**Job title** | Data Manager  
---|---  
**Division** | Medical Sciences  
---|---  
**Department** | Nuffield Department of Medicine  
---|---  
**Location** | Li Ka Shing Centre for Health Information and Discovery, Big Data Institute, Old Road Campus, Headington, Oxford, OX3 7LF  
---|---  
**Grade and salary** | Grade 7: £32,236 - £39,609 per annum  
---|---  
**Hours** | Full time  
---|---  
**Contract type** | Fixed-term until 30 June 2021  
---|---  
**Reporting to** | Senior Research Manager  
---|---  
**Vacancy reference** | 137538  
---|---  
**Research topic** | Scientific – Global Burden of Disease  
---|---  
**Principal Investigator / supervisor** | Catrin Moore  
---|---  
**Project team** | Oxford GBD group (BDI)  
---|---  
**Funding partner** | The funds supporting this research project are provided by the Department of Health  
---|---  
---|---  

### 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
Big Data Institute

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

Medical Sciences

The Medical Sciences Division is an internationally recognized 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: www.medsci.ox.ac.uk

Nuffield Department of Clinical Medicine (NDM) …fostering your career in science

The Nuffield Department of Clinical Medicine (NDM) is one of the largest departments of the University of Oxford and is part of the Medical Sciences Division, with responsibility for a significant part of the teaching of clinical students within the Medical School.

NDM has significant financial turnover and complexity, resulting from its diverse research portfolio, its geographical spread and its close links with NHS funding and strategic teams involved in the development and delivery of increasingly integrated clinical research platforms. For more information please visit: http://www.ndm.ox.ac.uk/home

The Nuffield Department of Clinical Medicine has been presented with a Departmental Athena SWAN Silver award in recognition of the commitment made to promote gender equality through our organisational and cultural practices and our efforts to improve the working environment for both men and women. For more information please see our Departmental Athena SWAN pages: https://www.ndm.ox.ac.uk/working-for-ndm/aboutndmatheneswan/
Oxford Big Data Institute (BDI)

The Big Data Institute (BDI), is a newly opened, interdisciplinary research centre located within the University of Oxford’s Old Road Campus. The Institute will combine researchers from genomics, epidemiology and infectious disease alongside those from computer science, statistics and engineering to develop the field of big data as applied to biomedical research. Scientists working in the Institute will form an analytical hub, deeply connected to the wider experimental and clinical community in Oxford and beyond, working to solve some of the major challenges in medical research. The BDI aims to develop, evaluate and deploy efficient methods for acquiring and analysing information at scale and for exploiting the opportunities presented by large-scale studies. The Institute will provide core facilities in high-performance computing and high-capacity data management. When fully occupied it will house over 350 researchers.

For more information please visit: [http://www.bdi.ox.ac.uk/](http://www.bdi.ox.ac.uk/)

Partner Institution for this grant: Institute for Health Metrics and Evaluation (IHME), University of Washington

The Institute for Health Metrics and Evaluation (IHME) is an independent research center at the University of Washington focused on expanding the quantitative evidence base for health. A core research area for IHME is the Global Burden of Diseases, Injuries, and Risk Factors (GBD) enterprise. A systematic, scientific effort to quantify the comparative magnitude of health loss due to diseases, injuries, and risk factors by age, sex, and geography over time, the GBD is the largest and most comprehensive effort to date to measure epidemiological levels and trends worldwide. The GBD's aim is to provide policymakers, donors, and researchers with the highest-quality quantitative evidence base to make decisions that achieve better health.

For more information please visit: [www.healthdata.org](http://www.healthdata.org)

Job Description

Overview of the role

This is an exciting opportunity to join the new Big Data Institute (BDI), based at the University of Oxford. Research at the BDI will be focussed on analysis of big data, and generation of health knowledge and information. The post holder will be based in the BDI, reporting to the Senior Research Manager in the BDI. The grant Principle Investigator (PI) is Professor Simon Hay (Principle Investigator for this grant) based at the Institute for Health Metrics and Evaluation (IHME), University of Washington, Seattle, WA, USA.

The post holder will contribute to The Global Burden of Disease (GBD) Antimicrobial Resistance (AMR) project which is a collaborative grant funded by the UK Department of Health, the Wellcome Trust and the Bill and Melinda Gates Foundation. The grant is in partnership with the Institute for Health Metrics and Evaluation (IHME), University of Washington.
The Global Research AMR (GRAM) project \(^1\) was launched last year at the Call to Action event with the support of the UK Government’s Fleming Fund, the Wellcome Trust and the Bill and Melinda Gates Foundation. The GRAM project objectives are to:

1. Gather and assemble global data on selected bacteria-antibacterial drug combinations;
2. Generate globally comparable AMR burden estimates for those “bug-drug” combinations from 1990 to the present for 195 countries and territories included in the Global Burden of Disease study;
3. Produce maps of AMR burden that will allow policymakers and researchers to tailor future studies and interventions to the local level; and
4. Provide free, public access to study results through interactive data visualizations.

The purpose of the grant is to collect and synthesise data on the burden of disease associated with AMR and ensure that this data is included in the Global Burden of Disease study (GBD). This post holder may also engage in additional projects that arise from collaborative opportunities within BDI.

The post holder will work with data from various sources, including: vital registration, registries, surveys, industry, administrative sources, clinical research, microbiology and clinical databases and scientific literature. The researcher will need to become familiar with global and national patterns in the epidemiology, including fatal and nonfatal outcomes, of these conditions. You will work as a team member to produce estimates of incidence, prevalence, and deaths from 1990 to present by country.

The overall GBD enterprise produces estimates for more than 300 diseases and injuries and more than 70 risk factors for greater than 500 geographic locations. Researchers will be integrally involved in producing, critiquing, improving, and disseminating results. The individual will work with senior research leads and take part in the intellectual exchange about how to improve upon the results and in creating papers and presentations that help share the results with broader audiences. The individual will also be responsible for contributing to papers, presentations, and other materials to help disseminate results.

**Responsibilities**

1. To establish data management processes, systems and operations in the BDI for the GRAM project
2. To manage, transform and curate clinical, epidemiological, microbiological and molecular data in collaboration with other members of the partnership working on the GRAM project.
3. To ensure the accurate and complete submission of study datasets and associated documentation involving direct communication with data contributors from around the
Big Data Institute

4. globe in collaboration with other members of the partnership working on the GRAM project.
5. To extract key study information from published studies, reports or protocols and enter them into the GRAM database, particularly related to estimating excess mortality risks
6. To work with the Oxford GBD group and IHME partners to ensure the data is in the format required for further analyses
7. Collaborate with GBD researchers at Oxford and IHME in further analysis of the data to estimate GBD from AMR
8. To maintain audit trails of data curation
9. To conduct systematic internal verification and consistency of data obtained from various sources
10. To develop and maintain a tracking system to monitor the progress of submitted data through the transformation and curation processes.
11. To train other staff within the group on the data management and transformation processes.

In addition the Data Manager will be expected to undertake any other duties for the completion of the work as appropriate for the grade.

Hazard-specific / Safety-critical duties:
This job includes the following hazards or safety-critical activities which will require successful pre-employment health screening through our Occupational Health Service before the successful candidate will be allowed to start work:

- Travel outside of Europe or North America on University Business

Selection criteria

Essential

- A first degree or higher, in a scientific or health related field
- Experience of data management in infectious diseases (particularly dealing with clinical and microbiology data)
- Experience and strong awareness of the issues around data archiving and data sharing
- Programming skills or a high knowledge level
- Excellent attention to detail in order to deal with and process large and diverse datasets
- Excellent organisational and time-management skills, with the ability to prioritise tasks, adapt to changing demands and manage a complex workload of their own and that of other project members to work together to meet deadlines
- Excellent IT skills including word-processing, presentation software, and/or web tools
- Good data analysis skills and ability to contribute to complex statistical analyses of
Big Data Institute

AMR datasets
- Understanding of a statistical and computational packages (for example R, Stata, Java, C, C++, or Python)
- Excellent verbal and written communication skills, including the ability to communicate with people from multiple disciplines e.g. clinicians, scientists and bioinformaticians as well as communicating with lay audiences.
- Excellent interpersonal skills, including ability to form relationships with key stakeholders.
- Ability to work both as a member of a group and independently using their own initiative and to meet project deadlines.

Desirable
- Experience working on large collaborative projects and in multidisciplinary teams
- Experience of working with relational databases such as MySQL and good understanding of Structured Query Language (SQL)
- Experience of managing and/or working with large databases
- Knowledge and familiarity with infectious diseases, bacterial genetics, antibiotic resistance, and/or other topics in public health linked to infectious diseases.
- Knowledge of issues surrounding Open Data and patient confidentiality
- Experience of web development.
- Experience in clinical research, ideally in developing countries
- Training and mentoring skills and experience in data management

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 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.

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. 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 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/.

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. From 1 October 2017, 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+/

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.
Big Data Institute

Benefits of working at the University

University Club and sports facilities

Membership of the University Club is free for all University staff. The University Club provides 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](http://www.club.ox.ac.uk) and [www.sport.ox.ac.uk/oxford-university-sports-facilities](http://www.sport.ox.ac.uk/oxford-university-sports-facilities).

Information for international staff

The University offers support and advice to international staff, including 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/reimbursement&loanscheme](http://www.admin.ox.ac.uk/personnel/permits/reimbursement&loanscheme).

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](http://www.welcome.ox.ac.uk).

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 to settle into Oxford and to provide them with an opportunity to meet people in the area. See [www.newcomers.ox.ac.uk](http://www.newcomers.ox.ac.uk).

Childcare

The University has excellent childcare services with 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](http://www.admin.ox.ac.uk/childcare).

Family-friendly benefits

The University subscribes to My Family Care service through which staff are eligible to register for emergency back-up childcare and adultcare services, a ‘speak to an expert’ advice service and a wide range of guides and webinars through a website called the Work+Family space. See: [www.admin.ox.ac.uk/personnel/staffinfo/benefits/family/mfc](http://www.admin.ox.ac.uk/personnel/staffinfo/benefits/family/mfc).

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/disability/staff](http://www.admin.ox.ac.uk/eop/disability/staff).
Big Data Institute

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/.

Additional benefits
Staff can enjoy a range of other benefits and discounts, including free entry to the Botanic Gardens and University colleges, and discounts at University museums. See www.admin.ox.ac.uk/personnel/staffinfo/benefits.