

# **Appolinaire Djikeng, Ph.D.**

## ***Technology Manager***

*BecA-ILRI bub*

*Biosciences eastern and central Africa (BecA) –  
International Livestock Research Institute (ILRI)*

[\*a.djikeng@cgiar.org\*](mailto:a.djikeng@cgiar.org)

## ***Assistant Professor (Adjunct)***

*Infectious Diseases – Viral Genomics*

*J Craig Venter Institute (JCVI),*

*Rockville, MD 20850, USA*

[\*adjikeng@jcvl.org\*](mailto:adjikeng@jcvl.org)

## GSC pilot at the University of Buea, Cameroon

- > Jan 2006 (Nairobi) GSC strategy planning meeting
- > Fall 2007: SIG agreed to fund 6 teaching missions (over the course of 3 years) for graduate courses at the University of Buea, Cameroon
- > 2008: Two teaching missions:
  - Summer: PhD course: Genomics and Bioinformatics
  - Fall/winter: PhD course: Functional Genomics
- > 2009: Two teaching missions
  - Summer: MSC course: Molecular Biotechnology
  - Fall/winter: Integrated MSC Labs (November 2009)
- > 2010: Two teaching missions
  - Summer:
  - Fall/winter:

**A1. Group picture (Appolinaire Djikeng and University of Buea 2008-2009 1<sup>st</sup> year Biochemistry PhD students) in front of the classroom**



# My current research activities

## I. **International Livestock Research Institute (ILRI) and Biosciences eastern and central Africa (BecA).**

Development and implementation of new technologies for research within the BecA network and the hub.

## II. **Ongoing Work in Cameroon**

II.2. Genomics, Bioinformatics and HIV drug resistance in Cameroon (Gates Foundation)

II.3. Development of a biomedical information transmission network: Prevention of mother-to-child HIV transmission and early infant diagnosis (Elsevier Foundation)

## III. **Ongoing Work in the USA (JCVI)**

III.1. Viral discovery, ecology (Environmental viral metagenomics)

III.2. The human microbiome initiative (human virome)

III.3. Viral Genomics (Surveillance of emerging/re-emerging viral infectious diseases)

III.4. R&D for improving genome sequencing methodologies and applications

# BecA Hub and its role in enhancing science and technology capacity in Africa



# BecA's Mission

To improve the livelihoods of resource-poor people in Africa, through the development and use of new technologies and strategies for sustaining agricultural production, improving human health, and conserving the environment.

biosciences

eastern and central **africa**

## BecA-Net Countries



### BecA-Net countries

Burundi, **Cameroon\***, Central Africa Republic, Congo Brazzaville, Democratic Republic of Congo, Equatorial Guinea, Eritrea, **Ethiopia\***, Gabon, Kenya, Madagascar, **Rwanda\***, São Tomé and Príncipe, Somalia, Sudan, **Tanzania\***, **Uganda\***

(\*Node countries)

# Core competencies at BecA Hub

- Bioinformatics
- Diagnostics (nucleotide- and protein-based)
- DNA sequencing/genotyping
- Genetic engineering
- Genomics/Genetics
- RNA silencing/RNAi
- Molecular breeding (marker development/applications)
- Proteomics
- Vaccine technology/immunology
- Vectors (e.g. ticks)



**Thank you !!!**  
**Asante sana !!!**  
**Merci !!!**