



Job Description

Nuffield Department of Primary Care Health Sciences

Job title	Quantitative Researcher in the Health Impacts of Climate Change
Division	Medical Sciences
Department	Nuffield Department of Primary Care Health Sciences
Location	Radcliffe Primary Care Building, Radcliffe Observatory Quarter, Woodstock Road, Oxford, OX2 6GG
Grade and salary	Grade 7: £32,817 - £40,322 per annum
Hours	Full time (37.5 hours per week)
Contract type	Fixed-term (2 years in the first instance)
Reporting to	Professor Rafael Perera, Director of Medical Statistics and Co-PI (healthcare) in the Future of Cooling Programme
Vacancy reference	BZ21002 (HRIS No. 149248)
Project team	Big Data Group (Primary Care Health Sciences) and Future of Cooling (Oxford Martin School)

The role

The Nuffield Department of Primary Care Health Sciences (NDPCHS) in conjunction with the Oxford Martin School is expanding its team of researchers, data scientists, programmers and statisticians who work with large primary care datasets. This post will be based in the Big Data group of the NDPCHS with a particular focus on understanding the health impacts of climate change in the UK, the likely costs for the NHS, and the use of air conditioning or other cooling practices to reduce the health burden of extreme heat. This position requires solid statistical skills and prior experience in statistical projects in either epidemiology or applied economics.

The post holder will be primarily involved in managing and analysing data arising from different datasets within the NDPCHS, particularly the Clinical Practice Research Datalink – CPRD (an observational database of electronic GP health records for over 59 million patients, including 16 million currently registered patients), and the Oxford Royal College of General Practitioners Health Informatics Data Hub (ORCHID), which is an active research and surveillance unit that collects and monitors data from over 1700 practices (over 17million people) across England and Wales and provides almost real-time data and feedback to contributing practices. As an example of the type of analyses to be carried out, the post holder will use information from



these databases to link it with weather data and make forecasts of the health burden of climate change in the UK using information from general circulation models.

The successful candidate will spend significant time analysing CPRD data as part of an exciting new multi-disciplinary programme on the Future of Cooling based at the Oxford Martin School. The primary goal of the programme is to examine cooling energy demand growth as an integrated system of key social and technical components, and identify and influence the levers by which its current trajectory can be shaped to deliver sustainable development. The research conducted will inform targeted health, energy and climate policy interventions.

The Big Data group of the NDPCHS significantly contributes to teaching within the University, in particular as part of the MSc in Evidence-Based Health Care and MSc in EBHC (Medical Statistics). The successful candidate will have the opportunity to undertake teaching within the University at undergraduate and postgraduate level.

Responsibilities

- Contribute to implementing a thorough research protocol on the health impacts of climate change using CPRD data
- Develop own research ideas in the quantitative analysis of health data
- Data management and manipulation of large and complex databases, including adapting existing methods and developing new approaches
- Develop coding strategies and methods for identifying cases, conditions and/or medication regimes
- Develop research questions within a specific context and conduct research, analysing detailed and complex quantitative data from a variety of sources, and generate original ideas (theoretical and empirical) by building on existing concepts
- Present papers at leading national and international conferences and lead seminars or workshops to disseminate research findings to a range of stakeholders.
- Work closely with the research team to ensure that research outputs have an impact on public policy
- Contribute to design collaborative projects with colleagues in partner institutions and research groups, including collaboration with major international research and policy initiatives in close collaboration with the team
- Contribute to the development and maintenance of Standard Operating Procedures for data provision, data manipulation and management, and archiving and destruction of datasets
- Manage own day-to-day research and administrative activities

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/.

Selection criteria

Essential selection criteria

- Hold or be near to completion of a masters degree or PhD/DPhil in applied economics, statistics, epidemiology, computer science or a related discipline
- Possess an interest in public health and climate change impact assessment
- Hold an in-depth knowledge of working with large, complex datasets
- Expertise in using statistical programming tools such as R and Stata
- Experience of working in healthcare
- Be interested in engaging with interdisciplinary research and collaborations, with the potential to work across disciplinary boundaries
- Be able to work well in a team, working closely with colleagues to deliver research objectives
- Self-motivated with good time-management skills, ensuring tasks and projects are delivered on time
- Excellent IT and communication skills
- Good record keeping and documentation skills

Desirable selection criteria

- Experience of working with large volumes of structured data and database systems, such as Microsoft SQL Server, MySQL and Oracle
- Expertise in using Python and SQL
- Good knowledge of UK health services
- Good knowledge of information governance and training relevant to the handling of UK medical research datasets
- Knowledge of coding systems for electronic healthcare records such as ICD, Read and SNOMED
- Experience or interest in machine learning
- Publication record

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 spin-outs, 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.

Nuffield Department of Primary Care Health Science

The top ranked centre for academic primary care in the UK, we lead world-class research and training to rethink the way healthcare is delivered in general practice and other primary care settings, both across the UK and globally. Integrating evidence and innovation, our main research focus is on the prevention, early diagnosis and management of common illness.

Our research is led by internationally renowned scientists; many of whom are practising GPs, but we also have academics from a range of non-medical disciplines including the social sciences and humanities. We cover the broad range of issues that you might expect to consult your GP about including cardiovascular and metabolic disease, infectious diseases and childhood illness, diet, smoking and cancer. We also focus on understanding and improving the experiences of patients, utilising big data, developing digital health interventions and working internationally. We have methodological expertise in clinical decision making and diagnostics, clinical epidemiology, medical statistics, modelling, qualitative research and the wider application of social science theory and methods to address practical and theoretical challenges in health and care settings. We also have a dedicated in-house Primary Care Clinical Trials Unit.

The department was established in October 1998 (as the Department of Primary Health Care) with the appointment of a foundation chair in general practice. We provide a strong multi-disciplinary training environment, a full programme of academic support and good IT facilities. Our ability to collaborate with other epidemiological and community-based research groups across the University and with GP surgeries locally and nationally enables us to utilise a broad range of relevant expertise into our teaching and research.

The department has recently developed a new stream of clinical research which seeks to improve the conceptual understanding and use of monitoring in a number of chronic diseases. We have an international reputation for developing research methodologies to ensure that research findings have a positive impact on clinical practice.

We are home to the Oxford Centre for Evidence-Based Medicine; the international Cochrane Tobacco Addiction Group which collates and summarises research evidence from across the world to underpin governmental health policies on smoking; the Interdisciplinary Research in Health Sciences research group (which uses both quantitative and qualitative methods to examine the human, organisational and societal issues relating to the delivery of healthcare and the improvement of health services) and the Health Experiences Research Group (HERG), which undertakes qualitative research into the patient experience including the Healthtalk research programme www.healthtalkonline.org through a close working experience with the charity DIPEX. The Department is a founding member of the National Institute for Health Research (NIHR) School of Primary Care Research, houses both the NIHR Collaboration for Leadership in Applied Health Research and Care Oxford and the NIHR Community Healthcare MedTech and In Vitro Diagnostics Co-operative, and leads 3 Themes of the Oxford BRC.

The Nuffield Department of Primary Care Health Sciences holds a departmental Silver Athena SWAN award to recognise advancement of gender equality: representation, progression and success for all.

Our staff are mostly located in the superbly renovated Grade II listed Radcliffe Primary Care Building on the Radcliffe Observatory Quarter (ROQ), the University's most prestigious development site for a generation, and close to the city centre (see <http://www.ox.ac.uk/roq/> for more information). Some staff are located nearby in the Gibson Building at the ROQ and at Eagle House, off Walton Street.

Car parking is very restricted at both sites with only a small percentage of staff being granted an annual parking permit. Bus Pass, Train Pass, bicycle loans and Season Ticket Loan Schemes are all in operation for staff.

The Nuffield Department of Primary Care Health Sciences holds a departmental Silver Athena SWAN award to recognise advancement of gender equality: representation, progression and success for all.

The Nuffield Department of Primary Care Health Sciences currently holds a Gold NUS Green Impact award. Green Impact is an environmental accreditation scheme championed by the National Union of Students and is designed to support environmentally and socially sustainable practice. The department supports sustainability initiatives in the following areas: supporting and leading change; energy; water; materials and waste; sustainable travel; biodiversity and nature; and food.

For more information on the department please visit: <http://www.phc.ox.ac.uk>

Medical Sciences Division

The Medical Sciences Division is an internationally recognised centre of excellence for biomedical and clinical research and teaching. We are 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/>

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 www.ox.ac.uk/about/jobs/supportandtechnical/.

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 on the basis of how you demonstrate that you meet the selection criteria stated in the job description.

If you are applying for a research post and you have had periods of working part-time, please indicate this on your CV or in your supporting statement. This will ensure that any outputs such as publications are fairly judged when considered alongside the expected outputs of full-time workers.

Where posts are advertised full-time, we **may** be able to consider part-time working or job share arrangements depending on the requirements of the role. If you want to work part-time and this option is not expressly stated in the advert or job information, please email hr@phc.ox.ac.uk to enquire whether the role you are applying for might be available on a part-time basis.

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. Incomplete or late applications will not be considered.

Only in exceptional circumstances and with prior agreement can we consider applications submitted via methods other than the on-line recruitment system.

Please note that you will be notified of the progress of your application by automatic e-mails from our e-recruitment system. **Please check your spam/junk mail** regularly to ensure that you receive all e-mails. **We contact all candidates, whether shortlisted for interview or not, so if you have not heard from us, please check your spam/junk folder and then contact us if you have not received a response.**

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/](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.

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** 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.

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.