



POSTDOCTORAL POSITION

within the project “Ferment in the family: alcohol hormesis in workers of the honeybee *Apis mellifera*” funded by the National Science Centre, Poland



NATIONAL SCIENCE CENTRE
POLAND

We are looking for one early-career PhD-level scientist to join the Integrative Ecology Team at the Institute of Systematics and Evolution of Animals of the Polish Academy of Sciences in Kraków, Poland. The postdoctoral position of adjunct is available for two years from the earliest possible date. Salary is fixed (gross 120000 PLN / year).

About the project:

Hormesis is a relationship in which only certain doses affect the organism positively due to evolutionary adaptations to these typical doses. Alcohol, for example, occurs in nature only in low concentrations. According to the hormetic principle, low levels of alcohol consumption affect the organism positively, but abstinence and alcohol abuse act negatively. As alcohol abuse is addictive, the negative effects of high doses can be more pronounced than those of abstinence. Alcohol hormesis is possible in organisms adapted for the consumption of food naturally spiked by alcohol, such as fermenting fruits or nectar.

The main objective of the project is to investigate whether alcohol hormesis occurs in the honeybee (*Apis mellifera* L.) and confirm that honeybees get addicted to alcohol when they abuse its consumption. The aim is to feed honeybees various types of alcohol-spiked diets and then investigate the effects of these diets on mortality, body parameters as well as flight, and learning abilities. This research promises a complex understanding of alcohol hormesis and the effects of alcoholism on various aspects of functioning in the honeybee. The project centers around broad issues at the intersection of addiction biology, ecotoxicology, behavioral ecology, evolutionary ecology, and physiological entomology.

Working environment:

Institute of Systematics and Evolution of Animals of the Polish Academy of Sciences is located in Kraków, Poland. To learn more about this great city, visit krakow.travel/en. The Institute employs researchers who specialize in various fields of biological sciences such as systematics, paleontology, biogeography, and broadly conceived ecology. As such, the Institute provides a great platform to interact with colleagues who study evolution and biodiversity from many different perspectives. Within the Institute, the Integrative Ecology Team is a new, friendly, and inclusive group in which we realize various projects. Find out more about the team on our website, iecoteam.com.



Integrative
Ecology
Team
iEcoTeam

About the position:

We are looking for an enthusiastic, ambitious postdoctoral researcher to join the project detailed above. Its experimental parts involve primarily behavioral and physiological techniques, but depending on your interests and skills, complementary studies are possible. There is also an opportunity to engage in another, related project on alcohol self-medication in the honeybee. We expect a solid record of scientific achievement and full commitment to producing high-quality science.

Candidate qualifications:

- 1) A PhD in biology or a related field;
- 2) Background in work with the honeybee;
- 3) Proven track record in peer-reviewed scientific publications;
- 4) Experience in performing statistics in the R environment;
- 5) Excellent written and oral communication in English.

What we offer:

- 1) Full-time salary at a very good standard in Poland, including health care and social benefits;
- 2) Full coverage of all research costs, international conference attendance;
- 3) Becoming part of a growing team with many opportunities for collaboration;
- 4) Possibility for participation in a related project;
- 5) Help in securing further stay in the team by joint work on a proposal to an appropriate granting agency within the timeframe of your employment.



Applications should be electronic (a single pdf file) and comprise a scientific CV, a copy of the doctoral degree diploma, a motivation letter for joining the team, and two reference letters. The deadline for applications is February 18, 2023. Submit your application to: rekrutacja@isez.pan.krakow.pl. Top candidates can expect an interview invitation (online). The successful candidate will be announced by February 28, 2023 and asked to provide additional documents before employment.

All inquiries should be sent to Dr Krzysztof Miler: miler@isez.pan.krakow.pl.

Please add the following clause to your submitted documents: *I consent to the processing of my personal data included in the application documents for the purposes of the competition for the position indicated in the announcement and held by the Institute of Systematics and Evolution of Animals of the Polish Academy of Sciences. I have been informed that my consent is voluntary and that I have the right to withdraw it at any time, and that the withdrawal of my consent shall not affect the lawfulness of the processing that was carried out on its basis prior to its withdrawal. I also declare that I have read the information clause concerning the processing of personal data in accordance with the Regulation of the European Parliament and of the Council of 27 April 2016, included in the recruitment announcement issued by the Institute of Systematics and Evolution of Animals of the Polish Academy of Sciences.*



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