

Job Title:	Research Assistant or Associate
Department/School/Faculty:	Infectious Disease Epidemiology, Public Health, Medicine
Campus location:	St Mary's Campus (Paddington)
Job Family/Level:	Research family, Research Assistant or Research Associate
Responsible to:	Dr Jeffrey Eaton
Key Working Relationships (internal):	Lead investigator, HIV Inference Group
Key Working Relationships (external):	Centre for Infectious Disease Epidemiology and Research, University of Cape Town Health Economics and Epidemiology Research Office (HE ² RO), University of Witwatersrand Human Sciences Research Council (HSRC) South Africa National Department of Health South Africa National AIDS Control Council (SANAC) US CDC and USAID South Africa
Contract type:	Full time, fixed term for 2 years in the first instance

Purpose of the Post

We seek an outstanding researcher for a project to develop district-level HIV estimates and modelling for South Africa. The position is part of Project Liganisa, a collaboration of University of Cape Town, the Health Economics and Epidemiology Research Unit at Wits University, and Imperial College London to produce estimates, modelling, and economic analysis that support HIV policy and programming in South Africa.

The post holder will lead development of new Bayesian spatio-temporal statistical models and infectious disease models of HIV at district level. This work will involve analysis, triangulation, and visualisation of HIV surveillance and programme data, and collaborating with project partners, collaborators, and national stakeholders to analyse and disseminate model results.

Project results will input directly to HIV policy processes in South Africa, published in peer-reviewed journals with methodological and substantive focus, and disseminated by the website <https://www.hivdata.org.za>.

The post holder will be a member of the HIV Inference Group within the MRC Centre for Global Infectious Disease Analysis at Imperial College London. The group comprises a diverse group of researchers and research software engineers in the School of Public Health and Department of Mathematics focused on improving the methods, data, and tools that quantify the global HIV epidemic and the demographic impacts of HIV. The group hosts the secretariat for the UNAIDS Reference Group on Estimates, Modelling, and Projections (www.epidem.org), an international technical advisory group providing expert guidance on the methods and data for responding to the global HIV epidemic, and develops and maintains mathematical models and software tools used by national HIV programmes to produce official HIV statistics (<https://hivtools.unaids.org/>).

The MRC Centre (<https://www.imperial.ac.uk/mrc-global-infectious-disease-analysis>) is an international resource and centre of excellence for research and capacity building for the epidemiological analysis and modelling of infectious diseases. The Centre has built upon a world-leading research group in the Department of Infectious Disease Epidemiology to undertake applied collaborative work with national and international agencies in support of policy planning and response across a wide range of emerging infectious disease threats and global health challenges.

Please be in touch with Dr Jeffrey Eaton (jeffrey.eaton@imperial.ac.uk) for further information about the post

or project details.

Key Responsibilities:

Research Duties

- Analysis, visualisation, and mathematical modelling of national HIV data sources for district-level analysis of HIV indicators in South Africa.
- Development of new statistical and mathematical models to estimate HIV epidemic trends, intervention targets, and coverage.
- Disseminate research findings through peer-reviewed journal publications and presentations at international meetings and conferences.
- Collaborate and present findings to research partners and stakeholders in South Africa.
- To take initiatives in the planning of research
- To direct the work of small research teams
- To identify and develop suitable techniques, and apparatus, for the collection and analysis of data
- To conduct data analysis
- To ensure the validity and reliability of data at all times
- To maintain accurate and complete records of all findings
- To write reports for submission to research sponsors
- To submit publications to refereed journals
- To provide guidance to staff and students
- To attend relevant workshops and conferences as necessary
- To promote the reputation of the Group, the Department and the College
- To provide guidance to PhD Students
- Contribute to bids for research grants
- To conduct and plan own scientific work with appropriate supervision.
- To maintain highly organised and accurate record of experimental Work.
- To actively participate in the research programme of the Group
- To publish in high quality journals and to present data at national and international meetings.
- To participate in Group research meetings and internal seminars.
- To contribute to the smooth running of the group
- Assist in the supervision of undergraduate and postgraduate research students and research assistants as required.
- To comply with the College safety practices and to attend courses on safety when appropriate.
- Any other duties as may be deemed reasonable by Head of group as well as Head of Department/School.

Where Imperial or funder conditions necessitate, you will be required to complete timesheets for your work on projects in a timely manner.

Other Duties

- To undertake any necessary training and/or development
- To undertake appropriate administration tasks
- To attend relevant meetings

Person Specification

Requirements	Essential (E)/ Desirable (D)
Candidates/post holders will be expected to demonstrate the following	
Education	
At Research Assistant level: Masters or equivalent in statistics, infectious disease epidemiology, population biology or a similarly quantitative discipline.	E
At Research Associate level: PhD or equivalent in one of the following areas: statistics, infectious disease epidemiology, population biology or a similarly quantitative discipline.	E
Experience	
Experience with applied Bayesian statistical modelling	E
Experience in analysis and visualisation of diseases surveillance and population health data	E
Research experience in infectious disease transmission dynamics	D
Experience of participating in international research collaborations	D
Experience in communicating research findings to specialist and non-specialist audience	D
Demonstrated interest in global health and HIV epidemiology	D
Knowledge	
Bayesian statistical modelling methods and computational tools	E
Knowledge of R programming language	E
Knowledge of infectious disease transmission dynamics	D
Knowledge of the epidemiology of HIV in sub-Saharan Africa.	D
Knowledge of methods for collection and analysis of common disease survey and surveillance data, especially HIV	D
Skills & Abilities	
Ability to conduct a detailed review of recent literature	E
Ability to develop and apply new concepts	E
Creative approach to problem-solving	E
Excellent verbal communication skills and the ability to deal with a wide range of people	E
Excellent written communication skills and the ability to write clearly and succinctly for publication	E
Ability to organise own work with minimal supervision	E
Ability to prioritise own work in response to deadlines	E
Advanced computer skills, including word-processing, spreadsheets and the Internet	E
Ability to direct the work of a small research team and motivate others to produce a high standard of work	E
Other	
Flexible attitude towards work	E
Discipline and regard for confidentiality and security at all times	E
Willingness to undertake any necessary training for the role	E
Willingness to travel both within the United Kingdom and abroad to conduct research and attend conferences	E
Willingness to work out of normal working hours (including weekends) if the requirements of the project demand	E

Please note that job descriptions cannot be exhaustive and the post-holder may be required to undertake other duties, which are broadly in line with the above key responsibilities.

Imperial College is committed to equality of opportunity and to eliminating discrimination. All employees are expected to follow the [7 Imperial Expectations](#) detailed below:

- 1) Champion a positive approach to change and opportunity
- 2) Encourage inclusive participation and eliminate discrimination
- 3) Communicate regularly and effectively within and across teams
- 4) Consider the thoughts and expectations of others
- 5) Deliver positive outcomes
- 6) Develop and grow skills and expertise
- 7) Work in a planned and managed way

Employees are also required to comply with all College policies and regulations paying special attention to:

- Confidentiality
- Conflict of Interest
- Data Protection
- Equal Opportunities
- Financial Regulations
- Health and Safety
- Information Technology
- Smoking
- Private Engagements and Register of Interests

They must also undertake specific training and assume responsibility for safety relevant to specific roles, as set out on the [College Website Health and Safety Structure and Responsibilities](#) page.

The College is a proud signatory to the San-Francisco Declaration on Research Assessment (DORA), which means that in hiring and promotion decisions, we evaluate applicants on the quality of their work, not the journal impact factor where it is published. For more information, see <https://www.imperial.ac.uk/research-and-innovation/about-imperial-research/research-evaluation/>

The College believes that the use of animals in research is vital to improve human and animal health and welfare. Animals may only be used in research programmes where their use is shown to be necessary for developing new treatments and making medical advances. Imperial is committed to ensuring that, in cases where this research is deemed essential, all animals in the College's care are treated with full respect, and that all staff involved with this work show due consideration at every level. <http://www.imperial.ac.uk/research-and-innovation/about-imperial-research/research-integrity/animal-research/>

We are committed to equality of opportunity, to eliminating discrimination and to creating an inclusive working environment for all. We therefore encourage candidates to apply irrespective of age, disability, marriage or civil partnership status, pregnancy or maternity, race, religion and belief, gender identity, sex, or sexual orientation. We are an Athena SWAN Silver Award winner, a Disability Confident Leader and a Stonewall Diversity Champion.

March 2021