

Africa Biosciences Challenge Fund 2012 Research Fellowships

Biosciences eastern and central Africa Hub,
International Livestock Research Institute (BecA-ILRI Hub),
Nairobi, Kenya

The **Africa Biosciences Challenge Fund (ABCF)** is a competitive grant that enables scientists from national research institutes and universities within the eastern and central Africa region to conduct research at the world-class research facilities of the Biosciences eastern and central Africa (BecA) Hub at the International Livestock Research Institute (ILRI), in Nairobi, Kenya.

The BecA-ILRI Hub is a centre for excellence for modern plant and animal agricultural biosciences in Africa. The Hub hosts and conducts crop, microbe and livestock research where new developments in science offer promise to address previously intractable problems constraining Africa's development. The Hub complex comprises more than 10,000-m² space and houses seven laboratories, e.g. molecular biology, immunology, virology, plant transformation; plus BSL2 and BSL3 containment laboratories. The complex boasts state-of-the-art biosciences equipment including a 454 pyrosequencer, and units that provide the following support services: bioinformatics, DNA sequencing, genotyping and oligonucleotide services, flow cytometry and microscopy, diagnostics, media preparation, small and large animal units, tick vector unit, and a biological services unit, which holds a large collection of microbial genetic stocks.

We seek applicants who have exceptional ideas for short-term research projects (3-6 months) that can be carried out at the BecA-ILRI Hub. Projects must be related to food and nutritional security, food safety or animal health issues. Scientists who are conducting research in the following areas are particularly encouraged to apply, as are women candidates:

- African swine fever (ASF) epidemiology and control
- Improved vaccines and diagnosis of contagious bovine pleuropneumonia (CBPP)
- Development of vaccines for peste des petits ruminants (PPR)
- Improved control strategies for other animal diseases
- Harnessing genetic diversity for conservation, resistance to disease and improving productivity of livestock, particularly
 - Goats
 - Cavies (guinea pigs)
 - Chickens (focusing on African indigenous breeds)
- Research on orphan (understudied) crops to boost productivity, including
 - Amaranth
 - African wild mushrooms
 - Enset
 - Other under-researched important African crops

- Genetic diversity studies for improving productivity of other important crops
- Mycotoxins: addressing aflatoxin and other mycotoxin contamination of maize and other foods
- Plant transformation to address food insecurity in Africa
- Tissue culture and virus indexing for production of virus-free planting materials in Africa
- Rapid diagnosis of crop and livestock disease: Adopting and adapting existing diagnostics for use in Africa
- Plant 'viromics': Viral screening and pathogen discovery in plants for improving and developing diagnostic tools
- Metagenomics for microbial diversity
- Bioinformatics
- Other innovative ideas that could potentially lead to major breakthroughs.

Applicant requirements

- A national of one of the BecA countries: Burundi, Cameroon, Central Africa Republic, Congo Brazzaville, Democratic Republic of the Congo, Equatorial Guinea, Eritrea, Ethiopia, Gabon, Kenya, Madagascar, Rwanda, São Tomé and Príncipe, Somalia, South Sudan, Sudan, Tanzania and Uganda.
- Affiliated with a national agricultural research program or university in the BecA region
- Currently engaged in agricultural research
- MSc or PhD in agricultural biosciences
- Good working knowledge of written and spoken English
- Completed online application form and uploaded CV and research project concept note: http://hpc.ilri.cgiar.org/beca/ABCF_2012/index.php

The deadline for applications is **March 30th 2012**. Applications received after the deadline and incomplete applications will not be considered. Successful applicants will be notified between April and June 2012. Funding for travel, accommodation, medical insurance, and some research expenses at the Hub will be provided. Please note that funding for research at the applicant's home institute or field work is not provided under the ABCF Fellowship programme.

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For more information about the BecA-ILRI Hub visit <http://hub.africabiosciences.org/>

Thank you in advance for considering this opportunity. We look forward to hearing from you.



Segenet Kelemu, PhD
Director, BecA-ILRI Hub