



Funded by the Intra-Africa
Academic Mobility Scheme of
the European Union



Applications invited for MSc and PhD Scholarships

Mobility for plant genomics scholars to accelerate climate-smart adaptation options and food security in Africa / GENES

Feeding the increasing populations in Africa requires radical transformation of a largely underdeveloped agriculture over the next four decades. A major challenge is how to increase agricultural production among resource-poor farmers without exacerbating environmental problems and simultaneously coping with climate change, a critical force driving low agricultural productivity in sub-Saharan Africa.

Genomics offers a precise, quick, non-expensive technology that complement classic breeding approaches. However, despite the tremendous progress observed in genetics and molecular breeding worldwide, African universities have remained poorly involved in such technologies with low capacity and poor facilities. This makes it difficult to apply those powerful technologies to improve African crops. Genomics cultivar development and constraints of the target universities and countries were matters of focus in recent years. Recently, the molecular hub of Africa BecA-ILRI (in Kenya) was equipped with genotyping by sequencing (GBS) facility with a grant from the Bill & Melinda Gates foundation. This facility, termed the Integrated Genotyping Service and Support (IGSS) platform offers a new perspective for training young scholars to equip them in designing and developing molecular approaches to increase the potential of genomic breeding to help adapt crops to climate change. In anticipation of the need to increase the number of plant breeders who can use genomics, the **GENES Project was established**.

GENES is funded by the Intra-Africa Program of the Education, Audiovisual and Culture Executive Agency (EACEA) of the European Commission. The consortium intends to:

- 1) Produce for Africa **10 world-class PhD holders molecular plant breeders** who will accelerate cultivar development to adapt to current and future challenges related to climate change and food and nutrition security;
- 2) Train **36 MSc holders genomics scientists and 8 support staff** with strong capacity in cultivar development and new molecular breeding approaches to increase knowledge and prospects of improving major crops including cereals, pulses, vegetables, fruits, and bio-fuels used in Africa for food and nutrition security and the crop production industry;
- 3) Harmonize training programs and research agenda of the consortium members (universities) on the use of genomic breeding to accelerate cultivar development and increase the resilience of crop production systems;
- 4) Foster national, regional, and global collaboration and programmatic agenda that promote genomic breeding research and training for agricultural innovations within Africa.

GENES clearly exhibits the potential to accelerate the process of in-depth reform, scope, quality, and harmonization of genomic breeding training programmes throughout Africa. GENES will also reshape academic research adapted to the continent's needs with a focus on the adaptation strategies using genomics, metabolomics, and transcriptomics. As curriculum review takes place at intervals within the University systems following standard procedures, **harmonization of programmes can take place** among higher education institutions (HEIs) in the consortium. One of the major outputs of GENES partnership will be the establishment and reinforcement of programmatic relationship between four universities from three regions of Africa - two universities in **western Africa**, (Ebonyi State University in Nigeria and the University of Abomey-Calavi in Benin), one university in **eastern Africa** (Jimma University in Ethiopia) and one university



in **central Africa** (University of Yaounde 1 in Cameroon). GENES is another opportunity to facilitate recognition and improvement of studies and enable the application of academic credit transfers between universities.

Programs and courses of the consortium are available at <http://www.genes-intra-africa.org/programmes.php>

GENES will foster diversity and gender equity at the work place. Therefore, women and persons from underprivileged groups are especially encouraged to apply.

GENES Scholarship

Application process

The GENES mobility grant is open to all students from any of the partner universities (Target Group 1) and to students from other African universities (Target Group 2). Currently, 10 PhD and 20 MSc scholarships are available.

Target Group 1:

This category includes students enrolled (for M.Sc application) or graduated (for PhD application) from all partner universities as follows:

1. Ebonyi State University; Nigeria
2. University of Abomey-Calavi; Benin
3. Jimma University; Ethiopia
4. University of Yaounde 1

Target Group 2:

Students from all African countries

Table 1 Indicative distribution of individual incoming by university

University	Incoming Mobility	
	M.Sc	PhD
Ebonyi State University, Abakaliki	5	3
University of Abomey-Calavi, Benin	5	3
Jimma University, Ethiopia	5	2
University of Yaounde 1	5	2

Eligibility

To be eligible for a scholarship (i.e. financial support to third parties), master students as well as doctoral candidates referred to as "students" must comply with the criteria below at the time of the application for a scholarship:

- a) be a national and resident in any of the eligible countries covered by the Intra-Africa Mobility programme of the EACEA,
and
- b) be registered/admitted in or having obtained a HEI degree (or equivalent) from
 - i. one of the HEIs included in the GENES consortium (Target group 1)



ii. a HEI not included in the GENES consortium but established in an eligible country (Target group 2)
and

- c) have sufficient knowledge of the language of the courses in the host countries.
- d) NB: students with one-year post B.Sc but not yet admitted or registered in any of the Partner HEIs is also eligible to apply. However, mobility will begin in second year of the study, i.e. sponsorship from GENES will be for research work, only.

Students can only benefit from one scholarship under the Intra-Africa or IntraACP academic mobility scheme (regardless the type of mobility or the funding project).

Students having benefited from scholarship(s) under the previous intra-ACP Academic Mobility Scheme cannot receive scholarship under the Intra-Africa academic mobility.

Admission

Admission regulations for Doctoral and MSc Studies are to be found from prospective HEIs website. This application is for GENES Project scholarships only. The Scholarship application form together with other required documents should be sent as a unique PDF attachment to: emails indicated below. You may download the MS Word version of the application form, and complete it before sending. Important also is the student proposal that should be sent together within the application as ONE SINGLE DOCUMENT, preferably PDF.

Other required documents are listed in the application form and include:

1. Cover letter
2. Scholarship Application form (download from GENES website)
3. Student proposal (guidelines available from GENES website)
4. National ID or Copy of Passport Data page
5. Certificate of degree
6. Transcript records
7. Support letter from sending HEIs
8. Recommendation letter of home supervisor (mandatory for all applicants)
9. Enrollment proof in degree course from home institution (for MSc applicants)
10. Curriculum Vitae
11. Employment certificate (only for staff)
12. Certificate of English or French language skills
13. Proof of socio-economic vulnerability (if available)

In order to meet the general selection requirements for MSc Mobility Grant (maximum 12 months' scholarship mainly for research), the applicant must have completed the first two semesters of a Master of Science course in Agronomy, Biology or any related fields in his home country. Students with Genetics, Biotechnology, and plant breeding background are highly encouraged to apply. It is obligatory that the students have their first year MSc Academic transcripts.

For Academic / Administrative staff, applicants should hold a B.Sc, MSc or PhD degree in Genetics, Biotechnology, Plant breeding, Agronomy, Biology or any related fields. Person with Genetics, Biotechnology, and plant breeding background are highly encouraged to apply.

For MSc students, the Project offers maximum of twelve-months credits or degree seeking mobility. For academic staff, a maximum of two-months staff exchange mobility is available for partner universities only.

In line with Agreement with Intra-Africa Mobility Scheme of EACEA, the scholarship will cover:

1. Round trip flight ticket and visa costs (using a preferred travel agent and calculated against direct linear distance);



2. Direct participation costs such as tuition fees, registration fees and service fees where applicable;
3. Comprehensive travel insurance (Health, Accident and Travel) }
4. A monthly subsistence allowance for the mobility period.

Table 2 Financial Support available via the GENES scholarship

Type of mobility	Duration (No. of Months)	Monthly Stipend	Settling-in allowance	Participation costs (per academic year only for mobility equal or longer than 10 months)	Research cost (per academic year only for mobility equal or longer than 10 months)	Insurance (per month)
Master	12 max	€ 600	1-time payment of € 600	€ 3.500	€ 600	€ 75
PhD	48 max	€ 900	1-time payment of € 900	€ 4.000	€ 2.000	€ 75
Academic/ Administrative Staff	1-2	€ 1,200	-	-	-	€ 75
		Paid in full to scholarship holder partnership Managed by the partnership	Paid in full to the scholarship holder	Managed by the partnership	Managed by the partnership	Managed by the partnership

NB: Female PhD scholarship holders will receive additional allowances according to the Intra-Africa Mobility Scheme. Female PhD scholars moving for more than two academic years with their children to the host country will receive an allocation for childcare on a per capita basis. In case of breaks for family reasons, mechanisms allowing women to pursue their mobility experience will be discussed. All students to consider the cropping season and crop speciality of host university (country) of their choice in writing proposals and completion of courses.

Selection

The selection among the eligible candidates will be based on their capacity to benefit from the training. The criteria used to assess these prospects are:

- Quality of earlier writings by the candidate(s) and quality of other merits;
- Originality, feasibility and potential contribution of the planned research to the field of interest;
- Integration with a product-focused cultivar or breed development program that serves smallholder farmers;
- Practical and realistic time-line;
- Ability of plan to include a realistic and feasible molecular breeding techniques;
- Importance and relevance of the trait(s) and germplasm to the region;
- Enthusiasm of the applicant, and support of home institution;
- Possibilities for the Host and Home HEIs to offer adequate supervision with respect to the planned research;
- Gender considerations.



Contact

Due to difference in the partners higher education system, specific academic arrangements will be performed to assure that scholars are admitted in the right program and can make benefit of the mobility programme. These arrangements will be fixed on a case-by-case basis between the host HEI and Coordinating Institution.

For more information, please contact Dr Celestine Afiukwa afiukwa@yahoo.com, Head Department of Biotechnology, Ebonyi State University, Abakaliki, Nigeria. Contacts of HEIs representative are available on www.genes-intra-africa.org

Applicants should submit completed application and all supporting documents by email to genes.ebsu@genes-intra-africa.org with a copy to **Mr Dennis Okporie**, okporiedennis@gmail.com, by **30 May 2018**. They should indicate in the subject line (if submitting by email) or super scribe the envelope (if submitting by post) 'Application for GENES MSc/PhD programme'. Incomplete applications will be rejected.

Applications should be sent to: genes.ebsu@genes-intra-africa.org with copy to **Mr Dennis Okporie**, okporiedennis@gmail.com and

Contact information:

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