Announcement

SOKOINE UNIVERSITY OF AGRICULTURE (SUA), COLLEGE OF VETERINARY AND MEDICAL SCIENCES, MOROGORO, TANZANIA

The Southern African Centre for Infectious Disease Surveillance, Africa Centre of Excellence (SACIDS-ACE)

for Infectious Diseases of Human and Animals in Southern and Eastern Africa



2 POSTDOCTORAL, 30 PhD and 8 MPhil/MSc RESEARCH OPPORTUNITIES IN AN INTERNATIONAL SMART PARTNERSHIP FOR INFECTIOUS DISEASES IN AFRICA

Closing Date: 28th July 2017

The SACIDS Africa Centre of Excellence for Infectious Diseases of Humans and Animals in Southern and Eastern Africa

The SACIDS-ACE is a **ONE HEALTH** Virtual Centre, whose Mission is to harness innovation in science and technology in order to **improve Africa's capacity** to detect, identify and monitor infectious diseases of **humans**, **animals**, **ecosystems** and their **interactions** in order to better manage the risk posed by them.

The SACIDS – Africa Centre of Excellence for Infectious Diseases of Humans and Animals stems from the concern for a high burden of infectious diseases in Africa and yet a low capacity for its risk management. It arises out of a consortium in Southern and East African countries (Tanzania, Democratic Republic of Congo, Zambia, Mozambique and South Africa) that was formed in 2008 as a One Health partnership of medical and veterinary institutions, plus smart partnership with the London School of Hygiene and Tropical Medicine (LSHTM), the Royal Veterinary College (RVC), the London International Development Centre and The Pirbright Institute, with Sokoine University of Agriculture (SUA) in Tanzania, as the Lead Institution. The core partnership of the Center is SUA, Muhimbili University of Health and Allied Sciences (MUHAS) and the Tanzania National Institute for Medical Research (NIMR). Its current partnership extends to institutions in Botswana, Kenya and Uganda plus associate relations with institutions in Rwanda, Ethiopia and Senegal as well as to new partners in Europe and the USA to include private sector partners.

The programme of the SACIDS-ACE is funded from a variety of sources including the Tanzania Government, the World Bank, the African Development Bank, the Wellcome Trust, the Skoll Global Threats Fund, the World Bank-linked African Partnership for Skills in Applied Science and Technology (PASET) and the International Development and Research Centre (IDRC) of Canada.

We are looking for highly qualified and motivated *young, bright African scientists* with an ambition for research excellence leadership in infectious diseases to undertake research that will contribute to health, food, livelihoods and environment securities at African community, national, regional and continental levels and thereby to the global health and food security agendas.

The SACIDS-ACE is committed to the principle of gender equity and equal opportunity to individuals with physical disability.

This call is OPEN for competition by young scientists from Africa. Registration will be at either Sokoine University of Agriculture (SUA) or Muhimbili University of Health and Allied Sciences (MUHAS) in Tanzania, depending on area of research interest.

While SACIDS-ACE will sponsor a limited number of applicants as outlined below, *self sponsored* candidates or those funded by other schemes are encouraged to apply provided their proposals are in line with the mission of SACIDS-ACE, the scientific competence areas and the priority research areas outlined below. Such candidates should provide a statement of source of funding.

Scientific Competence Domains

The SACIDS-ACE boasts well equipped laboratories at SUA for pathogen molecular biology, cell culture based virology, biosafety laboratories to BSL-3 level and, thanks to USAID support, a unique BSL-2 experimental animal facility. At MUHAS, SACIDS-ACE boasts access to the university and teaching hospital facilities of the prime nature in Tanzania, which are being expanded through a new campus under construction. Accordingly, we are able to offer research training competence areas in the following 3 domains:

- i. Virology and microbiology, including pathogen genomics ranging from conventional PCR right through to whole genome sequencing and associated bioinformatics.
- ii. Epidemiology ranging from descriptive to data mining, focusing on relevant analytical epidemiological modelling tools such as risk modelling, network analysis and predictive modelling.
- iii. Social sciences including economics, conventional social science and socio-anthropology.

Postdocs, and PhD plus MPhil students will additionally undergo special training in transferable and enabling skills including leadership/management and scientific writing

Research Areas

The research opportunities being offered will employ one or more of the above competence domains to objective driven research in the following overarching 3 strands:

- STRAND 1: Addressing Viral Disease Threat to Human Health, Food Security and Livelihoods.
- STRAND 2: Addressing Chronic Neglected Tropical Infectious Diseases (NTDs) in poor and marginalized communities focusing on genetic determinants and genomic epidemiology of Mycobacterial infections across the human, animal and environment compartments as well as on Antimicrobial resistance. Proposals on other bacterial or parasitic NTDs will also be considered where such proposals will contribute to collaboration with other programmes/partners and are associated with funding.
- STRAND 3: Addressing Community Level One Health Security cross cutting: disease surveillance, ecoHealth, health and food systems, social, economic and/or environmental determinants of health and/or food security.

Supervision

While individual research students and fellows will be pursuing their work in one specific area, the research programme of SACIDS-ACE will increasingly emphasise collaborative transdisciplinarity to address issues of national and regional importance, through the core competences of SACIDS-ACE.

Each student or Postdoc will be registered at either SUA or MUHAS, and will be co-supervised or mentored also by scientists from the wider SACIDS smart partnership.

Postdoctoral Research Fellowships

Through World Bank funding SACIDS-ACE will sponsor **2 Postdoctoral** Fellowships to cover stipend, university registration fees, approved research expenses, travel to partner institutions as may be necessary. These fellowships will be in be the following areas:

- i. Postdoctoral Fellow in the Genomics of Antimicrobial Resistance: Registered at MUHAS and closely linked to SUA and Catholic University of Health and Allied Sciences in Tanzania and LSHTM in the UK
- ii. Postdoctoral Fellow in the Genomics of Viral Diseases of Food Security Importance: Registered at SUA in Tanzania and closely linked to the RVC and The Pirbright Institute in the UK.

The Postdoctoral fellowships will be for 2 years. It is expected that during this period the research fellows will undertake both high quality research and develop funding proposals for their enhanced research within the SACIDS-ACE partnership and environment

PhD and MPhil/ Research MSc fellowships for this Call

• Through World Bank funding, SACIDS-ACE will sponsor **15** 4-year **PhD** Fellowships to cover stipend, university registration fees, approved research expenses, travel to partner institutions as may be necessary.

SACIDS-ACE will also sponsor 8 MPhil/Research MSc (i.e. 2-year full time research at Master's level)

Candidates are advised to indicate their interest in the above listed priority research areas and their preferred registration university between **SUA** and **MUHAS**.

• Through funding by the Regional Scholarship Innovation Fund (RSIF) of the Partnership for Skills in Applied Science, Engineering and Technology (PASET), SACIDS-ACE will sponsor an additional 15 4-year PhD Fellowships, 12 of whom will be from RSIF PASET participating countries. The fellowship will cover stipend, university registration fees and approved research expenses. The research training of the RSIF PASET scholars will focus on issues related to food security, including (i) cattle productivity and/or market access limiting diseases (e.g. foot-and-mouth diseases, East Coast fever) with a focus on the genetic and antigenic variation and/or risk modeling, (ii) epidemic diseases of short-cycle stock (e.g. Peste des Petits Ruminants (PPR), African swine fever (ASF), Rift Valley fever and poultry viral diseases with a focus on the pathogen genetic analysis, molecular epidemiology, risk modeling and/or definition of risk based control strategies, and (iii) epidemiological, socioeconomic and/or socio-anthropological studies on the interaction between animal health, livestock productivity, household food security/livelihoods and pro-poor market access in Tanzania.

Candidates for RSIF PASET will be registered at SUA.

If interested in the RSIF scholarship, please ensure to apply for it at https://www.rsif-paset.org/apply/ in addition to your regular SUA application.

Postdoc and Student Selection

The selection will be in 2 stages:

- The first will be by the registering university (SUA or MUHAS) for admission into the relevant programme.
- Candidates with provisional admission by the registering university (SUA or MUHAS) will then undergo selection process by a SACIDS-ACE Panel of assessors drawn from the SACIDS Smart Partnership in Africa and UK.
- RSIF PASET PhD scholars will undergo an additional screening based on their separate RSIF applications and interviews by RSIF Implementation Unit (RIU) at the Association of African Universities (AAU) followed by final selection and validation by PASET Executive Committee (EC).

Qualifications:

Applications should be submitted to either SUA or MUHAS with copies to the SACIDS Secretariat. A candidate can apply to one or both universities, although ultimately will register at only one university.

Candidate should ensure they meet the admission requirements of SUA or MUHAS as described on the university website;

For SUA Admission to MPhil, PhD and Postdoc programs see the Regulations and Guidelines for Higher Degrees at http://www.suanet.ac.tz/phocadownload/regulation_guidelines2011.pdf

For MUHAS Admission visit www.muhas.ac.tz

Mode of Application:

- 1. The Sokoine University of Agriculture (SUA), Directorate of Research and Postgraduate Studies, SUA, P.O. Box 3151, Morogoro, Tanzania. Tel.+ 255 23 2640043 Fax: + 255 23 2640013 E-mail: drpgs@suanet.ac.tz
 Application forms can be requested from the Director of research and Postgraduate Studies or downloaded from SUA DRPGS website: http://www.drpgs.suanet.ac.tz
 Such dully-filled forms are to be submitted together with a Money order as stipulated by SUA as application fee.
- 2. The Muhimbili University of Health and Allied Sciences (MUHAS), Directorate of Postgraduate Studies, Muhimbili University of Health and Allied Sciences, P.O. Box 65001 Dar es Salaam, Tanzania; Fax+255 22 2150465; Telephone +255 22 2151378, e-mail: dpgs@muhas.ac.tz

Further enquiries can be addressed to:

Either the registering University (above) or

The SACIDS Secretariat and Virtual Graduate School at Sokoine University of Agriculture E-mail: secretariat@sacids.org

Enquiries about research areas can also be addressed to the SACIDS Secretariat, who will forward them to Professor Gerald Misinzo (for viral diseases), to Professor Matee (for Bacterial diseases and antimicrobial resistance) and to Professor Esron Karimuribo (for crosscutting One Health research)

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