



# Nuffield Department of Population Health

## Job description and selection criteria

<b>Job title</b>	Senior Researcher in Health Economics
<b>Division</b>	Medical Sciences Division
<b>Department</b>	Nuffield Department of Population Health
<b>Unit</b>	Health Economics Research Centre
<b>Location</b>	Old Road Campus, Headington, Oxford
<b>Grade and salary</b>	Grade 8: £39,992 - £47,722 per annum
<b>Hours</b>	Full time (Part time considered)
<b>Contract type</b>	Fixed-term - 2 years in the first instance
<b>Reporting to</b>	Dr Joel Smith
<b>Vacancy reference</b>	133600

## 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 over 20 health economists/scientists, six 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 emphasize the methodology and application of economic evaluation to health interventions, disease modelling, outcome measurement and valuation, economic assessment of novel genomic technologies, health care decision making, 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, 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 data-sets 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](#). 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](http://www.ndph.ox.ac.uk)

### The Medical Sciences Division

The Medical Sciences Division is an internationally recognized 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, and in providing all of our staff with a welcoming and inclusive workplace that supports everyone to develop and do their best work. Recognising that diversity is a great strength, and 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 2014/15 exceeded £522.9m and ranked first in the UK for university spin-outs, with more than 130 spin-off 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](http://www.ox.ac.uk/about/organisation)

## **The Oxford Biomedical Research Centre**

The National Institute for Health Research (NIHR) Oxford Biomedical Research Centre (OxBRC) is based at the Oxford University Hospitals NHS Trust and works in partnership with the University of Oxford. Oxford has long been at the forefront of medical research, including the genetic and molecular basis of disease, advances in neuroscience, and clinical studies in cancer, diabetes, heart disease, stroke and others. Oxford also has one of the largest clinical trial portfolios in the UK. OxBRC undertakes 'translational research', taking laboratory research into a clinical setting. It covers 20 thematic areas: Cancer, Respiratory, Haematology, Genomics, Stroke, Obesity, Neurology, Cardiovascular, Diabetes, Multimorbidity, Gastroenterology, Vaccines, Microbiology, Surgery, Musculoskeletal, Digital Health, Informatics, Molecular Diagnostics, Imaging and Partnerships for Health, Wealth and Innovation. It is one of 20 centres funded by the NIHR in 2017 through a competitively awarded five year grant. In April 2017, OxBRC was awarded funding for another five years following success of OxBRCs in 2007 and 2012. In recognition of OxBRCs outstanding contribution to translational healthcare research, the level of funding since the initial inception has doubled to the current level of £113.7m. Its primary focus is to enable translational research through partnership. The Oxford University Hospitals NHS Trust comprises the John Radcliffe, Churchill, and Horton Hospitals, as well as the Nuffield Orthopaedic Centre. It is one of the largest NHS teaching trusts in the country, provides a

wide range of general and specialist clinical services, and is a base for medical education, training and research.

### **Overview of the Role**

A range of health economic activities are already in place across several OxBRC themes. We now seek to appoint a Senior Researcher (08S) to support and extend the OxBRC economic research portfolio. This research will include simulation methods to model the efficiency of hospital processes, early-phase economic evaluation of new therapeutics as well as applied microeconomic research on person-centred care. The postholder will be encouraged to contribute to existing OxBRC methodological research using existing and novel methodologies. Current examples include Bayesian and machine learning methods for identifying heterogeneous effects, flexible (semi-)parametric methods for modelling healthcare costs, Behavioural and Experimental Economic approaches to inform clinical decision-making during the early-stages of translational biomedical research. There will also be opportunities to develop methodological research which are aligned with the aims of the OxBRC as well as assisting OxBRC theme leads in the mentoring and supervision of junior researchers. The postholder will be based in HERC and report to Dr Joel Smith.

### **Responsibilities/duties**

- Apply modern econometric and statistical methods for early-phase biomedical research within experimental and non-experimental study designs;
- Develop and apply new research methodologies;
- Promote the programme of work nationally and internationally, and disseminate the work and research findings by means of peer-reviewed publications, conference presentations and leading seminars;
- Mentor and support junior members of the research group on specialist methodologies;
- Raise further research funding and write funding applications to develop the programme of research in the longer term;
- Play a part in maintaining and expanding the current economic research activities in OxBRC;
- Represent the research group at external meetings/seminars, either with other members of the group or alone;
- Carry out collaborative research with clinical and academic colleagues in the OxBRC as well as external collaborators and research groups in the UK, Ireland and USA;
- To contribute, as required to the wider academic activities of the Nuffield Department of Population Health (including teaching, student mentoring or supervision, and assessment) and to participate in appropriate training and quality assurance processes for such roles;

## Selection criteria

### Essential

- A doctoral degree in economics, econometrics, biostatistics or a closely related field.
- Evidence of the analysis of large and complex data from experimental and non-experimental health studies.
- Demonstrated knowledge of a range of research techniques and methodologies, including modern econometric, statistical and decision-analytic modelling methods.
- Strong programming skills in R, Stata or similar statistical software packages.
- Excellent interpersonal and communication skills with the ability to communicate economic and statistical concepts to clinical, health and social scientists.
- Ability to work independently, effectively, and collaboratively in a multidisciplinary team.
- Excellent potential to publish in high-ranking peer-reviewed journals.
- Promising capacity for obtaining externally funded research income.

### Desirable

- Experience in Bayesian Econometrics/Statistics and associated software packages.
- Interest in Behavioural and Experimental Economics.
- Expertise in evidence synthesis.

## How to apply

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 <https://www.ox.ac.uk/about/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 should explain how you meet 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 on the basis of 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 departments.*

*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](mailto:recruitment.support@admin.ox.ac.uk). Further help and support is available from [www.ox.ac.uk/about\\_the\\_university/jobs/support/](http://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](http://www.recruit.ox.ac.uk).

Please note that you will be notified of the progress of your application by automatic emails from our e-recruitment system. **Please check your spam/junk mail** regularly to ensure that you receive all emails.

### **Important information for candidates**

#### **Pre-employment screening**

Please note that the appointment of the successful candidate will be subject to standard pre-employment screening, as applicable to the post. This will include right-to-work, proof of identity and references. 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/](http://www.ox.ac.uk/about/jobs/preemploymentscreening/).

#### **The University's policy on retirement**

The University operates an Employer Justified Retirement Age (EJRA) for all academic posts and some academic-related posts. From 1 October 2017, the University has adopted an EJRA of 30 September before the 69<sup>th</sup> 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/revisedejra/revaim/](http://www.admin.ox.ac.uk/personnel/end/retirement/revisedejra/revaim/).

For **existing** employees, any employment beyond the retirement age is subject to approval through the procedures: [www.admin.ox.ac.uk/personnel/end/retirement/revisedejra/revproc/](http://www.admin.ox.ac.uk/personnel/end/retirement/revisedejra/revproc/)

From 1 October 2017, there is no normal or fixed age at which staff in posts at **grades 1–7** have to 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.

The University of Oxford is a member of the [Athena SWAN Charter](#) and holds an institutional Bronze Athena SWAN award. The Nuffield Department of Population Health holds a departmental Silver Athena award in recognition of its efforts to introduce organisational and cultural practices that promote gender equality in SET and create a better working environment for both men and women.



## Benefits of working at the University

### Training and Development

A range of training and development opportunities are available at the University. Further details can be found at [www.ox.ac.uk/staff/working\\_at\\_oxford/training\\_development/index.html](http://www.ox.ac.uk/staff/working_at_oxford/training_development/index.html).

### For research staff only: Support for Research Staff

There is a particularly wide range of support for career development for research staff. Please visit: [www.ox.ac.uk/research/support-researchers](http://www.ox.ac.uk/research/support-researchers) to find out more.

### Pensions

The University offers generous occupational pension schemes for eligible staff members. Further details can be found at [www.admin.ox.ac.uk/finance/epp/pensions/pensionspolicy/](http://www.admin.ox.ac.uk/finance/epp/pensions/pensionspolicy/).

### Information for international staff (or those relocating from another part of the UK)

A wealth of information is available on the University's International Staff website for staff who are relocating to Oxford from abroad, at [www.admin.ox.ac.uk/personnel/staffinfo/international/](http://www.admin.ox.ac.uk/personnel/staffinfo/international/).

### The University of Oxford Newcomers' Club

The Newcomers' Club is aimed at helping partners of newly-arrived visiting scholars, graduate students and academic members of the University to settle in and to meet people in Oxford.

### Transport schemes

The University offers a range of travel schemes and public transport travel discounts to staff. Full details are available at [www.admin.ox.ac.uk/estates/ourservices/travel/](http://www.admin.ox.ac.uk/estates/ourservices/travel/).

### University Club and University Sports Facilities

The University Club provides social, sporting and hospitality facilities. It incorporates a Club bar, a cafe and sporting facilities, including a gym. See [www.club.ox.ac.uk](http://www.club.ox.ac.uk) for all further details.

University staff can use the University Sports Centre at discounted rates, and have the chance to join sports clubs. Please visit [www.sport.ox.ac.uk/oxford-university-sports-facilities](http://www.sport.ox.ac.uk/oxford-university-sports-facilities).

### Childcare and Childcare Vouchers

The University offers quality childcare provision services at affordable prices to its employees. For full details about the services offered, please visit [www.admin.ox.ac.uk/childcare/](http://www.admin.ox.ac.uk/childcare/). **NB: Due to the high demand for the University's nursery places there is a long waiting list.**

The University also offers nursery fee payment schemes to eligible staff as an opportunity to save tax and national insurance on childcare costs. Please visit [www.admin.ox.ac.uk/childcare](http://www.admin.ox.ac.uk/childcare).

### Disabled staff

The University is committed to supporting members of staff with a disability or long-term health condition and has a dedicated Staff Disability Advisor. Please visit [www.admin.ox.ac.uk/eop/disab/staff](http://www.admin.ox.ac.uk/eop/disab/staff) for further details.

### BUPA - Eduhealth

Bupa Eduhealth Essentials private medical insurance offers special rates for University of Oxford staff and their families [www.eduhealth.co.uk/mini-site/](http://www.eduhealth.co.uk/mini-site/).

### All other benefits

For other benefits, such as free entry to colleges, the Botanic Gardens and staff discounts offered by third party companies, please see [www.admin.ox.ac.uk/personnel/staffinfo/benefits/](http://www.admin.ox.ac.uk/personnel/staffinfo/benefits/).