



NATIONAL SCIENCE CENTRE
POLAND



HR EXCELLENCE IN RESEARCH

Post-doctoral Position within the OPUS (2024/53/B/NZ8/03731) project on Ecogeographical Rules in Mammalian Evolution

We invite applications for a fully funded 3-year postdoctoral position in evolutionary ecology, based at the Institute of Nature Conservation, Polish Academy of Sciences (INC PAS) in Kraków, Poland. This position is part of the innovative OPUS project "Global Wind Regimes in Ecogeographical Rules of Evolution", funded by the National Science Centre Poland and starting in April/May 2025. We are looking for a driven, independent researcher with strong analytical skills and a background in mammalian evolutionary biology, eager to lead high-impact research on how wind and climate shape mammalian adaptations at a global scale.

Study field: evolutionary ecology, biogeography, phylogenetics, mammalogy

Location: Institute of Nature Conservation Polish Academy of Sciences (INC PAS), al. Adama Mickiewicza 33, Krakow, Poland

Project leader: [Dr. Arkadiusz Fröhlich](#)

Salary: The annual salary is 140,000 PLN gross gross (approximately 7,000 PLN net per month, subject to employment factors). The full-time contract spans 36 months, with continuation after a 6-month trial period based on positive evaluation. The role comes with generous funding for conference travel, project meetings, international research stays, and support for developing your own independent research ideas.

Career Development Opportunities: The postdoctoral researcher will gain valuable experience by mentoring students, leading analyses within a multi-disciplinary team, advancing their skills in analytical methods and programming, and expanding their international research network through fully funded collaboration stays and high-profile project meetings.

Recruitment process: Recruitment will follow the NCN (Polish National Science Centre, [see](#)) guidelines and include evaluation of submitted documentation, interviews with selected candidates, and final selection by an evaluation committee appointed by the Director of INC PAS. Candidates should submit the following in a single PDF file to sekretariat@iop.krakow.pl (Cc to frohlich@iop.krakow.pl) with the subject line "OPUS 27 Postdoc Application":

- A two-page cover letter detailing qualifications, research experience, and career goals.
- A copy of the PhD diploma (foreign degrees require recognition in Poland, [see](#)).
- Curriculum vitae, including a list of scientific achievements, publications, and referees.
- A signed consent for personal data processing ([see](#)).

Application deadline: The review of applications ends on 17 April 2025.

Additional questions should be directed to frohlich@iop.krakow.pl

Short description of the research project: In the face of accelerating climate change, uncovering the evolutionary forces that shape biodiversity is more urgent than ever. While significant progress has been made in evolutionary biology, the role of specific climatic factors—particularly wind—remains underexplored. This project breaks new ground by examining wind regimes as an overlooked yet powerful driver of mammalian phenotypic evolution, within the framework of ecogeographical rules such as Bergmann's and Allen's rules. Focusing on body size and appendage length (e.g., tails and limbs), the project aims to fill a critical gap in our understanding of climatic selection pressures. Its core objectives are to:

- Test the hypothesis that higher wind speeds within mammalian ranges are linked to larger body sizes and shorter appendages, enhancing thermoregulation in colder climates.
- Explore the interactive effects of wind and temperature on the evolution of mammalian phenotypes across thermal gradients.
- Apply advanced phylogenetic comparative methods, including Brownian Motion (BM) and Ornstein-Uhlenbeck (OU) models, to evaluate these hypotheses.
- Use a multifaceted approach to determine whether body size and appendage length evolve independently or in tandem in response to climatic pressures.
- Beyond testing specific hypotheses, the team aims to address fundamental evolutionary questions and reexamine existing evidence through inquisitive, unconventional, and integrative approaches.

The project involves close collaboration with internationally recognized researchers, including [Prof. Matthew Symonds](#) (Deakin University, Australia) and [Prof. Daniel Sol](#) (CREAF, Spain).

Tasks for the Postdoctoral Researcher: The postdoctoral researcher will lead the mammalian-focused component of the project, with core responsibilities including:

- Literature review on mammalian phenotypes and their potential adaptation to wind regimes.
- Assembling and managing global datasets on body size, appendage length, and species distributions.
- Performing spatial and advanced phylogenetic analyses using R.
- Leading the preparation and publication of high-impact scientific papers.
- Presenting findings at international conferences, attending workshops, and through collaborative research stays.
- Contributing to science communication, outreach, and public engagement initiatives.

Requirements for candidates:

- A PhD degree in evolutionary biology, zoology, computational ecology, or a related field obtained within the past 7 years (the period could be prolonged given the scientific career breaks, [see](#)). The degree must be recognized in Poland or nostrified. If required, use the [KWALIFIKATOR](#) tool to assess recognition status.
- Proven experience in large-scale data handling.
- Proven experience with phylogenetic comparative methods and statistical modeling in R.
- Proven knowledge of global mammalian diversity, ecology and evolutionary biology.
- Good spoken and written English skills.

Additional advantages include an experience with evolutionary models (Brownian Motion and Ornstein-Uhlenbeck frameworks), publications in high-impact scientific journals, familiarity with thermal biology and ecogeographical rules, readiness for collaborative international research stays, and a strong motivation to contribute to high-impact evolutionary research.