

Recruitment in project: Integrative approach to adaptive radiation in ancient lakes - a case study of Lake Ohrid *Gammarus* species flock

Two positions open : Post-doc and PhD student

The project aims to unravel, via integrative approach, the processes behind evolutionary radiation in the ancient Lake Ohrid using the endemic *Gammarus* species flock (Crustacea, Amphipoda) as model organisms. The integrative approach will incorporate transcriptome sequencing and phylogenomics, functional morphology analysis and assessment of diet preferences using DNA metabarcoding.

The main hypothesis of the project is that the observed diversity of endemic *Gammarus*, both on molecular and morphological level, is a result of adaptive radiation. Such a process of speciation when multiply species emerge from a common ancestor as a consequence of rapid adaptation to new or underutilized ecological niches in effect showing increase in diversification rates. This will be expressed, among others, by a high number of morphologically well recognizable species with noticeable number of adaptive features to various ecological niches (e.g. associated with different depth zones), having relatively low molecular divergence but high rate of speciation, in comparison to molecularly highly divergent but morphologically conservative sister lineages living in neighboring springs and rivers.



Post-doc position main tasks:

- Metabarcoding of gut content
- Metabarcoding of environmental samples

PhD position main tasks:

- SEM morphological analysis
- Barcode reference libraries

Project realised in:



Project founded by:



In collaboration with:



Additional information:

Post-doc position:

Timescale: 6 to 24 months
Requirements:
PhD in biology
Experience in work in DNA laboratory
At least basic experience with bioinformatics (bash, R)

PhD student position:

Timescale: 48 months
Requirements:
Msc in biology
Experience in work with invertebrate morphology

Deadlines for applications:

Post-doc : 30.V.2021

PhD: 30.VI.2021

For recruitment send CV and motivation letter to: tomasz.mamos@biol.uni.lodz.pl

After initial qualification and online interview, the official procedure in University of Lodz will follow and will require diplomas.

Contact:

tomasz.mamos@biol.uni.lodz.pl
michal.grabowski@biol.uni.lodz.pl
anna.wysocka@ug.edu.pl
d4303@bio.uminho.pt