



East Central and Southern Africa Health Community

Vacancy Announcement

Thanzi La Mawa Research Project

Job Title: Software Developer (2 Positions)

Reports to: Principal Investigator – Thanzi Research Programme

1.0 Background

The East, Central and Southern Africa Health Community (ECSA-HC) invites applications for the position of Software Developer from suitably qualified persons, who are nationals of member states. The member states are Eswatini, Kenya, Lesotho, Malawi, Mauritius, Tanzania, Uganda, Zambia and Zimbabwe. The position is tenable at ECSA Health Community Secretariat, based in Arusha, Tanzania.

2.0 The Organization

The East, Central and Southern Africa Health Community (ECSA-HC) is a regional organization set up in 1974 to promote the highest standards of health among member countries. It is mandated to foster cooperation that will lead to the strengthening of health care programmes among member states in the region. The Secretariat implements its activities through specific programmes and projects in Health Systems and Capacity Development; Family Health and Infectious Diseases; Non-communicable Diseases, Food Security and Nutrition; and Knowledge Management, Monitoring and Evaluation.

3.0 Background to the *Thanzi La Mawa* Project

In the last few years, ECSA-HC in collaboration with partners implemented the [Thanzi la Onse](#) (Health of All) research programme, whose core objective was to improve population health and reduce health inequities in the Eastern, Central and Southern Africa (ECSA) region. A major research project within this initiative was the development of a

mathematical model in Malawi – the [TLO model](#) – that can be used to inform planning decision in healthcare service delivery. The model is individual-based and represents all major health conditions and the effect of interventions. It is a uniquely powerful tool to examine important cross-cutting issues, including determining the Essential Health Package for a country that is deliverable with the resources and capabilities currently available, and evaluating investments in different types of “healthcare system strengthening”. A major project, called *Thanzi La Mawa* (Health of Tomorrow), funded by the The Wellcome Trust, supports the development and the use of this model in the wider region, and thereby contribute to the objectives of improving population health through data-informed resource allocation and strategic planning and investment. ECSA-HC will accomplish this by making the model available for use by analysts working in the ECSA region and by supporting them in the adoption and application of the model.

4.0 Job Responsibilities and Tasks

The Software Developer will:

- i. Develop the TLO Model in ways that maximise its potential for responding to real questions on policy and planning in healthcare service delivery in the region.
- ii. Develop the TLO Model to maximise ease-of-use for new analysts that would wish to use it. This will include a needs solicitation from target users and the associated technical developments, deployment, and creation of documentation.
- iii. Support analysts in the region to learn about the TLO Model and consider its suitability for questions they are tackling. This will include developing a curriculum to teach the model’s theoretical and technical underpinnings and designing and running workshops to support analysts in the region in using the model.
- iv. To take a ‘hands-on’ approach to directly supporting a small selection of analysts in the ECSA region to adapt the TLO Model to another setting and to apply the model to a strategic question.

The post-holders would work collaboratively with counterparts based at the Kamuzu University of Health Sciences (Health Economics and Policy Unit) in Malawi and a team that also includes researchers in the United Kingdom, at Imperial College London, University College London and the University of York.

5.0 Education and Working Experience

- i. Degree in a quantitative/scientific subject, such as computing, mathematics or natural sciences.
- ii. Experience of developing technical analytical software and its documentation is essential.
- iii. Experience of developing software that is applied to novel technical questions in research, especially in the field of healthcare and governmental planning and policy is desirable.

- iv. Knowledge of (or interest to gain the knowledge) of how mathematical modelling can be used to inform decision-making.
- v. Experience in the use of mathematical models to answer real-world questions and presenting to non-specialists will be an asset.

6.0 Essential Skills and Abilities

- i. Advanced programming skills in Python; or, experience in at least one of C, C++, Java, or R, and a willingness to learn Python to an advanced level.
- ii. Confident ability in using git, collaborating on code development, and working within a defined technical style.
- iii. Ability to interact with academics, especially in other disciplines
- iv. Ability to learn (self-directedly) new concepts, techniques, packages, etc. as required to solve the problem at hand.
- v. Excellent verbal communication skills and the ability to deal with a wide range of people and work in a multi-cultural environment
- vi. Excellent written communication skills and the ability to write clearly and succinctly for lay audiences and for publications
- vii. Ability to prioritise own work in response to deadlines
- viii. Willingness to travel internationally to conduct research and attend conferences

7.0 Age

Applicants must be between 25 and 50 years old

8.0 Remuneration Package

The position offers an attractive package, including salary and benefits applicable to internationally recruited staff at Senior Programme Officer level.

9.0 Contract Appointment

This will be a two-year performance-based contract. Renewal will depend on availability of funding and continuing need for the position.

10.0 Method of Application

Nationals of member States who wish to apply for the Post should do so by submitting the following:

- a. Brief Application Letter stating why the candidate feels suitable for the Post

- b. Detailed Curriculum Vitae.
- c. Completed Application form for ECSA-HC posts (available under vacancies/opportunities jobs on www.ecsahc.org)
- d. Certified copies of Educational and Professional Certificates
- e. Names of three (3) referees with their addresses including telephone and e-mail

Applications that have not met all of the above set criteria will not be accepted. Only candidates who have met all the requirements of the post and have been selected for an interview will be contacted.

Applications should reach the address below by 4th December, 2023.

The Director General
East, Central and Southern Africa-Health Community
Plot 157 Oloirien, Njiro Road
P.O. Box 1009
Arusha, Tanzania
E-mail: vacancies@ecsahc.org with copies to regsec@ecsahc.org ; doid@ecsahc.org;
Website: www.ecsahc.org

The ECSA Health Community is an equal opportunities employer. Female candidates are particularly encouraged to apply

EAST, CENTRAL AND SOUTHERN AFRICA HEALTH COMMUNITY
ECSCA-HC



APPLICATION FORM

Ref. No. (for official use):			Received on:		PLEASE ATTACH A RECENT PHOTOGRAPH
Please fill this form as clearly and as accurately as possible. It is important that you answer all the questions fully. Failure to complete this form may render your application invalid					
1. FAMILY NAME		FIRST NAMES		MAIDEN NAME	
2. DATE OF BIRTH		3. PLACE OF BIRTH COUNTRY		4. PRESENT NATIONALITY	5. SEX MALE FEMALE
Day	Month	Year			
6. PERMANENT ADDRESS			PRESENT ADDRESS (If different from 6)		
7. Telephone Office Telephone Home		Fax Office Fax Home		Telex Office Telex Home	
8. MARITAL STATUS					
Single		Married		Others, specify please	

	Date			
9. DEPENDANTS (Spouse and legitimate natural or legally adopted children)				
NAMES	Date of Birth	Relationship		
10. EDUCATION (Please attach copy of your degree certificates or diplomas. Originals will be required if you are short listed for an interview)				
(A) University or Equivalent				
Name of University – City – Country	Duration		Degree Obtained	Major field of study
	From	To		
(B) Secondary or Technical education				
School – City – Country	Type of Education	Duration		Certificates or diplomas obtained
		From	To	

Personnel Selection Form

EMPLOYMENT HISTORY:

Please list the following information about your current and previous employees. Please start with your current or last employer							
Dates		Name and Address of Employer	Job Title and brief responsibilities and to whom directly responsible	Reasons for leaving	Salary		Other Benefits e.g. free housing
From	To				Start	Finish	

4. **EXPERIENCE:**

- (a) Give details of your experience and achievements in the positions listed on the previous page, which are **relevant** to the job applied for.

- (b) What are your future plans and aims?

- (c) What is your reason for seeking a new appointment?

- (d) What do you see as the main attractions of the post you are applying for?