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**KENYA MEDICAL RESEARCH INSTITUTE  
VACANCY ANNOUNCEMENT**

**POST-DOCTORAL RESEARCH ASSOCIATE**

**Location:** Nairobi

**Grade:** As per KEMRI scheme of service

**Salary:** Based on salary scheme subject to satisfactory performance.

**Hours of Work:** Full Time

**Opening date:** 20<sup>th</sup> June 2022

**Contract duration:** 30<sup>th</sup> May 2027.

**Supervisor:** The Principle Investigator

The Kenya Medical Research Institute (KEMRI) is a State Corporation established in Kenya in 1979 through the Science and Technology (Repealed) Act, Cap 250 of the Laws of Kenya and as currently established and dully accredited to continue to operate as such under the Science Technology and Innovation Act, 2013 as the national body responsible for carrying out research in human health in Kenya. KEMRI's vision is "to be a leading center of excellence in human health research" and its mission is "to improve human health and quality of life through research, capacity building and service delivery"

**[Assistant Principal Research Scientist \(Bio-statistician/ Epidemiologist required for new CLEAN-Air \(Africa\) Global Health Research Unit](#)**

KEMRI in collaboration with the University of Liverpool is directing the new CLEAN-Air (Africa) Global Health Research Unit – a multi-country 5-year public health initiative designed to benefit population health through clean energy funded by the UK National Institute of Health Research. We wish to employ a dynamic, hard-working and experienced post-doctoral researcher with strong quantitative and epidemiological/statistical skills to guide a comprehensive suite of epidemiological studies providing statistical advice on study design, data collection, data analysis

and dissemination. The post will form part of an established team of public health experts based at the Centre for Respiratory Disease Research (CRDR) at KEMRI that will be initiating Africa's first Air Pollution Centre of Excellence.

The post is funded under the CLEAN-Air (Africa) Unit and will contribute to its wider program of research and capacity building activities over a 5 year time frame in Cameroon, Tanzania, Uganda, Rwanda and Cameroon. This program builds on the substantial success of the CLEAN-Air (Africa) Global Health Research Group (funded 2018 to 2022: see [www.cleanairafrica.com](http://www.cleanairafrica.com))

### **Health Research Focus**

Household Air Pollution (HAP) from reliance on polluting domestic fuels (such as kerosene, charcoal and wood) is one of the biggest global environmental health issues. More than 3 billion people across the world rely on these fuels for cooking, heating and lighting and resulting HAP is estimated to be responsible for more than 2.3 million deaths annually. In Kenya, three quarters of the population cook with solid fuels and kerosene and more than 23,000 people die as a result (more deaths than HIV and malaria combined). Together with partners, KEMRI will be leading international efforts to address this burden through research and capacity building initiatives designed to help populations transition to clean household energy (such as electricity and gas). Efforts under the CLEAN-Air (Africa) Unit are designed to contribute to national strategies and policies to meet UN Sustainable Development Goals under their 2030-time horizon (with a specific focus on SDG7 "universal access to clean modern energy for all").

The advertised post is an exciting opportunity for an experienced and accomplished biostatistician/ epidemiologist to join the multi-disciplinary research team at KEMRI CRDR at a time of expansion including establishment of Africa's first Air Pollution Centre of Excellence. This will be a flagship initiative for KEMRI CRDR in accordance with KEMRI's leading position in providing world renowned medical and health research. The new Centre will immediately seek to accelerate understanding of air pollution related disease burden and prevention strategies. The Centre will house state-of-the-art air pollution monitoring equipment to elucidate relationships between exposure to HAP and respiratory disease and cardiovascular health. Research conducted by the Centre, as part of CLEAN-Air (Africa) will also seek to quantify hidden burdens from reliance on polluting solid fuels and kerosene for household energy related to gender inequity (time poverty from fetching firewood) and burns/ scalds (through clinical/ primary care surveillance).

Under NIHR CLEAN-Air (Africa) Unit funding, research and capacity building initiatives will include (i) strengthening national health systems for community health prevention of HAP-related disease and (ii) providing evidence-based recommendations for population transition to clean household and institutional energy.

### **Role and responsibilities:**

KEMRI is looking to employ:

A bio-statistician/ epidemiologist at *Post-doctoral Research Associate* (PDRA) level. The role will include guidance and support for epidemiological studies providing statistical advice on study design, data collection, data analysis and dissemination. In addition to analysis of complex quantitative datasets the post holder will be expected to publish results in peer-reviewed journal articles and contribute to dissemination through conference proceedings and policy briefings. The candidate should ideally have some experience of working with air pollution data and public health.

The candidate must have demonstrable competence in bio-statistics and/or epidemiology. Demonstration of effective team work and also independence in steering data analysis is required. Evidence of a strong publication history and of supervision of staff and other team members in analysis is an advantage.

The post holder will work closely with the lead of the air pollution and health group at KEMRI CRDR (and co-Director of CLEAN-Air (Africa)) to assist in meeting key deliverables for the CLEAN-Air (Africa) Unit's research program, offering advice on study methods to be used to support data collection in line with research objectives.

They will be jointly responsible for disseminating findings to academic audiences through publications in high-impact peer-reviewed journal articles and reports to lay/ stakeholder audiences involved in policy making under the supervision of the KEMRI CRDR principal investigator and the CLEAN-Air (Africa) Unit Directorship (KEMRI PI/University of Liverpool).

## Core responsibilities

### **Bio-statistician/ Epidemiologist (PDRA)**

Accountable to the KEMRI CRDR PI/ Co-director of the CLEAN-Air (Africa) Global Health Research Unit, the postholders core responsibilities will include:

- Advice and support to the PI to ensure optimum research scope and methodologies for all aspects quantitative data collection.
- Conduct and leadership of analysis of complex datasets across the program and partnership (including assurance of data quality, supervision of staff/ training in analysis, knowledge translation and dissemination of data analysis – including to lay/ stakeholder audiences).
- Participate in all aspects of publication development (peer-reviewed and other) relevant to dissemination from the Unit (including literature review/ synthesis relevant to the research topics undertaken by the Unit).
- Provide advice, support and leadership in the development of grant applications for related funding for the group.
- Provide quantitative/ statistical support to the air pollution centre of excellence (including the air pollution monitoring hub).

[Reflexive approach to other reasonable tasks assigned by the KEMRI CRDR Air Pollution Centre of Excellence Director.](#)

### Key Education, skills and competencies

- Education: PhD in statistics, biostatistics, epidemiology or other relevant discipline.
- Advanced knowledge of relevant statistical/ analytical software for quantitative data analysis (e.g., STATA, R, Python etc.)
- Ability to learn quickly and analyze household air pollution data
- Flexible, self-driven and motivated
- Excellent communication skills and organization skills
- Evidence of effective work both independently and as a team player
- At least 2 years' research experience in the field of environmental health and/or public health and epidemiology
- Relevant publication history through peer-reviewed journal articles

- Experience with international/multi country projects is an added advantage

The Director  
Kenya Medical Research Institute  
P.O. Box 54840-00200  
NAIROBI.

Attn: Deputy Director, CRDR

A copy of the application should be sent by email to: [projectpositions@kemri.go.ke](mailto:projectpositions@kemri.go.ke)

For more details please visit: [www.kemri.org](http://www.kemri.org)

**KEMRI IS AN EQUAL OPPORTUNITY EMPLOYER COMMITTED TO DIVERSITY; PERSONS WITH DISABILITY, WOMEN, YOUTH AND THOSE FROM MARGINALIZED AREAS ARE ENCOURAGED TO APPLY. KEMRI DOES NOT CHARGE A FEE AT ANY STAGE OF ITS SELECTION PROCESS INCLUDING APPLICATION, INTERVIEW AND PROCESSING OF OFFER LETTER. IF ASKED FOR A FEE, REPORT SUCH REQUEST IMMEDIATELY**