UNIVERSITY of RWANDA

COLLEGE OF SCIENCE AND TECHNOLOGY

OFFICE OF PRINCIPAL

ANNOUNCEMENT FOR THE PROFESSIONAL DEVELOPMENT TRAINING WORKSHOP ON USING ENVIRONMENTAL DNA RESEARCH

WORKSHOP DATE: FROM 2nd TO 13th OCTOBER 2023
OPEN TO: CITIZENS OF ANY AFRICAN COUNTRY
DEADLINE FOR APPLICATION: 1st SEPTEMBER 2023

In partnership with researchers from the Congo Basin Institute at the University of California, Los Angeles and CALeDNA at the University of California, Santa Cruz, the Centre of Excellence in Biodiversity and Natural Resource Management at the University of Rwanda (CoEB) is hosting a workshop to build research capacity in eDNA approaches. The workshop is funded by JRS Biodiversity Foundation and the Congo Basin Institute.

Quantifying biodiversity is essential to conserving it. Environmental DNA (eDNA) is a cutting-edge tool that excels at the rapid quantification of biodiversity. It takes advantage of the fact that animals and plants shed DNA that can reside in the sediments for 100's to 1000's of years. This shed DNA can be captured and sequenced to allow us to build a picture of both past and current environments.

It is in this context that I am pleased to inform you about the above training workshop on Using Environmental DNA Research to Better Inform Conservation Decisions that will take place at **the College of Science and Technology, University of Rwanda, and Nyungwe National Park from 2nd to 13th October 2023.**

The workshop is open to citizens of any African country and applicants should have a BSc and should be in a graduate program, or postdoctoral or professional research-related position in biodiversity conservation biology or related field. The Deadline is 1st September 2023.

Please see the attached flyer for more details on the criteria and how to apply and encourage your students and early career research colleagues to apply. For more information, please contact Venant Nzibaza nzibazavenant@gmail.com or 0785 646 244

Done in Kigali on 18th August 2023

Dr. Ignace GATARE
Principal

Using Environmental DNA Research to Better Inform Conservation Decisions

Professional Development Training Workshop: Oct 2 – 13 2023

Quantifying biodiversity is essential to conserving it. Environmental DNA (eDNA) is a cutting-edge tool that excels at the rapid quantification of biodiversity. It takes advantage of the fact that animals and plants shed DNA that can reside in the sediments for 100's to 1000's of years. This shed DNA can be captured and sequenced to allow us to build a picture of both past and current environments.

The Center of Excellence in Biodiversity and Natural Resources Management at University of Rwanda, in partnership with researchers from the Congo Basin Institute at University of California, Los Angeles and CALeDNA at University of California, Santa Cruz, are hosting a training workshop that will take place at the College of Science and Technology, University of Rwanda, and Nyungwe National Park. The workshop is funded by JRS Biodiversity Foundation and the Congo Basin Institute.

We seek fifteen participants who wish to develop and collaborations in the field of eDNA.

Objectives

- We aim to understand the biodiversity patterns in Nyungwe National Park over the last 500 years to inform park management plans
- Participants will learn about eDNA through lectures and hands on activities including:
    - developing a sampling plan and collecting eDNA samples in Nyungwe National Park
    - extracting modern and ancient DNA from the samples collected
    - preparing and DNA libraries and conduct high throughput sequencing
    - analyzing and displaying existing eDNA data from lake cores in Akagera National Park
    - making a plan to complete at least one publication based on the data generated during the workshop
- Participants will develop their own ideas for future eDNA work by:
    - forging collaborations with other researchers and agency managers
    - receiving training to enhance their grant writing skills
    - working within their collaborative group to develop an independent proposal to compete for one of two $5000 seed grants

Criteria for Acceptance

Citizens of any African country are welcome to apply. Applicants should have a BSc and should be in a graduate program, or postdoctoral or professional research-related position in biodiversity conservation biology or related field. Applicants should be able to commit to participating in the entire 12-day workshop. Priority will be given to applicants who demonstrate an ability and interest in continuing to work with the team post-workshop to help analyze the resulting data and prepare it for publication. Participation in the workshop includes a visit to Nyungwe National Park for sampling, where participants can expect to trek approximately 12 km on the sampling day. Rwandan applicants are expected to cover their own travel to Kigali. We have limited funding to help with travel for those traveling from larger distances. Please note in the application whether you are in need of such funding. **Apply here by September 1, 2023.**

Lodging and Food

Lodging, breakfast, tea breaks and lunch are provided free of charge to participants while attending the workshop in Kigali. Participants will be responsible for their dinners while in Kigali. During the workshop we will travel to Nyungwe National Park for two nights. Tent sites, tents, sleeping pads, and all meals will be provided free of charge, but participants must bring their own sleeping bag and other bedding. The camp site has an ablution block with flush toilets and shower. Drinking water will be provided at all times. More details will be provided upon acceptance.