Associate Scientist, Cassava Breeder (Ref: DDG-R4D/AS/CB/NEXTGEN/05/19)

Background: The International Institute of Tropical Agriculture (IITA) invites applications for the internationally recruited position of **Associate Scientist, Cassava Breeder**.

The International Institute of Tropical Agriculture (IITA) is a not-for-profit institution that generates agricultural innovations to meet Africa's most pressing challenges of hunger, malnutrition, poverty, and natural resource degradation. Working with various partners across sub-Saharan Africa, we improve livelihoods, enhance food and nutrition security, increase employment, and preserve natural resource integrity. IITA is a member of CGIAR, a global agriculture research partnership for a food secure future. Please visit http://www.iita.org/ for more information on IITA.

IITA seeks a highly motivated individual to work on cassava breeding using genomic selection within the Next Generation Cassava Breeding project. The primary activities include phenotypic and genotypic characterization of germplasm populations, describing genetic architecture of breeding traits and implementation of genomic selection and marker-assisted selection. Other opportunities are exploration of a large repository of genomic and phenotype cassava data (www.cassavabase.org) produced in the first phase of the project.

The Next Generation Cassava Breeding (www.nextgencassava.org) project aims to significantly increase the rate of genetic gain in cassava breeding and unlock the full potential of cassava, a staple crop central to food security and livelihoods across Africa. The project implements Genomic Selection to accelerate breeding cycles to develop high yielding, climate resilient, higher pest and disease resistant varieties that meet farmer and consumer demands. As part of the NextGen project, you will get broad exposure and work closely with a global genomics and breeding community, including Cornell University, National Root Crops Research Institute in Nigeria, the National Crops Resources Research Institute in Uganda, Tanzania's Ministry of Agriculture, Livestock, and Fisheries, the International Center of Tropical Agriculture (CIAT), the Boyce Thompson Institute, and USDA-ARS.

Position Responsibilities:
- Develop improved cassava lines by working at the interphase between field breeding, genomic selection and marker assisted selection.
- Implement multi-environment field trials to evaluate performance of new populations and make advancement decisions to support the breeding pipeline.
- Carry out routine single and multi-environment mixed-model analysis of field trial data.
- Carry out population genetic analyses to describe germplasm collections using genome-wide SNP markers.
- Develop and validate new phenotyping platforms for end-user preferences cassava breeding (e.g. NIRS).
- Mentor young breeders in the region on modernization of cassava breeding programs.
- Publish research findings in peer reviewed journals.
- Stay current on relevant technical advances.
- Supervise PhD and MSc students with international universities.

Other responsibilities

- This position will involve extensive travels within Nigeria and Africa to co-coordinate with the Project Leader, a cassava breeding community of practice in the national programs of DR Congo, Sierra Leone, Ghana, Zambia, Mozambique, Rwanda, Malawi and Cote d'Ivoire.
- Provide technical backstopping in data analytical developments and process improvement for national partner programs in Nigeria, Uganda, Tanzania
- Participate in resource mobilization with cassava research teams.

Educational Qualifications:

The candidate should have a PhD degree in plant or animal breeding or agronomy with cognate experience of at least 5 years.

Core Competencies:

- Strong background in breeding, quantitative genetics, statistics, and molecular technologies.
- Highly self-motivated, detail-oriented, and innovative.
- Excellent leadership, communication, and interpersonal skills.
- Good project management skills.
- Demonstrated experience with statistical programming in R.
- Strong record of innovation and process improvement in breeding.
- Strong understanding of management and utilization of large data sets.
- Fluency in English is required, and a working knowledge of French is a strong advantage.

Duty station: IITA Headquarters, Ibadan, Nigeria.

General information: The contract will be for an initial period of three years with possibility of renewal based on performance and availability of funding. IITA offers internationally competitive remuneration package paid in U.S. Dollars.

Applications: Applications must include covering letter which should address how the candidate's background/experience relates to the specific duties of the position applied for, curriculum vitae, names and addresses of three professional referees (which **must** include either the Head of the applicant's current or previous organization or applicant's direct Supervisor/Superior at his/her present or former place of work). The application should be addressed to the Head of Human Resources. Please complete our online application form using this link: http://www.iita.org/careers.

Closing Date: The position will remain open until a suitable candidate is found

IITA is an equal opportunity employer and particularly welcomes applications from women candidates.

Please note that only shortlisted candidates will be contacted.