimating the value of research funding. This strand of work is likely to involve: 1) Developing new methods to estimate the value to society and to the economy of investment in biomedical research infrastructure; 2) Developing randomised controlled trials to estimate the impact of research funding on, for example, the career trajectories of researchers.
- Economic issues related to COVID-19. There is likely to be potential to work on a variety of economic issues relevant to the pandemic. These may include, for example, estimating the economic value of a vaccine/treatment; analysing (health) inequalities exacerbated by the pandemic.
- The impact of delirium on inpatient care: for an observational cohort of unplanned hospital admissions in patients aged 70 years and older, assessing the impact of delirium on length of stay, risk of admission and cost.
- Health-related quality of life (HRQoL) in inflammatory bowel disease: assessing HRQoL over time for an observational cohort of patients whose HRQoL is captured fortnightly, assessing the impact of flares and symptoms, and the impact of COVID-19 on anxiety and depression.

Research methods required may include: 1) literature reviews; 2) econometric/statistical analyses; 3) conducting randomised experiments 4) trial-based health economic evaluation; and 5) model-based health economic evaluation.

Selection criteria

Essential

- Hold a degree in a relevant subject and a post-graduate degree in (Health) Economics, (Bio) Statistics, or other quantitative discipline;
- Possess strong data analysis skills and have previous experience in econometric analysis and/or in conducting economic evaluations alongside Randomised Controlled Trials;
- Ability to plan and manage own workload within tight deadlines and maintain high standards under pressure;
- Ability to work independently, effectively, and collaboratively in a multidisciplinary team;
- Previous experience of contributing to publications/presentations;
- Excellent communication skills, including the ability to write for publications, present research proposals and results, and represent the research group at meetings.

Desirable

- A PhD (or equivalent) in a relevant scientific subject;
- Good programming skills in Stata and/or R;
- Research experience in modelling-based health economic evaluations;
- Research experience in other areas of health economics or health technology assessment;

- Experience of writing reports and manuscripts and a publication record in the field (health) economics.

Pre-employment screening

All offers of employment are made subject to standard pre-employment screening, as applicable to the post.

If you are offered the post, you will be asked to provide proof of your right-to-work, your identity, and we will contact the referees you have nominated. You will also be asked to complete a health declaration (so that you can tell us about any health conditions or disabilities so that we can discuss appropriate adjustments with you), and a declaration of any unspent criminal convictions.

We advise all applicants to read the candidate notes on the University's pre-employment screening procedures, found at: www.ox.ac.uk/about/jobs/preemploymentscreening/.

Furthermore, additional pre-employment screening might be required for this post, as such; the successful candidate might be required to undergo criminal record checks/University security screening or other checks.

Working at the University of Oxford

Before submitting an application, you may find it helpful to read the 'Tips on applying for a job at the University of Oxford' document, at www.ox.ac.uk/about_the_university/jobs/research/

If you would like to apply, click on the **Apply Now** button on the 'Job Details' page and follow the on-screen instructions to register as a new user or log-in if you have applied previously. Please provide details of two referees and indicate whether we can contact them now.

You will also be asked to upload a CV and a supporting statement. The supporting statement must explain how you meet each of the selection criteria for the post using examples of your skills and experience. This may include experience gained in employment, education, or during career breaks (such as time out to care for dependants).

Your application will be judged solely based on how you demonstrate that you meet the selection criteria stated in the job description.

Please upload all documents **as PDF files** with your name and the document type in the filename.

All applications must be received by **midday** on the closing date stated in the online advertisement.

Information for priority candidates

A priority candidate is a University employee who is seeking redeployment because they have been advised that they are at risk of redundancy, or on grounds of ill-health/disability. Priority candidates are issued with a redeployment letter by their employing department(s).

If you are a priority candidate, please ensure that you attach your redeployment letter to your application (or email it to the contact address on the advert if the application form used for the vacancy does not allow attachments).

Should you experience any difficulties using the online application system, please email recruitment.support@admin.ox.ac.uk. Further help and support is available from

www.ox.ac.uk/about_the_university/jobs/support/. To return to the online application at any stage, please go to: www.recruit.ox.ac.uk.

Please note that you will receive an automated email from our e-recruitment system to confirm receipt of your application. **Please check your spam/junk mail** if you do not receive this email.

Important information for candidates

Data Privacy

Please note that any personal data submitted to the University as part of the job application process will be processed in accordance with the GDPR and related UK data protection legislation. For further information, please see the University's Privacy Notice for Job Applicants at: www.admin.ox.ac.uk/councilsec/compliance/gdpr/privacynotices/job/. The University's Policy on Data Protection is available at: www.admin.ox.ac.uk/councilsec/compliance/gdpr/universitypolicyondataprotection/.

The University's policy on retirement

The University operates an Employer Justified Retirement Age (EJRA) for all academic posts and some academic-related posts. The University has adopted an EJRA of 30 September before the 69th birthday for all academic and academic-related staff in posts at **grade 8 and above**. The justification for this is explained at: www.admin.ox.ac.uk/personnel/end/retirement/acrelretire8+/.

For **existing** employees, any employment beyond the retirement age is subject to approval through the procedures: www.admin.ox.ac.uk/personnel/end/retirement/acrelretire8+/.

There is no normal or fixed age at which staff in posts at **grades 1–7** must retire. Staff at these grades may elect to retire in accordance with the rules of the applicable pension scheme, as may be amended from time to time.

Equality of Opportunity

Entry into employment with the University and progression within employment will be determined only by personal merit and the application of criteria which are related to the duties of each particular post and the relevant salary structure. In all cases, ability to perform the job will be the primary consideration. No applicant or member of staff shall be discriminated against because of age, disability, gender reassignment, marriage or civil partnership, pregnancy or maternity, race, religion or belief, sex, or sexual orientation.



Benefits of working at the University

Employee benefits

University employees enjoy 38 days' paid holiday, generous pension schemes, travel discounts, and a variety of professional development opportunities. Our range of other employee benefits and discounts also includes free entry to the Botanic Gardens and University colleges, and discounts at University museums. See www.admin.ox.ac.uk/personnel/staffinfo/benefits.

University Club and sports facilities

Membership of the University Club is free for all University staff. The University Club offers social, sporting, and hospitality facilities. Staff can also use the University Sports Centre on Iffley Road at discounted rates, including a fitness centre, powerlifting room, and swimming pool. See www.club.ox.ac.uk and www.sport.ox.ac.uk/oxford-university-sports-facilities.

Information for staff new to Oxford

If you are relocating to Oxfordshire from overseas or elsewhere in the UK, the University's Welcome Service website includes practical information about settling in the area, including advice on relocation, accommodation, and local schools. See www.welcome.ox.ac.uk. There is also a visa loan scheme to cover the costs of UK visa applications for staff and their dependents. See www.admin.ox.ac.uk/personnel/permits/reimburse&loanscheme/.

Family-friendly benefits

With one of the most generous family leave schemes in the Higher Education sector, and a range of flexible working options, Oxford aims to be a family-friendly employer. We also subscribe to My Family Care, a service that provides practical advice and support for employees who have caring responsibilities. The service offers a free telephone advice line, and the ability to book emergency back-up care for children, adult dependents and elderly relatives. See www.admin.ox.ac.uk/personnel/staffinfo/benefits/family/mfc/.

Childcare

The University has excellent childcare services, including five University nurseries as well as University-supported places at many other private nurseries. For full details, including how to apply and the costs, see www.admin.ox.ac.uk/childcare/.

Disabled staff

We are committed to supporting members of staff with disabilities or long-term health conditions. For further details, including information about how to make contact, in confidence, with the University's Staff Disability Advisor, see www.admin.ox.ac.uk/eop/disab/staff.

Staff networks

The University has a number of staff networks including the Oxford Research Staff Society, BME staff network, LGBT+ staff network and a disabled staff network. You can find more information at www.admin.ox.ac.uk/eop/inpractice/networks/.

The University of Oxford Newcomers' Club

The University of Oxford Newcomers' Club is an organisation run by volunteers that aims to assist the partners of new staff settle into Oxford, and provides them with an opportunity to meet people and make connections in the local area. See www.newcomers.ox.ac.uk.