

We are seeking a motivated **Masters student** for a project: **Biological Clocks in the Wild: the effects of artificial light at night on circadian rhythms of a migratory bird**

at the Institute of Environmental Sciences, Jagiellonian University (Poland)



What do we study: It is well established that biological rhythms are fundamental drivers of biochemistry, cell biology, physiology and behaviour. The regularity of behaviours is governed by endogenous clocks, which are adjusted and synchronised with environmental cues, primarily light. Rapidly expanding anthropopressure largely disrupts these cues. Yet, it is surprising how little we know about the effects of disorders in the functioning of the internal time-keepers in free-ranging animals. The project will aim at understanding the effects of disturbance in environmental cues, i.e. light exposure, on circadian clock of a wild migratory bird: collared flycatcher (*Ficedula albicollis*). We will employ an experimental setup introducing artificial light at night in nestboxes during breeding season, at different stages of development and quantify its effects on circadian clock, physiology and behaviour. As a result we will try to build a comprehensive understanding of shifts in circadian rhythms and their consequences in a natural population.

Job description: The MSc candidate will actively participate in fieldwork (collecting phenotypic, biological and environmental data), analytical and lab work. S/he will be interacting with the PI and other team members, collaborators in Poland and worldwide, and attend relevant workshops and conferences. It is expected that the candidate will learn a large ecological skill set that will allow him/her to infer the evolutionary ecology of disturbed photoperiods in wild flycatchers. Specifically, the thesis will focus on the behavioral part of the project and the tasks will involve:

- active participation in fieldwork across two breeding seasons (ca. 2-3 months each year) on the Swedish island of Gotland,
- installation of cameras and light sources in randomly selected nestboxes,
- recording, and then carefully viewing behavioral responses of birds in a dedicated software,
- analysing the results in cooperation with other team members.

Salary: A National Science Centre stipend (2000 PLN/month, tax-free stipend) is available for 24 months.

Requirements:

1) Formal conditions:

- admission (or being already enrolled) to an MSc program at the Jagiellonian University (for example programs in English:

https://studia.eko.uj.edu.pl/en_GB/ecoevo, https://studia.eko.uj.edu.pl/en_GB/epm or programs in Polish)

2) Specific merit requirements for the project include:

- strong English language command, communication, organizational and collaboration skills;
- experience with field work (preferably with birds) is considered advantageous;
- bird ringing/handling experience, ethical permits to work with animals and driving license are a plus.

Informal enquiries: email to the principal investigator Joanna Sudyka (joanna.sudyka@uj.edu.pl) or the project manager Wioleta Oleś (wioleta.oles@uj.edu.pl).

The formal application should be sent by **01.10.2021** to Wioleta Oleś (wioleta.oles@uj.edu.pl) with the term “MSc position” as email subject line and include:

- 1) CV (maximum 2 pages) including information on relevant academic achievements, relevant experience and training and contact information for two referees;
- 2) cover letter (maximum 1 page), explaining how the applicant’s background and research interests make them a suitable candidate for the position;
- 3) signed copy of a formal statement concerning the processing of personal data, available here: https://cawp.uj.edu.pl/en_GB/wynagrodzenia/stypendia (Wzór oświadczenia o przetwarzaniu danych osobowych)

The documents must be submitted in English or Polish.

The applications will be considered by a selection committee according to the regulations about scientific scholarships in research projects financed by the National Science Centre, Poland
(https://www.ncn.gov.pl/sites/default/files/pliki/regulaminy/ncn_scholarships_in_projects_en.pdf)

In the lack of eligible applications, the enrollment will be extended or a new deadline will be announced.