LONDON SCHOOL OF HYGIENE & TROPICAL MEDICINE

IT DEVELOPER AND DATABASE MANAGER

GENERAL INFORMATION

The London School of Hygiene & Tropical Medicine

The London School of Hygiene & Tropical Medicine is a world-leading centre for research and postgraduate education in public and global health. Our mission is to is to improve health and health equity in the UK and worldwide; working in partnership to achieve excellence in public and global health research, education and translation of knowledge into policy and practice.

Founded in 1899, the School has expanded in recent years at its two main sites on Keppel Street and Tavistock Place. Our staff, students and alumni work in more than 150 countries in government, academia, international agencies and health services. Research income has grown to more than £110 million per year from national and international funding sources including UK government and research councils, the European Union, the Welcome Trust, Gates Foundation and other philanthropic sources. The School's multidisciplinary expertise includes clinicians, epidemiologists, statisticians, social scientists, molecular biologists and immunologists, and we work with partners worldwide to support the development of teaching and research capacity.

Our education provision has expanded to more than 1,000 London-based Master's and Research students, 3,000 studying postgraduate courses by distance learning, and 1,000 each year on short courses and continuous professional development. Our free online courses (MOOCs) are studied by more than 30,000 participants globally.

The School performs well in various global university league tables. In the US News Best Global Universities Ranking 2017, we are ranked sixth in the world (together with Oxford University) in the fields of social sciences and public health. In the 2016 CWTS Leiden Ranking, the School was ranked fifth in the world for research impact across all disciplines, based on the share of institutions' outputs within the top 1% of papers by citation in all areas of science and independent of size of output.

The School was named University of the Year 2016 by Times Higher Education, in recognition of our response to the Ebola epidemic. The School is a member of the M8 Alliance of Academic Health Centre, Universities and National Academies, the Association of Schools of Public Health in the European Region, and the Consortium of Universities for Global Health.

FACULTY INFORMATION

The Faculty of Epidemiology & Population Health (EPH) houses a large number of epidemiologists, demographers, statisticians and nutritionists working on issues of major public health importance in the UK and globally. EPH has approximately 400 staff members organised into four research departments.

Department of Infectious Disease Epidemiology
Department of Medical Statistics
Department of Non-communicable Disease Epidemiology
Department of Population Health

The Faculty has a teaching programme consisting of ten MSc courses: Epidemiology, Demography

and Health, Medical Statistics, Public Health for Development (run jointly with the Faculties of Infectious & Tropical Diseases and Public Health & Policy), Nutrition for Global Health, Reproductive & Sexual Health Research, Veterinary Epidemiology (run jointly with the Royal Veterinary College), Global Mental Health (run jointly with Kings College London - Institute of Psychiatry) and the Distance Learning courses in Epidemiology, Clinical Trials and Demography in Health. The Faculty also has approximately 120 research students studying for an MPhil, PhD or DrPH degree. The Dean of Faculty is Professor John Edmunds.

The portfolio of duties outlined below will vary in accordance with the detailed expectations of the role (attached), which may be varied from time to time, and agreed at your annual Performance and Development Review (PDR).

LOCATION-SPECIFIC INFORMATION

Hararghe Health Research partnership

Haramaya University (HU) and London School of Hygiene & Tropical Medicine (LSHTM) entered into dialogue in 2016 to establish a collaborative research partnership including delivery of the Child Health, Pregnancy and Mortality Prevention Surveillance (CHAMPS) programme in Ethiopia. The partnership built on the strengths of HU's demographic surveillance sites in Harar and Kersa and its relationship with Hiwot Fana Hospital, and LSHTM's world class expertise in public and international health. The partnership has expanded to include research projects with other collaborators and funders, including the Welcome Trust. To reflect its geographical base, focus on health research, and the relationship between Haramaya University and the London School of Hygiene & Tropical Medicine, the collaborative research programme is known as the Hararghe Health Research partnership (HHR).

CHAMPS

The CHAMPS Network (www.champshealth.org) has a global vision to provide accurate, timely and reliable data on the causes of death and sickness for children under five from locations with high mortality and morbidity. CHAMPS currently operates in seven sites – six in sub-Saharan Africa and in Bangladesh. Emory University in Atlanta, USA, coordinates the CHAMPS Network, with funding from the Bill & Melinda Gates Foundation.

HHR IT provision

HHR is based in the College of Health and Medical Sciences, in Harar, which is part of Haramaya University. Existing infrastructure is limited, and needs to be developed to support a platform of surveillance and research. To support this we have undertaken a scoping exercise with IT experts from KEMRI Welcome Trust Research Programme (KWTRP) in Kenya, resulting in a detailed specification for IT hardware, software and support services which are currently being procured; and a satellite license has been applied for to allow installation of a back-up system to ensure reliable internet connectivity; KWTRP has also shared its expertise in integrated demographic, clinical and laboratory surveillance systems. In addition the CHAMPS Program Office team has a strong informatics team, and there will be ongoing dialogue between the Program Office and all CHAMPS sites to ensure consistent, timely and high quality data exchange with robust IT systems to support this.

JOB DESCRIPTION

Job Title:	**IT Developer and Database Manager**
Department:	Infectious Disease Epidemiology
Faculty:	Epidemiology and Population Health
Location:	Harar, Ethiopia
FTE:	1.0 (part-time options will be considered)
Grade:	Professional Support Grade 6
Accountable to:	Anna Seale
Job Summary:	The IT Developer and Database Manager is a key role in the LSHTM collaboration with Haramaya University (HU) in Eastern Ethiopia, known as the *Hararghe Health Research partnership* (HHR). A programme of research is being developed between the two Universities, based on the initial investment of the Bill & Melinda Gates Foundation in the Child Health and Mortality Prevention Surveillance (CHAMPS) project. CHAMPS includes streams of work for social science, clinical surveillance, microbiology and pathology. An international standard laboratory has been set-up on-site to support this work. The post holder will lead IT infrastructure development, software programming, database development and data management in partnership with Haramaya University senior IT staff.

Main Activities and Responsibilities

Communication
1. Communicate the HHR IT development plan to HU IT staff and project staff as appropriate, providing clear information and guidance to staff whose work it impacts.
2. Communicate relevant IT and data issues to the Principal Investigators and site leads, giving advice for action.
3. Oversee the design of reports from data collected, including verification error reports, comments reports, constraints reports and lists of data collection problems experienced, and ensure that these are accurate and distributed in a timely manner.

Teamwork and motivation
1. Provide leadership, direction and professional supervision with respect to Information Technology services to support the work of HHR. This includes IT infrastructure, programming and database development and management.
2. Support design and maintenance of updated data dictionaries and oversee others to carry out data review, validation including discrepancy checking and cleaning and report generation of records generated from the databases.

Liaison and Networking
1. Liaise with the global CHAMPS IT team to elevate issues to the CHAMPS Program Office at Emory University as necessary.
2. Contribute to CHAMPS network discussions as they pertain to IT infrastructure, systems and data management through liaising with colleagues at other CHAMPS sites and with specialist members of the CHAMPS Program Office team.

Service Delivery
1. Produce an IT development plan for HHR, building on existing IT infrastructure and documentation, for the continued improvement and management of the HHR IT

architecture and services.

2. Oversee implementation of improved IT infrastructure, supporting procurement of appropriate equipment as required.
3. Guide the software programmers to develop appropriate databases for project activities, working towards an integrated data management platform that spans demographic, laboratory and clinical activities.
4. Oversee combining of databases to implement integrated data collection across demographic, clinical and laboratory activities. Includes managing systems and tools for collecting, entering, editing, cleaning, storing, archiving, retrieving, organizing, and transferring data.

Decision Making
1. Advise on the assessment and selection of qualified external suppliers of IT equipment in and out of country.
2. Identify any gaps in IT staffing for the research work and participate in recruitment of additional IT staff through Haramaya University as required.

Planning and Organizing
1. Apply appropriate project management tools to IT projects and update the overarching project management plan with IT activities.
2. Provide expertise in the development of IT budget proposals for the research group.
3. Oversee the creation and management of standard operating procedures (SOPs).

Initiative and Problem solving
1. Manage risk and ensure that solutions to problems are implemented in line with change control processes.
2. Ensure the organization's data remains secure by keeping up to date on the latest cyber security threats and finding ways to guard against them at organizational level.

Analysis and Research
1. Oversee the development and testing of new software based on project needs.
2. Contribute to project planning and development discussions, and to the academic life of the research group.

Sensory and physical demands
1. The post holder will be working extensively with a visual display unit in their daily work.

Work environment
1. The post is based at the College of Health and Medical Sciences of Haramaya University in Ethiopia and will involve local travel between the college and main University Campus.
2. Limited international travel may be required to attend relevant training and CHAMPS network meetings.

Pastoral care and welfare
1. The post holder is expected to act in a supportive, caring and respectful manner towards colleagues and collaborators based at Haramaya University.

Team development
1. Build capacity amongst the College of Health and Medical Sciences Information Technology staff and staff working on projects within HHR, including conducting an IT skills assessment to determine training and recruitment needs.

Additional information

Generic duties and responsibilities of all LSHTM employees

This job description reflects the present requirements of the post but may be altered at any time in the future as duties and responsibilities change and/or develop providing there is full consultation with the post-holder.

The post-holder will carry out any other duties, tasks or responsibilities as reasonably requested by the line manager, Dean of Faculty, Head of Department or Director of Professional Service.

The post holder will be responsible and accountable for ensuring all School policies, procedures, Regulations and employment legislative requirements are adhered to including equality and diversity and health and safety.

This job description is not a definitive or exhaustive list of responsibilities but identifies the key responsibilities and tasks of the post holder. The specific objectives of the post holder will be subject to review as part of the individual performance review (appraisal) process.

PERSON SPECIFICATION
This form lists the essential and desirable requirements needed by the post holder to be able to perform the job effectively.

Job title: IT Developer and Database Manager
Department/Division: EPH/IDE

Competency		
Education, Qualifications and Training	• Master's degree in Computer Science or similar, or equivalent experience	E
	• Substantial experience of working in IT with data management	E
Experience	• Experience and skills in systems analysis, data management, database design and structures	E
	• Experience in network design and management, development of software-based solutions, creation and maintenance of database management-based systems or web-based applications (please give full details of software in which you have expertise, applications developed and the complexity of data collected and managed)	E
	• Experience in team management (including assessing training needs and delivering training)	E
	• Experience of living and working in a resource poor setting	D
	• Experience of procuring IT hardware, software and services	D
Knowledge	• Knowledge of design, implementation and integration of mobile applications	E
	• Knowledge of networking technologies	D

Personal qualities	• Highly professional approach to work and able to work under pressure to ensure deadlines are met	E
	• Able to work independently and as part of an international team	E
	• Collaborative and flexible approach and ability to work well and effectively with all colleagues and students with varying levels of IT knowledge/experience	D
	• Experience in troubleshooting, and ability to communicate ideas and suggestions clearly	D

SALARY AND CONDITIONS OF APPOINTMENT

This full-time post is funded until 30 June 2019, then subject to grant renewal. The post will be at Grade 6 on the Professional Services, with salary in the range £39,304 to £44,634 per annum. The position is full-time, however part-time options will be considered. The post will be subject to the LSHTM terms and conditions of service. Annual leave entitlement is 30 working days per year, pro rata for part time staff. In addition to this there are discretionary "Director's Days". Membership of the Pension Scheme is available.

Applications should be made on-line via our website at http://jobs.lshtm.ac.uk. Applications should also include the names and email contacts of 2 referees who can be contacted immediately if shortlisted. Online applications will be accepted by the automated system until 10pm of the closing date. Any queries regarding the application process may be addressed to jobs@lshtm.ac.uk. Please quote the reference number.

The supporting statement section should set out how your qualifications, experience and training meet each of the selection criteria. Please provide one or more paragraphs addressing each criterion. The supporting statement is an essential part of the selection process and thus a failure to provide this information will mean that the application will not be considered. An answer to any of the criteria such as "Please see attached CV" will not be considered acceptable.
Please note that if you are shortlisted and are unable to attend on the interview date it may not be possible to offer you an alternative date.

ASYLUM AND IMMIGRATION STATEMENT

Applicants will be required to have the right to work in Ethiopia (or to apply for a suitable work visa).