

BecA-ILRI Hub: Building the Capacity of NARS

Empowering African scientists to solve Africa's agricultural challenges



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BecA-ILRI Hub

MARI eBioKit Workshop; Nov 24- 28, 2014

biosciences
eastern and central africa

ILRI
INTERNATIONAL
LIVESTOCK RESEARCH
INSTITUTE

CGIAR



NEPAD
TRANSFORMING AFRICA

BecA-ILRI Hub: The who and what..

From the horses mouth..

...a shared agricultural research and biosciences platform located at and managed by ILRI in Nairobi, Kenya....

...increases access to world class laboratories for African and international scientists conducting research on African agricultural challenges...

...research projects implemented at the BecA-ILRI Hub are directed towards delivering products to help improve food and nutritional security in Africa...

The BecA-ILRI Hub's mission is mobilizing bioscience for Africa's development, by providing a centre for excellence in agricultural biosciences.

This enables research, capacity building conducted by scientists **in** Africa and **for** Africa, and empowers African institutions to harness innovations for regional impacts in improved agricultural productivity, income, and food and nutritional security.

Get more at: <http://hub.africabiosciences.org>

BecA Countries



The countries include (Alphabetic order)

- Burundi,
- Cameroon,
- Central Africa Republic,
- Congo Brazzaville,
- Democratic Republic of Congo,
- Equatorial Guinea,
- Eritrea,
- Ethiopia,
- Gabon,
- Kenya,
- Madagascar,
- Rwanda,
- Sao Tome and Principe,
- Somalia,
- South Sudan,
- Sudan,
- Tanzania,
- Uganda

BecA-ILRI Hub: Capacity building objectives



More and better skilled scientists from NARS and strengthened institutions in the BecA region conducting sustainable biosciences research for agricultural development in Africa for Africa, linked to a wide set of players.

- Strengthen capacity of individuals and institutions to harness the latest biosciences technologies for research for development to improve agriculture in Africa
- Promote access to world-class research and training facilities at the BecA–ILRI Hub

Capacity building at BecA



Capacity building is conducted via four streams:

1. ABCF Research Fellowships
2. Training workshops
3. Institutional capacity building
4. Creating linkages between researchers, Institutions



ABCF Research Fellowships

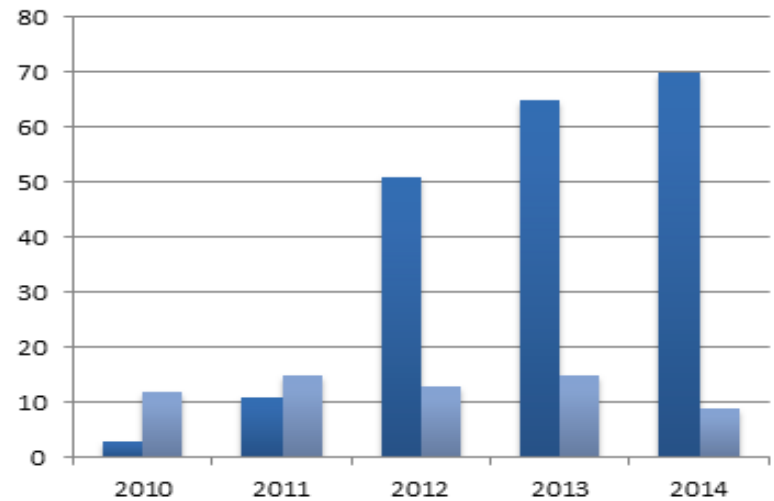
Building capacity through research, training, collaboration and mentorship



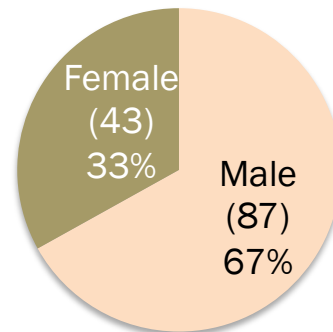
- Competitive
- Provide research placements at Hub for up to 12 months
- Capacity building through research, mentorship
- Open to researchers from African NARS (major focus in 18 BecA countries)
- Supports new projects or strengthens on-going projects
- **CALL FOR 2015 - open towards end 2014**
hub.africabiosciences.org

ABC F Research Fellows 2010-2014

Growing number of ABCF fellows at the Hub

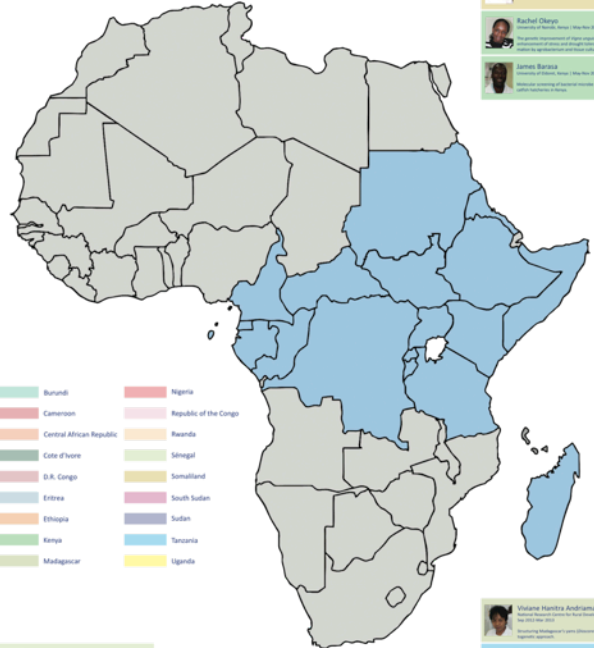


■ ABCF Fellows ■ Directly funded

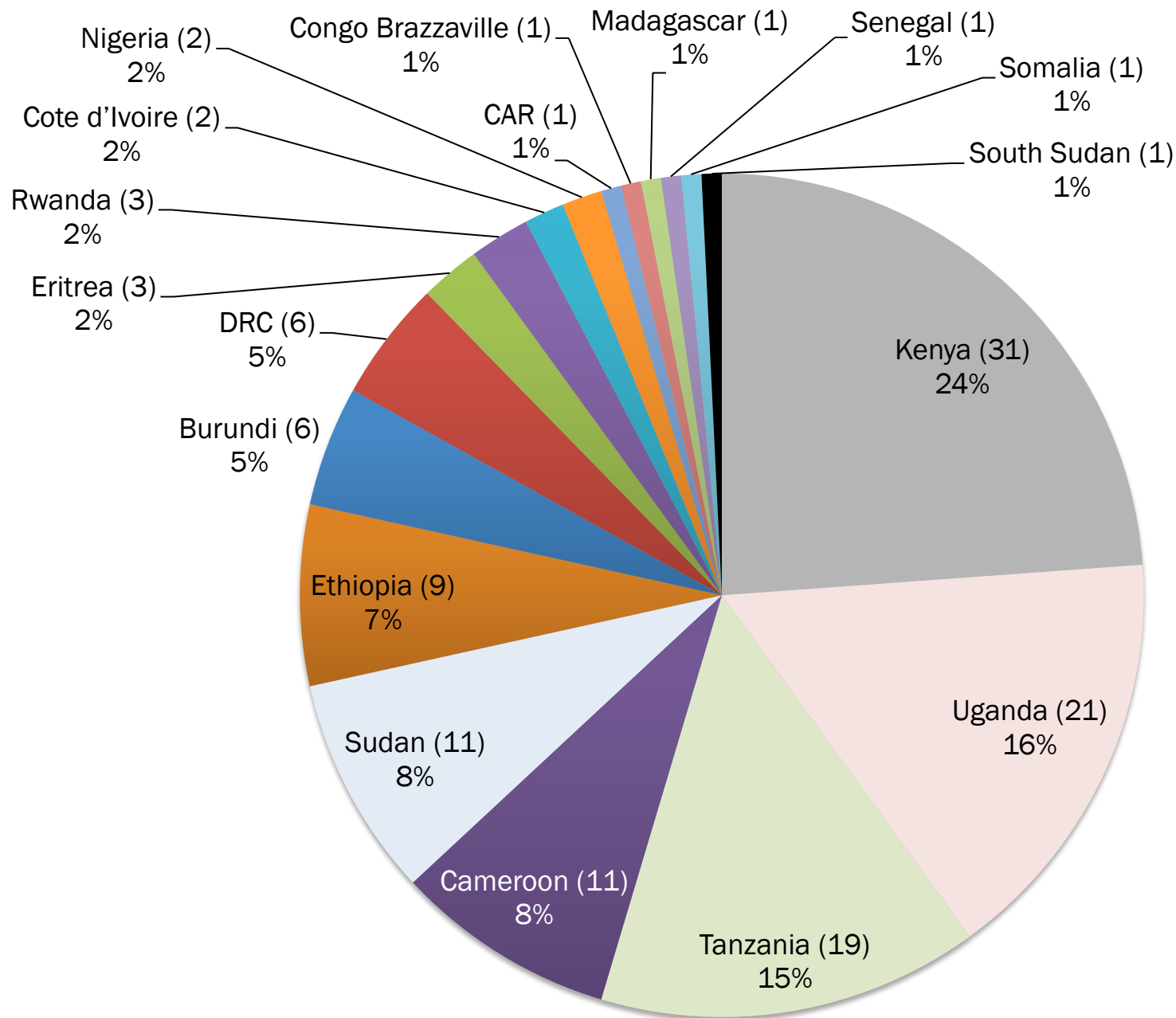


ABCF Fellows: gender

Name	Institution	Country	Name	Institution	Country
Felix Mwachira	University of Nairobi	Kenya	Yashvir Singh Badi	University of Nairobi	Kenya
Erica Anne Ewald	University of Nairobi	Kenya	Salimant Getachew Bedane	University of Addis Ababa	Ethiopia
Christian Tumbo Kambo	University of Nairobi	Kenya	Uday Vidana Alamu	University of Addis Ababa	Ethiopia
Fabrick Jolly Ngere Ema	University of Nairobi	Kenya	Abay Felicia Desta	University of Addis Ababa	Ethiopia
Nehame Desalegn Tshela	University of Addis Ababa	Ethiopia	Isabel Beyene	University of Addis Ababa	Ethiopia
Bana Ahmad Hala Yako	University of Addis Ababa	Ethiopia	Yohannes Fiseha Getewegabher	University of Addis Ababa	Ethiopia
Oliver Fikam	University of Addis Ababa	Ethiopia	Behnata Taboru Ertso	University of Addis Ababa	Ethiopia
Thomas Bawanyanga	University of Addis Ababa	Ethiopia	Muwin Fekadu Berhe	University of Addis Ababa	Ethiopia
Rachel Olayo	University of Addis Ababa	Ethiopia	Crispus Mshulu	University of Addis Ababa	Ethiopia
James Barasa	University of Addis Ababa	Ethiopia	Leifer Kandama	University of Addis Ababa	Ethiopia
Ruth Wangira	University of Addis Ababa	Ethiopia	Calist Owanji Ochia	University of Addis Ababa	Ethiopia
Shella Omondi	University of Addis Ababa	Ethiopia	Naman Onyango	University of Addis Ababa	Ethiopia
Eric Mutua Mwangi	University of Addis Ababa	Ethiopia	Serina Asant	University of Addis Ababa	Ethiopia
Nora Chao Kibalo	University of Addis Ababa	Ethiopia	Susan Wambui	University of Addis Ababa	Ethiopia
Grace Wangui Gachara	University of Addis Ababa	Ethiopia	Samuel Muriage	University of Addis Ababa	Ethiopia
Boniface Juma Wala	University of Addis Ababa	Ethiopia	George Tinaga Morara	University of Addis Ababa	Ethiopia
Lilian Wambua	University of Addis Ababa	Ethiopia	Everlyn Kamau	University of Addis Ababa	Ethiopia
Felicia Mwangi	University of Addis Ababa	Ethiopia	Isaac Macharia	University of Addis Ababa	Ethiopia
Harrold Eger	University of Addis Ababa	Ethiopia	Joshua Amimo	University of Addis Ababa	Ethiopia
Titus Kathurima	University of Addis Ababa	Ethiopia	Charles Mwangi	University of Addis Ababa	Ethiopia
Nelson Onyango	University of Addis Ababa	Ethiopia	Bombani Alexander J.	University of Addis Ababa	Ethiopia
Joseph Mwangi	University of Addis Ababa	Ethiopia	Harriet Angwech	University of Addis Ababa	Ethiopia
Elisa Dania Mwangi	University of Addis Ababa	Ethiopia	Robert Ojino	University of Addis Ababa	Ethiopia
Hashim M. Mangosong	University of Addis Ababa	Ethiopia	Samuel Tukwira	University of Addis Ababa	Ethiopia
Esther Mariani	University of Addis Ababa	Ethiopia	Ann Samata	University of Addis Ababa	Ethiopia
Hilda Bachwendu	University of Addis Ababa	Ethiopia	Abel Lubega	University of Addis Ababa	Ethiopia
Joseph Ekanje	University of Addis Ababa	Ethiopia	Peter Akai	University of Addis Ababa	Ethiopia
Abel Ngunjiri Amichae	University of Addis Ababa	Ethiopia	Frederick Kari	University of Addis Ababa	Ethiopia
Abdullah Mwangi	University of Addis Ababa	Ethiopia	Robertson Michael Simlagie	University of Addis Ababa	Ethiopia
Julian Agui	University of Addis Ababa	Ethiopia			



- Burundi
- Cameroon
- Central African Republic
- Cote d'Ivoire
- D.R. Congo
- Eritrea
- Ethiopia
- Kenya
- Madagascar
- Nigeria
- Republic of the Congo
- Senegal
- Somalia
- South Sudan
- Sudan
- Tanzania
- Uganda



ABCF Research Fellows by Country

Examples of outputs from ABCF projects



Photo: Alex Bombom

- Striga-resistant lines of sorghum, commercially available (Sudan)
- Drought tolerant sorghum (Eritrea)
- Passion fruit virus diagnostics (Kenya)
- Disease-free taro through tissue culture and diagnostics (Burundi/Ethiopia)
- Cereal crop hybrids (Uganda)
- PPR thermostable vaccine (Sudan)

Facilitating ABCF Fellows / Alumni sub-networks: Theileriosis group (2012)



Dr Awadia Mousa
(Sudan)

Elisa Mwega
(Tanzania)

Wani Marcellino
(South Sudan)

Dr Dia Hassan
(Sudan)

Fredrick Kabi
(Uganda)

Dr Ann Nanteza
(Uganda)

BecA Annual Workshops



Key skills areas with large demand

1. Introduction to Molecular Biology and Bioinformatics (*Held around May*)
 2. Advanced Bioinformatics and Genomics (*with SLU*) (*Annual, held around August*)
 3. Laboratory Management and Equipment Operations
 4. Scientific Research Paper Writing (*recently held- November 2014*)
- Taking the workshops to the region

Taking BecA training workshops to the region



Introduction to Molecular Biology, Bioinformatics and Functional Genomics

- 2013: University of Antananarivo, Madagascar
- 2014: Five BFX workshops: Kenya, Tanzania, Uganda, Sudan and Cameroon



Laboratory Management and Equipment Operations

- 2013: Ethiopian Institute for Agricultural Research (EIAR), Holetta, Ethiopia, June 2013
- 2014: Nelson Mandela Institute of Science and Technology (NM-AIST), Tanzania



Scientific Research Paper Writing

- 2013: NM-AIST, Tanzania
- 2014: ILRI, Nairobi, Kenya

Institutional capacity building



National Agricultural Biotechnology Centre, Ethiopian Institute for Agricultural Research (EIAR), Holetta

Gulu University, Uganda



Mikocheni Agricultural Research Institute (MARI), Tanzania



Photo: © Bill & Melinda Gates Foundation/Kate Holt

Nelson Mandela African Institution of Science and Technology (NM-AIST), Tanzania



Creating linkages/partnerships between scientists

Agricultural Research Connections Workshops

Encouraging Scientific Research Collaborations to Benefit African Farmers

- Organized by BecA & BMGF
- Kenya, July-Aug 2013; June 2014
- Over 150 scientists from SSA and outside SSA
- Proposals to Program for Emerging Agricultural Research Leaders (PEARLs)



BILL & MELINDA
GATES foundation



Partnerships



...and many more

BecA-ILRI Hub Capacity Building: Key contacts



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Programme Management Officer
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FOR MORE INFO

WEBSITE:

<http://hub.africabiosciences.org>



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