

# Three Day Metabolomics Training Course

October 24-26, 2022

Application deadline Oct 2, 2022

**Description:** Chemical compounds produced by living organisms are key sources of natural products, determine organisms' niches and modulate species interactions. This intensive three-day workshop will focus on the theory and methods used to study the metabolome — the multitude of diverse compounds produced by living organisms.

**The Training:** This workshop will provide training in metabolomic data analyses for graduate students (PhD and 2<sup>nd</sup> year MSc students) and early-career scientists from sub-Saharan African, working on a variety of plant and animal species. Participants will gain skills for collecting, analyzing and sharing metabolomic data, focusing in particular on data analyses using freely available software. Participants will also gain scientific communication skills through paper discussions and a poster session. Support for this workshop is provided by a grant from the JRS Biodiversity Foundation.

## Training Details

**Language of conduction:** English

**Requirements:** Applicants should have good computer skills and a basic understanding of chemistry and statistics. All participants will present their research during a poster session and are expected to bring a printed poster to the workshop. Materials will be made available online prior to the workshop and participants are expected to download required programs (e.g., R and mzMine2) and other materials to a personal laptop computer prior to the workshop. The workshop will assume a basic familiarity with the R programming language. Participants unfamiliar with this program should work through the “Data Analysis and Visualization in R for Ecologists” tutorials available at <https://datacarpentry.org/R-ecology-lesson/index.html>, prior to the workshop.

Participants should have proof of full COVID-19 vaccination prior to the workshop.

**Training location:** Duduville Campus, *icipe*, Kasarani, Kenya.

**Costs:** The workshop is free for all participants from Eastern and Western Africa. Participants traveling from outside of the Nairobi area are encouraged to apply for funds to cover travel costs. Travel support is provided by a grant from the JRS Biodiversity Foundation. Travel funding is limited and requests for support will be reviewed as applications are received.



## Application Form

To apply, submit this application and your comprehensive curriculum vitae to [sara.weinstein@usu.edu](mailto:sara.weinstein@usu.edu) by October 2, 2022.

Name: \_\_\_\_\_ Email address: \_\_\_\_\_

Academic Level:      MSc                  PhD                  Postdoc                  Other: \_\_\_\_\_

Department: \_\_\_\_\_

Institution: \_\_\_\_\_

Address: \_\_\_\_\_

Supervisor/Faculty Mentor: \_\_\_\_\_

Provide contact information (name, address, email, telephone) for two professional referees. For students, please include your faculty mentor as a reference.

Reference 1: \_\_\_\_\_

\_\_\_\_\_

Reference 2: \_\_\_\_\_

\_\_\_\_\_

**In the space provided, please answer the following questions explaining why you want to take this course, how you meet the requirements, and how these skills will enhance your research and career goals. Priority will be given to applicants from Eastern and Western Africa working on conservation and biodiversity in Sub Saharan Africa, and demonstrating research and career objectives that will benefit from this technical training. We recommend preparing answers in a word processing program before pasting them into the form.**

1. Why do you want to take this course? (75-150 words)

2. How do you meet the requirements? (75-150 words)

3. Describe your experience with computer programming (particularly in the R programming language) and relevant experience in chemistry and chemical ecology. (maximum 100 words)

4. How will these skills enhance your research and career goals? Please list specific examples of how the course relates to your current research. (75-150 words)

5. Provide the title and abstract for the poster you would present during the poster session. Priority will be given to applicants with research questions (and/or future research directions) relating to chemical ecology and metabolomics. (maximum 200 words)

Title: \_\_\_\_\_

Can we include your abstract in the online abstract booklet:      Yes                      No

**Travel Assistance (optional)**

Support for this workshop is provided by a grant from the JRS Biodiversity Foundation. Funds are available to cover travel, housing, and meals for participants that demonstrate a need for support and are traveling from more than 40 km away from the *icipe* campus. To apply for travel support please provide the following additional information:



Starting location: \_\_\_\_\_

Preferred method of travel: \_\_\_\_\_

Estimated cost of travel to Nairobi, KE: \_\_\_\_\_

Provide a short statement detailing your need for travel assistance.