

BUILDING SCIENCE LEADERSHIP^{IN} AFRICA

The Africa Biosciences Challenge Fund

biosciences

eastern and central africa



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. In addition, the BecA-ILRI Hub provides research-related services and capacity building opportunities to eastern and central Africa and beyond.

The Africa Biosciences Challenge Fund (ABCF), managed by the BecA-ILRI Hub, provides fellowships to scientists and graduate students from African national agricultural research organisations and universities to undertake biosciences research-for-development projects at the BecA-ILRI Hub. The purpose of the ABCF fellowship program is to develop capacity for agricultural biosciences research in Africa, to support research projects that ultimately contribute towards increasing food and nutritional security or food safety in Africa, and to facilitate access to the BecA-ILRI Hub by African researchers.

We seek applicants with innovative ideas for short to medium term research projects (up to 12 months) that can be undertaken at the BecA-ILRI Hub. Projects must be in the areas of food and nutritional security or food safety in Africa.

Scientists and graduate students conducting research in the following areas are particularly encouraged to apply:

- Improved control of priority livestock diseases including African swine fever (ASF); contagious bovine and caprine pleuropneumonia (CBPP and 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 (livestock focus: African indigenous breeds, particularly of goats, chickens, and cavies and other micro-livestock);
- 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 virus-free planting materials in Africa;
- Orphan crops including amaranth, baobab, taro, wild mushrooms, enset;
- Crop pests, pathogens and weed management research, including biological control;
- Food safety, including addressing aflatoxin and other mycotoxin contamination in food and feeds;
- Nutritional analysis of food and feeds;
- Rapid diagnostics for crop and livestock diseases;
- Genomics and metagenomics, including for microbial discovery;
- Studies on climate-smart forage grasses and mixed livestock-crop systems;
- Microbial technology for improving adaptation of staple food crops and grasses to biotic and abiotic stresses;
- Soil health in agricultural systems;
- Special opportunities also exist to connect with leading international scientists linked with the BecA-ILRI Hub in the following areas: wheat rusts, insect pests, nitrogen fixation. (For these opportunities please apply by Dec 31st 2013)



- Other special opportunities exist to connect with CGIAR Research Programs on Livestock & Fish and Agriculture for Nutrition & Health to explore how their proposed research might fit into the on-going efforts to improve pro-poor food systems in Tanzania (smallholder dairy), Uganda (smallholder pigs), Egypt (aquaculture) and Ethiopia (small ruminants). Such collaboration would allow the candidate's research to contribute more directly to an impact-oriented research-for-development agenda, and offer additional opportunities for joint activities. For more information, please contact: Dr. Amos Omoro a.omoro@cgiar.org (Tanzania dairy); Dr. Danilo Pezo d.pezo@cgiar.org (Uganda pigs); Dr. Malcolm Dickson m.dickson@cgiar.org (Egypt aquaculture); Dr. Barbara Rischkowsky b.rischkowsky@cgiar.org (Ethiopia small ruminants).

We particularly welcome applications from female candidates.

Applicant requirements

- National (passport holder) of a BecA-ILRI Hub target country: 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, Uganda. In exceptional cases we may consider applicants from other African countries.
- A researcher at a national agricultural research organization or university in a BecA-ILRI Hub target country
- 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
- MSc or PhD in biosciences, agriculture or related subject. In exceptional cases we may consider applicants with a bachelor's degree.
- Good working knowledge of written and spoken English
- Completed online application form
- A signed letter of approval for your application from the head of your institute.

Costs covered by the fellowship

- Research at the BecA-ILRI Hub
- Travel
- Medical insurance
- Accommodation
- Living allowance

Please note that fellowships do not cover the cost of fieldwork or research at the applicant's home institute.

Timeline

- Closing date for applications: February 28th 2014
- We will begin to notify early applicants from Dec 1st 2013. The notification process will be completed by April 30th 2014.
- Implementation of projects: from January 2014

TO APPLY ONLINE VISIT: <https://beca.fluidreview.com>

THE AFRICA BIOSCIENCES CHALLENGE FUND IS SUPPORTED BY:



**BILL & MELINDA
GATES foundation**



NEPAD
TRANSFORMING AFRICA

biosciences
eastern and central africa



Australian AID **ILRI**
INTERNATIONAL
INSTITUTE FOR
IMPROVED
AGRICULTURAL
PRODUCTIVITY



syngenta foundation
for sustainable
agriculture

2014 ABCF Research Fellowships

Application guidelines

BecA requires candidates to apply online. To access the online application system, which is hosted by FluidReview on behalf of the BecA, please visit <https://beca.fluidreview.com>

It is essential that you read all the guidelines carefully before you submit your application in order to ensure that you provide the required details and materials.

Although the application is made online, you may find it convenient to prepare all the application information on your computer before adding it online. See **Information Required for Application Tasks** (page 3 below) for details of the information that is required for the application.

How to Apply

1. Click on <https://beca.fluidreview.com> to create an account.
2. You will be asked to register:
 - a) Click on the **Sign up** button at the top of the page.
 - b) Enter the following information on the registration page:
 - i. Enter your full name. Give First (given) Name and Surname (family name).
 - ii. Enter your email address. Make sure you type it correctly!
 - iii. Enter a password
 - iv. Confirm password
 - v. Then click the **Register** button.
3. Once you complete the signup process, you'll get an email within a couple of minutes to confirm your registration. Please **click on the link** in the email to confirm the registration and activate your account.

It is possible that the email could end up in your spam folder, so please check there just in case. If you do find an email in your spam folder, do not forget to mark it as safe to ensure that you receive future messages from us.
4. You will be directed to a webpage with the following message:

Hi

You haven't created an application yet.

Create a new Submission?

Please click the **Get Started** button below to begin your application.

5. Click on the **Get Started** button.
6. You will then be directed to your **Application page**.

7. On the **Application page** you will see a list of 6 **Tasks** for you to complete:

1. *Applicant details*
2. *Education*
3. *List your previous employment and publications*
4. *Research Project Proposal*
5. *Previous activities with the BecA-ILRI Hub*
6. *Upload Official Letter of Approval*

8. Completing the tasks

- a. Click on the **Tasks** links to go to the Tasks pages.
- b. You can complete the **Tasks** in any order.
- c. As you complete each **Task**, the Status will change from *Incomplete* to *Complete*.
- d. You do not need to complete the entire application all at once. You can save your application online at any stage of the application process (use the Save & Continue Editing This Page or Save & Exit This Page or Save and Next buttons at bottom of each Tasks page).
- e. You can then return to your **Application page** to complete **Tasks** at a later date (You can return by going to <https://beca.fluidreview.com> and then Sign in.)
- f. You can View/Edit/Delete your **Tasks** at any stage before you submit your final Application (See the 'Actions' column next to each **Task** on the **Application page**.)
- g. You can withdraw your application at any stage by clicking on the **Withdraw Application** button on the **Application page**.
- h. Please note that there is an FAQ page with more information about the fellowships. The link to FAQ is at the top of the **Application page**.

9. Submit your application

- a. When you have completed all the **Tasks** on your **Application page**, and are ready to Submit, click the **Submit application** button on your **Application page** (the button is under Task 6).
- b. You will be directed to a page with two options:

If you still wish to be able to edit your submission, click the **Cancel button** below.
If you are sure that you have completed your application, and wish to submit it, click **Continue** below; however, please be aware that you will no longer be able to edit your application after doing so.

Continue

Cancel

- c. To submit, click the **Continue button**.
- d. You will be directed to a page with the following information:

Thank you for submitting your application. You will get an email shortly confirming that we have received your application.
You can click the **Back to Submission** button to return to and view your application, or to download your application for your records.

10. Your application is now complete. You will be notified of the outcome of your application between **Dec 1st 2013** and **April 28th 2014**.

Information Required for Application Tasks

1. Applicant details

Your Personal Information

Give your name, email address, phone number, citizenship, date of birth, and institute details. Please do not use acronyms.

2. Education

Please record details of your completed academic degrees, any degree currently under study, and other relevant training.

3. List your previous employment and publications

- Please cut and paste - from your CV - details of previous appointments that you have held.
- List your major publications grouped as journal articles, book chapters, conference papers/posters and degree theses (order chronologically for each group).

4. Research Project Proposal

4.1 - Title of your proposed research project

The title should be short and descriptive, and clearly describe the main objective of the proposed work. Avoid using acronyms or abbreviations.

4.2 - Research area

Choose one or more of the Research Areas that best describes your project. If none of the areas is relevant then please select 'Other' and describe your research area(s).

- Livestock disease control
- Rapid diagnostics for livestock diseases
- Livestock genetic diversity
- Pro-poor food system: smallholder dairy *
- Pro-poor food system: smallholder pigs *
- Pro-poor food system: aquaculture *
- Pro-poor food system: small ruminants *
- Crop genetic diversity
- Molecular breeding for important food security crops
- Plant transformation
- Plant tissue culture and virus indexing
- Rapid diagnostics for crop diseases
- Crop pests, pathogens and weed management research, including biological control
- Plant-microbe interactions
- Orphan crops
- Food and feed safety
- Nutritional analysis of food and feeds
- Genomics and metagenomics
- Microbial discovery
- Studies on climate-smart forage grasses and mixed livestock-crop system
- Microbial technology for improving adaptation of staple food crops and grasses to biotic abiotic stresses

- Soil health in agricultural systems
- Nitrogen fixation
- Other, please specify...

Applicants interested in the research areas marked (*) are encouraged to learn more about the priorities of the CGIAR Research Programs on Livestock & Fish and Agriculture for Nutrition & Health to explore how their proposed research might fit into the on-going efforts to improve pro-poor food systems in Tanzania (smallholder dairy), Uganda (smallholder pigs), Egypt (aquaculture) and Ethiopia (small ruminants). Such collaboration would allow the candidate research to contribute more directly to an impact-oriented research-for-development agenda, and offer additional opportunities for joint activities. For more information, please contact: Dr. Amos Omore a.omore@cgiar.org (Tanzania dairy); Dr. Danilo Pezo d.pezo@cgiar.org (Uganda pigs); Dr. Malcolm Dickson m.dickson@cgiar.org (Egypt aquaculture); Dr. Barbara Rischkowsky b.rischkowsky@cgiar.org (Ethiopia small ruminants).

4.3 - Short summary (abstract) of your research project

- Give the relevant background information, state the problem, identify the solution and why it is novel, specify the objectives and the expected outputs.
 - Also describe the direct and longer-term impacts of your research.
- (300 word maximum)

4.4 Statement of the problem, background & justification

- Describe the food and nutritional security or food safety problem that your research will address.
 - What is the significance of the problem in Africa?
 - Give current state of knowledge, and describe how your research will build upon what has already been done and why your work is novel.
 - Justify why the proposed research should be conducted, and the importance of the science.
- (500 word maximum)

4.5 Research question and hypothesis

State the research question(s), and give the hypothesis that you are testing with the research. *A research hypothesis is a statement of expectation or prediction that will be tested by the research. This hypothesis should determine and drive the data collection for your study.* (200 word maximum)

4.6 Research objectives

- The objectives are what you want to achieve by your research activities.
 - Give no more than five objectives.
 - Each objective should flow logically to the next.
- (150 word maximum)

4.7 - Research Plan

- Describe how you will accomplish each objective.
 - Justify the research methods and explain why each step is important.
 - Give details of organisms to be studied.
 - It is very important that you describe the sampling design and data analysis.
- (1000 word maximum)

4.8 - Biological materials

- Give details of the biological materials that you propose to bring to the BecA-ILRI Hub for your research project.

- Are the materials infectious to plants or animals?
(100 word maximum)

4.9 - Expected outputs of the research

- Expected outputs of a research project are the deliverables from the research work.
(150 word maximum)

4.10 - Tentative project timetable and start date

- List each activity in chronological order, and give start and finish weeks (week 1 is the first week of your project at the BecA-ILRI Hub).
- *Be realistic about what can be completed in the time frame.*
- *ABCF research fellowship projects are normally 3-12 months. Only in exceptional cases will projects for longer than 12 months be considered.*
- What is your preferred start date in 2014?

4.11 - Skills for the proposed research project

- List the research skills you currently possess that you will apply to the proposed research project
- List the research skills that you would like to gain during the proposed research project at the BecA-ILRI Hub.

4.12 - Potential impact of your research outputs

- What will you do with the outputs of your research project when you return to your home institute?
 - Describe how outputs of your project could lead to direct or longer-term impact to address food and nutritional security, food safety, poverty reduction or livelihoods.
 - Describe your plan to ensure the outputs will ultimately lead to impact.
- (500 word maximum)

4.13 - How does the proposed project link to your own research interests or a program of research at your institute?

(250 words maximum)

4.14 - Describe how an ABCF Research Fellowship will benefit your career as a researcher, and how it will build capacity for your research program, department or institution

(250 words maximum)

4.15 - References cited in the proposal

List the references you have cited in support of your proposal. Some of the references should be recent publications, indicating that you are aware of the current research in your research area. List references in alphabetical order. All references listed must be cited in the text.

Other information

- If you have co-funding for the proposed research project, please give details (including the amount) and why you need ABCF funding.
- Please give any other information that you think is relevant to your application but was not captured elsewhere.

5. Previous activities with the BecA-ILRI Hub

Have you previously received an ABCF fellowship, attended a training workshop organized by the BecA-ILRI Hub, or conducted any other research or training with the BecA-ILRI Hub?

If Yes, give details including dates.

6. Upload Official Letter of Approval

A signed and dated Letter of Approval for your application must be obtained from the head of your institute and uploaded when you submit your application. The letter must be on institute letterhead, and must confirm that the applicant is a full-time member of staff, or have a strong affiliation with the institute, confirm their role(s) at the institute, and describe how the ABCF Fellowship would benefit the applicant, their research program, department and institute. The letter should also state that the head of the institute has read and understood this application in its entirety.

Please name the file 'LoA' and include your name, e.g. LoA-Mercy Kenga.pdf

File Types Supported:

- **PDF (preferred)**
- Microsoft Office (.doc, .ppt, .xls)
- Microsoft Office 2007 & 2010: Supported but not recommended (.docx, .pptx, .xlsx)
- Open Office (.odt, .ott)
- Images (.jpg, .gif, .png)

Please note that .docx, .pptx, and .xlsx formats are not entirely supported.

Please save your file types as .doc, .ppt or .xls respectively before uploading.

Once you have uploaded your **Letter of Approval** file, you can return to your Application page by clicking **Back to Submission**.