

PhD Position (BioPlanet Doctoral School)

Museum and Institute of Zoology of the Polish Academy of Sciences

Project Title: Surviving the Desert: Phylogenomics and Evolution of Arid-Adapted Darkling Beetles (Tenebrionidae: Blaptinae)

Financed by National Science Center, Poland (OPUS-29 #2025/57/B/NZ8/03028)

Project Description and Objectives

The main goal of the project is to reconstruct a phylogeny of the subfamily Blaptinae (Coleoptera: Tenebrionidae), a globally distributed radiation of over 4,000 species adapted to arid and semi-arid environments. The project integrates high-throughput targeted enrichment (TE) sequencing, including museomic data, with extensive morphological datasets. Sequence data from 548 loci (>510,000 bp) will be generated from approximately 400 specimens (including historical museum material and recently collected samples), complemented by a morphological matrix of over 150 characters covering the majority of genera within Blaptinae.

The project addresses key questions in evolutionary biology, including:

1. Historical biogeography of desert-adapted lineages
2. Anatomical and molecular adaptations to arid environments
3. Development of a total-evidence classification framework for Blaptinae
4. Phylogeny and taxonomic revision of the tribe Opatrini (PhD project)

More information about the project is available at:

<https://sites.google.com/view/kaminskientomo/blaptinae>

PhD Project Scope (Opatrini Revision)

The PhD student will conduct a comprehensive phylogenetic and taxonomic study of the tribe Opatrini, the most diverse lineage within Blaptinae (>2,000 species).

The project will:

- Integrate targeted enrichment sequencing, museomic data, and morphological characters
- Test the hypothesis that current generic classification does not reflect phylogenetic relationships
- Develop a revised, phylogenetically informed classification of the tribe

We Offer

1. Work in an international research team in a supportive environment
2. Training in modern phylogenomics, systematics, and integrative taxonomy
3. Access to museum collections and molecular laboratory facilities

4. Opportunities for international collaboration and conference participation

PhD Student Tasks and Duties

1. Participation in preparation of a detailed research plan and work schedule
2. Laboratory work (DNA extraction, sequencing preparation)
3. Phylogenomic and bioinformatic analyses
4. Collection and coding of morphological data
5. Phylogenetic inference and evolutionary analyses
6. Preparation of scientific publications
7. Presentation of results at scientific conferences

Requirements

Mandatory:

1. MSc degree in biology or related discipline (or to be obtained before the start of the PhD program)
2. Very good command of English (written and spoken)
3. Strong interest in entomology, evolution, and systematics
4. Ability to work independently and in a team

Preferred:

1. Experience in systematics, insect morphology, zoological nomenclature, or taxonomy
2. Familiarity with phylogenetic methods and/or bioinformatics
3. Experience working with museum collections
4. Scientific achievements (publications, conference presentations, participation in projects)

Conditions of Employment

- PhD scholarship in accordance with NCN regulations (approx. 4,000–5,000 PLN gross/month, depending on stage of the doctoral school)
- Duration: 4 years
- Planned start: October 2026
- The candidate will be enrolled in the BioPlanet Doctoral School and based in Warsaw.

Required Documents

1. Application for admission to the BioPlanet Doctoral School
2. CV including education, research experience, and list of publications (if applicable)
3. Copy of MSc diploma (or equivalent)
4. Motivation letter
5. Contact details for at least one academic referee (or recommendation letter)

6. Certificates confirming English proficiency (if available)
7. Signed consent for processing personal data

Recruitment Process

The recruitment will be conducted in accordance with NCN regulations and BioPlanet Doctoral School procedures.

The selection process includes:

1. Evaluation of submitted documents
2. Interview with selected candidates

Application Deadline and Contact

Applications should be sent by **15 July 2026** to: **Prof. Marcin J. Kamiński / Project leader**
(mkaminski@miiz.waw.pl)