### BIG DATA INSTITUTE

<table>
<thead>
<tr>
<th>Job title</th>
<th>Senior Research Manager</th>
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<tbody>
<tr>
<td>Division</td>
<td>Medical Sciences</td>
</tr>
<tr>
<td>Department</td>
<td>Nuffield Department of Medicine</td>
</tr>
<tr>
<td>Location</td>
<td>Big Data Institute, The Li Ka Shing Centre for Health Information and Discovery, Old Road Campus, Headington, OX3 7LF</td>
</tr>
<tr>
<td>Grade and salary</td>
<td>Grade 10: £53,691 - £62,219 p.a (with a discretionary range up to £67,972 p.a)</td>
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<tr>
<td>Hours</td>
<td>Full time</td>
</tr>
<tr>
<td>Contract type</td>
<td>Fixed-term until 30 June 2021 in the first instance</td>
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<tr>
<td>Reporting to</td>
<td>Professor Simon Hay</td>
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<tr>
<td>Vacancy reference</td>
<td>132951</td>
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<tr>
<td>Research topic</td>
<td>The Global Burden of Disease - Antimicrobial Resistance (AMR) project</td>
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<tr>
<td>Principal Investigator / supervisor</td>
<td>Professor Simon Hay</td>
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<tr>
<td>Funding partner</td>
<td>UK Department Of Health, the Wellcome Trust and the Bill and Melinda Gates Foundation</td>
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</table>

### Introduction

**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 2015/16 exceeded £537.4m 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 state-of-the-art building at Oxford University's Old Road Campus, which opened in March 2017. This interdisciplinary research centre focuses on the analysis of large, complex, heterogeneous data sets for research into the causes and consequences, prevention and treatment of disease. To this end, BDI researchers will develop, evaluate and deploy efficient methods for acquiring and analysing information for large clinical research studies. These approaches will be invaluable in identifying the associations between lifestyle exposures, genetic variants, infections and health outcomes around the globe.

Research is conducted in 4 general themes: genomics, population health, infectious disease surveillance, and methodology (including informatics, statistics, and engineering). Big Data methods could transform the scale (breadth, depth and duration) and efficiency (data accumulation, storage, processing and dissemination) of large-scale clinical research. The work of the BDI requires people and projects that span traditional departmental boundaries and scientific disciplines, supported by technical resources to handle the vast quantities of data they generate.

Under the leadership of Professor Gil McVean (Director) and Professor Martin Landray (Deputy Director), the BDI will comprise around 350 researchers (approx. 30 research groups) drawn from a wide range of departments and will form an analytical hub, deeply connected to the wider experimental and clinical community in Oxford and beyond.

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 biomedical big data, and generation of health knowledge and information. The post holder will be based in the BDI, reporting to 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 provide leadership in research management for a joint unit between the BDI and IHME. The post holder plays a leading role in the management of the IHME-BDI unit and has responsibility for the development of its strategic direction and management. Initially, the role will focus on The Global Burden of Disease - 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 and work on other related projects as they are developed over time. The purpose of the grant is to collect and synthesise data on the burden of disease associated with AMR, ensure that this data is included in the Global Burden of Disease study (GBD), and map the prevalence and incidence of selected bacteria-antibacterial drug combinations at the highest geographic resolution possible. The role will also focus on a growing portfolio as the unit gains additional projects and funding sources.

The individual will work closely with leadership at the BDI, and with leadership at IHME who in alignment with goals jointly determined with senior leadership at within the BDI and at IHME. A recognised authority in their field, the post holder must bring intellectual agility and deft strategic planning skills to bear in providing leadership in resource allocation and management to meet high-pressure deadlines for research deliverables. While leading the research group, the post holder will delegate ongoing responsibilities, contribute to the unit’s overarching vision and manage staff performance.
Position Summary and Complexities

This position will be a key player in the coordination of the partnership between the BDI and IHME, driving forward the growth of the unit at Oxford in strategic alignment with the objectives of the BDI, IHME, and the collaboration as a whole. Initially, the position will focus on the newly awarded AMR (anti-microbial resistance) project. There is a strong desire by both BDI and IHME to develop additional projects and seek additional funding together. This position will help to drive the strategic direction of those efforts. This association is a unique partnership that brings together two global leaders in the field.

IHME and the BDI have chosen to form a joint unit to capitalize on their mutually complementary expertise in tackling large-scale issues such as the GBD, spatio-temporal analyses, and forecasting and to build upon their extensive networks of collaborators, funders, and policymakers. Researchers in the BDI have pioneered innovative geospatial modelling techniques to develop extremely high-resolution maps of key health outcomes over space and time. IHME is dedicated to providing rigorous scientific measurements of the world’s health problems. There is a clear benefit to working closely with a variety of partners and in forging stronger ties with leadership of a select set of funders. The AMR initiative represents the first of hopefully many specific projects that serve this joint mission. The AMR initiative will map incidence and prevalence of select bacteria-antibacteria drug combinations and will generate estimates of these combinations incorporated into the overall Global Burden of Disease framework. Given this ambitious mandate, the Senior Research Manager will need to navigate a significant breadth of intellectual expertise, learn new concepts, and agilely communicate to others about complex scientific results and their drivers.

The individual must become astutely familiar with analytic techniques and their application. You will need to be able to navigate and present complex scientific findings, summarise key goals of projects, and translates those goals into implementation plans. You will be a key emissary for the portfolio, expected to directly engage with collaborators, seek out new opportunities for uptake of the results amongst government and non-governmental actors, and to formulate funding proposals for new activities that can help extend the scope and influence of the work. He/she must be adept at facilitating communication among people with varying degrees of experience from a variety of cultural settings and disciplines. You will be responsible for financial management, human resources, and overall operational management of the unit. Overall, the Senior Research Manager will be a critical member of an agile, dynamic team. This position is contingent on project funding availability. You will often work fairly independently, enhancing the accountability and responsibility of the position. As the senior-most staff member outside of faculty at the BDI working on the collaboration with IHME, the position holds great sway over the future success of the collaboration. The strategic planning, opportunity assessment, and execution of both the science and efforts to expand the resource base carried out by this individual will be pivotal to the collaboration’s success.

Responsibilities/duties

- Act in a senior leadership role to initiate and implement a long-term interdisciplinary research collaboration between the BDI and the Institute for Health Metrics and Evaluation. The initial focus will be on anti-microbial resistance, but the express goal is to expand beyond this one topic while emphasizing joint expertise between BDI and IHME in geospatial analysis and the Global Burden of Disease.

- Develop an astute understanding of the material presented in journal articles, policy reports, and presentations that result from the unit’s projects, in particular those related to the Geospatial Analysis and Global Burden of Disease portfolios.
• Adeptly comprehend the major intellectual underpinnings and results of the Geospatial Analysis portfolio and its complementary intersection with the Global Burden of Disease enterprise to understand how the results and factors of the data and analysis inter-relate with one another.

• Demonstrate a complete understanding of how methods and analytic techniques map to project deliverables, and be agile in navigating and overcoming the challenges that can occur in development and production of the intellectual enterprise.

• Ensure the delivery to deadline of key analytic outputs and agreed products and their release publicly.

• Set the strategic direction for and manage multiple complex, multi-disciplinary projects, including management of intellectual resources, budgets, and staff.

• Supervise and mentor staff, including professional and academic staff. Set their goals and assess their progress. Mentor their professional and intellectual development.

• Ensure smooth operational support and functioning for the unit, integrated in the routines and systems of both BDI and IHME as appropriate. Develop and implement mechanisms to enhance the collaboration between BDI and IHME, promote strong communication, and identify ways to leverage joint skills and expertise to mutual benefit.

• Generate research income through proposal seeking and writing and promote the research activities of the BDI and IHME collaboration. Chart the strategic direction of the research and the collaboration’s growth with senior leadership and reflect strategic plans in the funding proposals.

• Identify opportunities to engage with potential collaborators. Formulate and implement plans to increase the impact and enhance the value of the outputs of the unit with key audiences.

• Contribute to writing reports, articles, and presentations.

• Present high-level strategic and scientific information to external audiences as a way to promote the collaboration’s aims to external audiences and a wide variety of stakeholders, including donors, policymakers, and other researchers.

Selection criteria

Essential

• PhD or Master’s degree plus significant experience in a relevant field such as social sciences or management.

• Provide evidence have managed work streams that resulted in high-impact publications.

• Experience of leading strategic planning for research programmes and other multidisciplinary endeavours.
• Experience of managing research projects and staff including demonstrated ability to think independently, be flexible, and juggle multiple priorities. Proven success managing and leading dynamic teams.

• Demonstrated outstanding intellectual capability and knowledge of global health and development issues.

• Analytically perceptive.

• Must exhibit strong desire and ability to learn intellectual content to facilitate highly complex scientific projects.

• Demonstrated record of oral and written communication skills with multiple audiences.

• High-level relationship management skills are critical to communicate with stakeholders at multiple levels, including the donor, researchers, field site representatives, administrators, and other external audiences.

• Excellent interpersonal skills; a cooperative team player, energetic, able to develop productive relationships with colleagues and external collaborators.

• Experience in one or more of the following: coordinating computational and analytic processes; designing and giving training in the social sciences; coordinating systematic reviews and other research-related tasks; facilitating research production activities; organizing and assessing data and results on a large scale.

• Must be able to work independently, take multiple priorities and translate them to completion through expert planning, while coordinating resources needed to meet deadlines.

• Willingness to travel occasionally, including at least 4 trips annually to Seattle for key meetings, to be determined jointly with the unit’s leadership.

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_the_university/jobs/professionalandmanagement

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.
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/.

**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.
Benefits of working at the University

University Club and sports facilities
The University Club provides social, sporting and hospitality facilities. It incorporates a bar, café and sporting facilities, including a gym. 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 international staff (or those relocating from another part of the UK)
If you are relocating to Oxfordshire from overseas, or elsewhere in the UK, the University's International Staff website includes practical information related to moving to and settling in Oxford such as advice on immigration, relocation, accommodation, or registering with a doctor. See: www.internationalstaffwelcome.admin.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/

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.

Family-friendly benefits
The University subscribes to My Family Care (www.admin.ox.ac.uk/personnel/staffinfo/benefits/family/mfc/) and staff are eligible to register for emergency back-up childcare and adultcare services, a 'speak to an expert' phone line and a wide range of guides and webinars through a website called the Work + Family space.

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

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/

Other benefits
Staff can enjoy a range of other benefits such as free visitor access to the University's colleges and the Botanic Gardens as well as a range of discounts. See www.admin.ox.ac.uk/personnel/staffinfo/benefits