CALL FOR APPLICATIONS FOR MASTERS SCHOLARSHIP UNDER THE AdEMNEA Project

Msc. Topic: *Comparative transcriptomic responses of African honeybees (Apis mellifera scutellata/other sub spps) and stingless bees (Meliponula subspps) to field relevant multi-agrochemical exposures in Uganda*

Work Package 3.2: Data analytics for Insect pollinator monitoring **TASK:** Understanding the effects of agrochemicals on bee health in landscapes of high, medium and low agrochemical usage on African bee genotypes (capacity building of Masters' student).

Background

Adaptive Environmental Monitoring Networks for East Africa (AdEMNEsA) Project is a combined research and capacity development project funded by the Norwegian Agency for Development Cooperation, (Norad) under the Norwegian Programme for Capacity Development in Higher Education and Research for Development (NORHED II). It is a cooperation between Norwegian University of Science and Technology, NTNU (leading institution), Makerere University in Uganda (leading southern institution), the University of Juba in South Sudan, Dar es Salaam Institute of Technology (DIT) in Tanzania and University of Bergen, Norway.

This project is part of the broader consortium that is developing effective bee species monitoring, management and conservation approaches. A multidisciplinary team of scholars in the project consortia are integrating Artificial intelligence technologies like smart beehives in bee health monitoring. For this current work package, we focus on understanding the effect of anthropogenic factors such as increased pesticide use on honeybee health using transcriptomics.

Bees (honeybees and stingless) are essential components of an agroecological system

as they provide pollination services, medicinal products and incomes to communities. However, the diversity and survival of these useful insects is threatened by increased pesticide use. The pressing need to investigate the potential for combined effects from exposure to co-occurring pesticides on African genotype of bees. Information that is useful in designing suitable approaches on management of bees. ***The recruited candidate is expected to conduct transcriptome profiling of African bees (Apis mellifera Scutellata) and meliponula sub species to commonly exposed pesticides in Uganda.***

Requirements

- An undergraduate degree in Biomedical laboratory technology, Entomology, Agriculture, Veterinary Medicine or Animal Production;
- Have a CGPA of at least 4.0 on a scale of 5.0
- Very hardworking, self-driven candidate who works with minimal supervision
- Be registered in a relevant Masters' degree program like Molecular biology and related disciplines at Makerere University.

Desirable Skills

- Molecular biology
- Laboratory science
- Bioinformatics
- Demonstrable ability to use R software will be an added advantage

Scholarships Available for **12 months** after signing of the contract

Key activities

The candidate will be required to do the following: -

1. Participate in research activities, leading to the assessment of effects of pesticides on bee health using molecular techniques
2. Participate in the lab activities including seminars, workshops

a) Participate in preparing of manuscripts

b) Participate in inventory management for the RTC laboratory Pollinator Protection and Insect Research team
c) A successful candidate will be based at RTC laboratory where they will be expected to mentor other students
3. Participate in the Field work for maintenance and deployment of insect pollinator research Nakyessesa field station in partnership with other project students

Funding

1. The successful Master candidates will receive in addition to Full Tuition and Functional Fees at Makerere University, a living allowance of 3,600 NOK (approx. 400 USD) every month for a period of two years.
2. The successful master's candidates will be offered entitled to attend workshops, seminars, conferences, facilitation for field study, printing of thesis, publication among others.

Admission requirements

The applicant must be admitted to Makerere University in any of the above-mentioned disciplines. The list of requirements is as follows:

d) The candidate must hold a bachelor's degree in a relevant field and possess competence in areas relevant to the position.
e) The applicant **MUST** commit and be ready to complete the assigned tasks within 12 months
f) The Applicant **MUST** be already admitted and registered for a Masters' program at Makerere University
g) The candidate **Must** be willing to sign a contract that commits him/her to work at Makerere University for at least a year on completion of their studies if offered the opportunity.
h) With the applicant's permission, Makerere University staff may also conduct a reference check before appointment.

i) All qualified persons are encouraged to apply for the fellowship, irrespective of cultural background, gender, age or disability.

j) Women are encouraged to apply.

k) Applicants should submit their application and CV by *email to admnea@cit.ac.ug with a copy to deborahruth.amulen@mak.ac.ug /amulendeborah@gmail.com* and *mnsabagwa@cit.ac.ug* . The subject of the email should specify the text **"SCHOLARSHIP APPLICATION".** The following documentation should be submitted as attachments to the application:

l) Certificates and/or grades for all post-secondary education, up to and including the bachelor's level.

m) A Masters concept aligning with one (or more) of the above-described areas of foci. The concept must be no more than 3 pages including the bibliography (font size 12pt, margin 1-inch, single line spacing). The concept should include a presentation of possible research questions/hypotheses, objectives and justification. An essential part of the assessment of applicants is the quality of the concept.

n) Attach academic documents, motivation letter for the scholarship and at least one reference from the Undergraduate supervisor.

The applicant is fully responsible for submitting complete documentation. Without complete documentation we cannot, unfortunately, include the applicant in the assessment process.

Opening date: 20th October 2025
Closing date: 14th Nov 2025 at 4pm East African Time.

For further information please contact:

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- Dr. Mary Nsabawa: Email: mnsabagwa@cit.ac.ug, Tel: +256701124388

PS: Only *Short-listed applicants will be invited for interviews.*


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