# The Africa Biosciences Challenge Fund 2016/2017 Call for Applications (new guidelines)



## **Background**

The Biosciences eastern and central Africa - International Livestock Research Institute (BecA-ILRI) Hub, located in Nairobi, Kenya, is a shared agricultural research and biosciences platform that exists to increase access for African researchers to affordable, world-class research facilities. The mission of the BecA-ILRI Hub is Mobilizing Bioscience for Africa's Development by providing a centre for excellence in agricultural biosciences, which enables research, capacity building and product incubation, conducted by scientists in Africa and for Africa, and empowers African institutions to harness innovations for regional impact. This mission is achieved by the BecA-ILRI Hub's contributions to:

- **Research:** enabling research to harness the potential of the biosciences to contribute to increasing agricultural productivity and to improving food and nutritional safety and security.
- Education: contributing to the education and training of the next generation of African agricultural research leaders and scientists.
- Innovation: promoting the development, delivery and adoption of new technologies to address key agricultural productivity constraints.

The BecA-ILRI Hub capacity building program is branded The Africa Biosciences Challenge Fund (ABCF). The ABCF program operates in the critically important intersection between agricultural research for development (ARD), food security, and individual and institutional capacity building. The ABCF program is delivered through: i) a visiting scientist program (the ABCF fellowship) targeting scientists from African national agricultural research organizations and universities to undertake biosciences researchfor-development projects at the BecA-ILRI Hub; ii) annual training workshops to support the acquisition of practical skills in molecular biology, genomics, bioinformatics, laboratory management, laboratory safety, equipment maintenance and scientific writing; iii) mobilizing national and regional capacities for joint action; and iv) supporting and strengthening the capacity of national agricultural research systems (NARS) to deliver on their research for development agenda.

## **Purpose**

The purpose of the ABCF fellowship program is to develop capacity for agricultural biosciences research in Africa, to support research for development projects that ultimately contribute towards increasing food and nutritional security and/or food safety in Africa, and to facilitate access to the BecA-ILRI Hub facilities by African researchers (and their partners). We seek applicants with innovative ideas for short to medium term research projects (up to 12 months) aligned with national, regional or continental agricultural development priorities that can be undertaken at the BecA-ILRI Hub.

Since its inception in 2010, the ABCF program has contributed to strengthening capacities of individual scientists and institutions in sub Saharan Africa. To enable national programs take full advantage of the opportunities available through the ABCF program, prospective candidates will require full support from their home institution. Institutions are strongly encouraged to nominate staff and faculty members for the ABCF program to help address critical capacity gaps or tackle key agricultural research for development challenges. Letters of nominations articulating institutions capacity building needs and alignment of the proposed research project to national priorities will constitute an important criteria for selection.

## **Areas of research**

Applicants must be scientists affiliated (through employment) with African National Agricultural Research Systems (NARS) e.g. national agricultural research institutes and universities, and conducting research in the areas of food and nutritional security or food safety in Africa.

Those carrying out research in the following areas are particularly encouraged to apply\*;

- Improved control of priority livestock and fish diseases including: African Swine Fever (ASF); Contagious Bovine Pleuropneumonia (CBPP) and Contagious Caprine Pleuropneumonia (CCPP); Peste des Petits Ruminants (PPR); Rift Valley Fever (RVF); East Coast Fever (ECF); Capripox Virus diseases of ruminants;
- Harnessing genetic diversity for conservation, resistance to disease and improving productivity of crops and livestock and fish (livestock focus: African indigenous breeds, particularly goats, chickens, alternative small livestock species);

- Molecular breeding for important food security crops in Africa:
- Plant transformation to address food insecurity in Africa;
- Plant-microbe interactions;
- Tissue culture and virus indexing for production of virusfree planting materials in Africa;
- Orphan/underutilized species of crops and livestock
- Crop pests, pathogens and weed management research, including biological control;
- Microbial technology for improving adaptation of staple food crops and forages to biotic and abiotic stresses;
- Rapid diagnostics for crop, livestock and fish diseases;
- Genomics, bioinformatics and metagenomics including microbial discovery;
- Studies on climate-smart forage grasses and mixed livestock-crop systems;
- Microbial technology for improving adaptation of staple food crops and forages to biotic and abiotic stresses;
- Soil health in agricultural systems.
- Improved control of parasitic pathogens of plants (bacteria, fungi, oomycetes) that cause enormous economic losses as well as environmental damage in natural ecosystems (e.g.: *Phytophthora infestans* that causes potato blight).

\*This list is not exhaustive and applicants working on other relevant topics are welcome to submit their suggestions.

Special opportunities also exist to connect with leading international scientists linked with the BecA-ILRI Hub in the following areas: wheat rusts, insect pests, and nitrogen fixation. Other special opportunities exist to connect with CGIAR Research Programs (CRPs): including but not limited to Livestock & Fish, Agriculture for Nutrition and Health, Humid tropics etc. Such collaboration would allow the applicant's research to contribute more directly to an impact-oriented research-for-development agenda, and offer additional opportunities for joint activities.

# Eligibility/applicant requirements

- National of a BecA-ILRI Hub target country for this call: Burundi, Central African Republic, Congo Brazzaville, Democratic Republic of the Congo, Equatorial Guinea, Eritrea, Gabon, Madagascar, São Tomé and Príncipe, Somalia, South Sudan and Sudan. Under special partnerships and collaborations arrangements, applicants from western and Southern Africa are considered for the fellowship. The applicant MUST be a researcher employed within NARS.
- Currently engaged in research in food and nutritional security or food safety in Africa, or in a research area with relevance to agriculture in Africa.
- Good working knowledge of written and spoken English.
- Completed online application form.
- A signed letter of endorsement / nomination of the application from the head of the applicant's home institute/organization/university faculty.

## Applicants stand a higher chance of acceptance to the program if:

 They have own funding to fully support their research and all other costs while at the BecA-ILRI Hub, or  They are able to secure a significant portion (at least 50%) of their total research budget and other necessary costs while at the BecA-ILRI Hub. In this case they would be seeking partial funding through application for an ABCF fellowship.

We particularly welcome applications from women and less resourced NARS.

# What the fellowship covers

The BecA-ILRI Hub has secured funding to sponsor several fellowships on a highly competitive basis. The fellowship will cover the following costs<sup>[1]</sup>;

- Research costs at the BecA-ILRI Hub;
- Travel:
- Medical insurance:
- Accommodation;
- A modest subsistence allowance;
- Cost of publication in open access journal.

## **Key timelines**

- For any inquiries / clarifications related to this call, please send an email to: abcfprogram@cgiar.org
- Closing date for applications: Applications will be accepted on an on-going basis until 30<sup>th</sup> June 2017.
- Notification to successful applicants and commencement of successful projects will be on continuing basis.

#### **Application form**

To apply for a fellowship, click on the online application link below: http://hpc.ilri.cgiar.org/beca/training/ABCF 2016/index.html

## **Decision on applications**

Details of successful applicants will be posted on the BecA-ILRI Hub Website on a continuous basis until completion of the review process.

**Note:** Successful applicants will be expected to secure leave from their workstation to fully focus on their research fellowship at BecA-ILRI Hub during the fellowship contract period.

## **Our Sponsors**

The ABCF Research Fellowship program is supported by the Syngenta Foundation for Sustainable Agriculture (SFSA), the Bill & Melinda Gates Foundation (BMGF), the UK Department for International Development (DFID), the Swedish Ministry of Foreign Affairs through the Swedish International Development Agency (Sida), and the Australian Government through a partnership between Australia's Commonwealth Scientific and Industrial Research Organization (CSIRO) and the BecA-ILRI Hub,

- For general information on the BecA-ILRI Hub visit http://hub.africabiosciences.org/aboutbeca.
- For information on the technologies and research-related services available at the BecA-ILRI Hub visit http://hub.africabiosciences.org/activities/services.
- A full prospectus of the BecA-ILRI Hub is available for download here http://hub.africabiosciences.org/mediacenter/publications?download=26:beca-prospectus
- Download a full prospectus on the ABCF program here: http://hub.africabiosciences.org/mediacenter/publications?download=33:abcf-prospectus&start=20





