





# Second call for scholarship application for MSc, Academic Staff and Trainees positions in the framework of GENES II Intra Africa Academic Mobility project

<u>GENES II Project:</u> Mobility for Plant Genomics Scholars to Accelerate Climate-Smart Adaptation Options and Food Security in Africa II

#### 1- Context

Extreme weather variability experienced in many parts of sub-Saharan Africa due to the adverse impact of climate change has caused a rapid decline in food production. The lack of a critical mass of trained graduates with knowledge in relevant areas such as genomics and digital technologies to mitigate the effects of climate change has further worsened the situation. To address these emerging issues, there is a need to develop knowledge and capacity to use genomic and digital technologies to develop climate-smart **crops.** Therefore, Higher Education Institutions (HEIs) across sub-Saharan Africa need to work together through the mobility scheme for plant genomics scholars to accelerate climate-smart adaptation options and food security. GENES II project is funded by the Education, Audiovisual and Culture Executive Agency (EACEA) of the European Commission. It brings together six universities across three African regions, namely, Western, Eastern and Southern Africa and one technical partner from the European region to address knowledge in genomics technologies to develop climate smart crops. This Project is coordinated by Ebonyi State University in Nigeria. The different partners include University of Abomey-Calavi, Benin (West Africa); Jimma University, Ethiopia; Egerton University, Kenya (Eastern Africa); North-West University, University of Zimbabwe (Southern Africa), and Wageningen University of Research, The Netherlands (Technical partner).

# The objectives of GENESII project are to:

- train 64 African scientists comprising 12 PhDs, 32 masters, 10 trainees and 10 staff in genomics, digital and advanced technologies such as measuring photosynthesis, to accelerate crop improvement for climate change adaptation and mitigation;
- enhance the entrepreneurial skills of beneficiaries in agribusiness and enterprise management to enhance graduate employability;





















 harmonize academic programmes and research agenda to enhance research collaboration among African Higher Education Institutions (HEIs).

# 2- Profile of the proposed positions and study crops

# 2-1 MSc and selected crops

The MSc are the students who has started and finished a MSc coursework in his home institution. He/she will be in mobility to conduct a research work in a selected host institution among those involved in the GENES II project consortium (Ebonyi State University, University of Abomey-Calavi, Jimma University, Egerton University, North-West University, and University of Zimbabwe). After completing the research activities, the MSc student will return to his home country to defend his/her thesis. Such scheme is named: credit seeking mobility.

Selected crops per country as well as key words for MSc subjects can be found in Table 1. MSc students are invited to develop their research proposal on a selected crop with focus on the key words listed in Table 1.

Table 1. Selected crops and key words per partner institution

Countries	Crops Key words for candidates		
Benin	Fonio	Agro-morphological diversity, phenotyping, photosynthesis, root quality analysis, Breeding for less anti-nutritional factor	
	Taro	Agro-morphological diversity, phenotyping, photosynthesis, root quality analysis, Breeding for less anti-nutritional factor	
	Sesame	Phenotyping, photosynthesis, grain quality analysis	
	Bambara groundnut	Agro-morphological diversity, phenotyping, photosynthesis, quality analysis	
Ethiopia	Finger Millet	Agro-morphological diversity, phenotyping, photosynthesis, grain quality analysis	
	Taro	Agro-morphological diversity, phenotyping, photosynthesis, root quality analysis, Breeding for less anti-nutritional factor,	





















	Amaranth	Agro-morphological diversity, phenotyping, photosynthesis, grain quality analysis	
	Okra (or Bambara ground nut, green gram or sesame)?	Agro-morphological diversity, phenotyping, photosynthesis, quality analysis	
	Finger millet	Genetic gain, climate change, digital and advanced technologies, drought tolerance, fortification, genetic diversity	
Kenya	Green gram/Mung Bean	Digital and advanced technologies, drought tolerance, marker-trait associations, grain quality, population structure	
	Amaranth	Climate smart cultivar, machine learning, diversity, grain yield, digital and advanced phenotyping, marker-trait-associations	
	Finger millet	Genetic gain, climate change, digital and advanced technologies, drought tolerance, fortification, genetic diversity	
	-		
	Taro		
Nigeria	Fonio  Bambara groundnut	Germplasm collection and characterization (agronomic, proximate and phytochemical); Genetic diversity assessment; analysis for yield and quality traits; Photosynthesis and yield interaction	
	Sesame	Germplasm collection and characterization (agronomic, proximate and phytochemical); Genetic diversity assessment; multi-environmental analysis for yield and quality traits; Photosynthesis and yield interaction assessment; Selection of breeding lines and cultivars	





















South Africa	Bambara groundnut	Morpho-agronomic characterization; Multi-environment trials; Selection of breeding lines and cultivars; Marker assisted selection
	Taro	Morpho-agronomic characterization; Multi- environment trials; Selection of upland cultivars; Marker assisted selection
	Finger Millet	Morpho-agronomic characterization; Multi-environment trials; Selection of breeding lines and cultivars; Marker assisted selection
	Amaranth	Flow cytometry analysis; Evaluation of breeding lines. Marker assisted selection
	Bambara groundnut	Marker assisted selection for aphid resistance
Zimbabwe	Finger millet	Characterization, Genotype x environment interaction analysis for yield and quality traits
	Amaranth	Genetic diversity assessment, stability and adaptability
	Cocoyam or Taro	Genotype x environment interaction analysis for yield and quality traits.

# P.S. The hosting university reserves the right to change the crop and/or modify the subject depending on the gap in the literature.

# 2-2 Profile of the academic staff position

The academic staff are the employed person in one of the Higher Education Institution involved in GENESII project (Ebonyi State University, University of Abomey-Calavi, Jimma University, Egerton University, North-West University, and University of Zimbabwe). They will be selected based on the needs expressed in their motivation letter, their background, and the importance of the capacity-building activity (requested mobility) for their home institution.

They will be asked to provide a plan to share the acquired knowledge from the mobility with other staff of their home country institution who would not benefit from the mobility.





















# 2-3 Profile of Trainees position

Trainees are students enrolled in a bachelor/master/PhD programme in one of the African beneficiaries HEIs (Ebonyi State University, University of Abomey-Calavi, Jimma University, Egerton University, North-West University, and University of Zimbabwe). The objective is to improve entrepreneurship in Plant breeding, Biotechnology by building the capacity of young African trainees applied to crops. Trainees will be selected to build their capacity in entrepreneurship, and soft skills and will broaden their knowledge in climate-smart agriculture practices and hands-on skills in enterprise. They will also broaden their network during the mobility and will have chance to interact with experts in their domain.

They will be asked to provide a plan on the knowledge they would like to acquire in selected enterprise in the host country which will turn around:

- development of business and management skills
- increased potential for innovation, creation of agribusinesses, and entrepreneurial ventures

Note that the host University will select the enterprise in which the trainees will conduct the internship based on the student's needs and perspective.

### 3- Scholarship: duration and financial support

- For MSc students, the maximum duration of a scholarship is 12 months for credit seeking mobility,
- For academic staff, the maximum duration of the scholarship is 2 months
- For Trainees, the maximum duration of the scholarship is 3 months

The scholarship includes subsistence allowances, participation costs, contribution to research costs and insurance in line with EACEA procedures. Please note that under the current EU scheme, scholarships holder will have to bear the cost of their flight ticket (round-trip) to the host institution. The monthly stipend has been revised by the EU commission to allow students to cover their travel ticket. Therefore:

- MSc students will receive a monthly stipend of 890 Euros.
- Staff member will receive a monthly stipend of 2370 Euros.
- Trainees will receive a monthly stipend of 1230 Euros.

Research costs, tuitions fees, costs related to training, participation to conferences and insurance costs are covered by the host institution following EACEA guidelines. Note that attendance/participation to conferences and special training has to be approved by the supervision team in the host institution.

# 4- Eligibility

# 4-1 Eligibility of MSc





















To apply to this call, students should have proficiency in **Plant breeding**, **Biotechnology or related fields. Students showing interest of applying digital technologies to above mentioned fields are encouraged to apply.** In addition, to be eligible for a scholarship "students" must comply with the below criteria at the time of the application for a scholarship:

- a) at the time they apply for MSc scholarship, candidates must be national of and resident in an African country.
- b) be registered/admitted in or having obtained a degree in a HEI from:

  <u>b-1) one of the HEIs included in the GENES II consortium (Target group 1</u>). This target group includes students from all partner
  - Ebonyi State University, Nigeria
  - University of Abomey-Calavi, Benin
  - Jimma University, Ethiopia

universities as follows:

- Egerton University, Kenya
- University of Zimbabwe, Zimbabwe
- North-West University, South of Africa

b-2) HEI not included in the GENES II consortium but established in an EACEA eligible country (Target group 2). This target group includes students registered/admitted in or having obtained a degree from another HEI other than Ebonyi State University, University of Abomey-Calavi, Jimma University, Egerton University, University of Zimbabwe, North-West University, but established in Africa.

- c) have sufficient knowledge of the language of the courses in the host countries.
- d) Should also meet the enrolment criteria of the university he/she would want to apply to.

#### 4.2 4-2 Eligibility for Trainees and Staff

- a) Trainees must be a student enrolled in a bachelor/master/PhD programme in one of the African beneficiaries HEIs (Ebonyi State University (Nigeria), University of Abomey-Calavi (Benin), Jimma University (Ethiopia), Egerton University (Kenya), North-West University (South of Africa) and University of Zimbabwe (Zimbabwe)) and proficient in Plant breeding, Biotechnology and related fields.
- b) Academic staff must be working in one of the beneficiaries HEIs (Ebonyi State University (Nigeria), University of Abomey-Calavi (Benin), Jimma University





















(Ethiopia), Egerton University (Kenya), North-West University (South of Africa) and University of Zimbabwe (Zimbabwe)). Academic staff, applicants should hold an MSc or PhD degree Plant breeding, Biotechnology or related fields.

Students having benefited from scholarship(s) under the previous intra-Africa Academic Mobility Scheme are eligible to receive scholarship under this current call.

The consortium involves Francophone and Anglophone countries and will promote bilingual aptitude in students throughout the implementation of the project. Language courses will be offered to help students improve their skills.

Nationals are **not eligible** to apply to the scholarships of their home university.

# 5- Number of available scholarships for this first call

The GENES II project is opened to all students from the <u>partner universities</u> (Target Group 1) and those from <u>other</u> African universities (Target Group 2) for master credit seeking mobility. For Staff and trainees, only staff and students in the HEI (Target group 1: Ebonyi State University, University of Abomey-Calavi, Jimma University, Egerton University, North-West University, and University of Zimbabwe) are concerned. **Currently, sixteen (16) MSc, five (05) Trainees and five (05) Staff are available.** 

#### 6- Submission

The Scholarship application form together with other required documents should be sent **as a unique PDF attachment** to emails indicated below. Other required documents are listed in the application form and include:

- 1. Cover letter
- 2. Scholarship Application form (available here)
- 3. Student research proposal (for MSc)
- 4. Study work plan in the selected host university (Only for Staff)
- 5. Provide a clear motivation on the learning outcome from the internship (only for trainees)
- 6. National ID or Copy of Passport Data page
- 7. Certificate of previous degree /or a Proof that the degree has been completed (for Staff applicants)
- 8. First year MSc transcript records (for MSc applicants)
- 9. Proof of enrolment in second year MSc degree course (or proof of eligibility to register) from home institution (for MSc applicants)
- 10. Proof of enrolment in bachelor/master/PhD programme in one of the African beneficiaries HEIs (University of Abomey-Calavi, University of Cape Coast, University of Rwanda, University of Eswatini) (only for Trainees)





















- 11. Previous transcript record for Staff and Trainees
- 12. A support letter from home HEIs (from an authority of the University, Vice chancellor or Dean or Vice Dean or Head of Department/School)
- 13. Two recommendation letters
- 14. Detailed curriculum Vitae.
- 15. Certificate of English or French language skills if any
- 16. Employment certificate (only for staff)
- 17. Proof of socio-economic vulnerability attested by an authority of the home HEI for those vulnerable. The letter should have the HEI letter header and Email and contact of the signatory person.
- 18. Any other supporting documents

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 Plant breeding, Biotechnology, Biology or related fields in his home country. It is obligatory that the students have their first year MSc recognition and academic transcripts and a proof that he/she has completed the course work of the MSc.

For the choice of the host university, the students are allowed to only apply for the Ebonyi State University (Nigeria), University of Abomey-Calavi (Benin), Jimma University, (Ethiopia), Egerton University (Kenya), University of Zimbabwe (Zimbabwe), North-West University (South of Africa)

#### 7- 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. These arrangements will be fixed on a case-by-case basis between the host HEI and Coordinating Institution.

For more information, please contact

Table2. Contact of the local coordinators

Countries	Universities	Contact Person	
Republic of Benin	University of Abomey-	Prof. Enoch Achigan-Dako	
	Calavi	(Email: e.adako@gmail.com)	
		Dr Nicodème Fassinou Hotegni	
		(Email: nicodemef@gmail.com)	
Nigeria	Ebonyi State University	Prof Happiness Oselebe,	
		h.oselebe@ebsu.edu.ng;	
Ethiopia	Jimma University	Prof Wosene Abtew, wosish@yahoo.com	





















Zimbabwe	University	of	Prof	Edmore	Gasura,
	Zimbabwe		gasurae@yahoo.com		
Kenya	Egerton University		Prof	Pascal	Ojwang,
			pascal.okwiri@egerton.ac.ke		
South of Africa	North-West Universit	ty	Prof	Sydney 1	Mavengahama,
			sydney.Mavengahama@nwu.ac.za		

# 8- Deadline

# The deadlines vary according the selected position

Applications for Master, Staff and Trainees should be submitted to: <a href="mailto:genes2@genes-intra-africa.org">genes2@genes-intra-africa.org</a> and copied Mr. Christel Azon, <a href="mailto:christelferreolazon@gmail.com">christelferreolazon@gmail.com</a>, Prof Happiness Oselebe, h.oselebe@ebsu.edu.ng and Dr Godwin Nwonumara, ngnkwuda@gmail.com, not later than <a href="mailto:July 30th">July 30th</a>, 2025. Shortlisted candidates will be contacted and invited for interviews.

GENES II fosters diversity and gender equity at the work place. Therefore, female candidates and persons from socio-economic vulnerable groups are strongly encouraged to apply.

The list of academic programmes offered by different host institutions can be found (here)

































