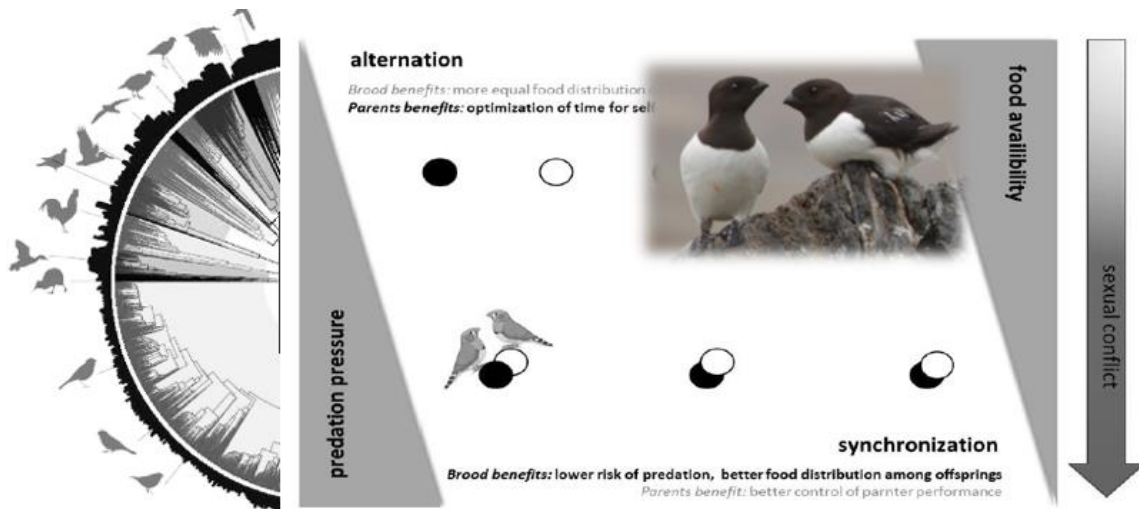


Two Ph.D. scholarships for studying parental coordination in birds

ACORD: Avian COordination of parental activities: patterns and mechanisms

Studied species: Little auk (**PhD #1**) and all the birds, with little auk as a case study (**PhD#2**)



Location: PhD students will be based at the Faculty of Biology, University of Gdańsk, Poland. Fieldwork (both positions) will be conducted on Spitsbergen (Hornsund).

Project objectives: The main aim of our project is to investigate some mechanisms of parental coordination in birds, considering both ultimate and proximate components.

For ultimate part (**PhD #1**), we will look at coordination patterns through the perspective of various species, examining their life-history traits, breeding ecology and the level/pattern of their parental coordination. We will also examine behavioural response to shortcoming of the breeding partner in respect to environmental conditions, this way exploring basic mechanistic of parents cooperation and coordination. To this end, we will apply inter-species perspective (meta-analyses: two chapters) as well as focus on the little auk as a special case (one chapter).

For proximate factors (**PhD #2**), we will examine endocrine mechanisms of parental care, through the perspective of three hormones: corticosterone (CORT), prolactin (PRL), and mesotocin (MT) measured at breeding partners, at various stages of the breeding season (3-4 chapters, each focusing on different hormones/breeding stages). We will perform this investigation applying a case study approach, using the little auk as a model species.

Tasks: Successful candidates will conduct their Ph.D study being supervised by Katarzyna Wojczulanis-Jakubas from POLar Ecology Group (<https://polarecologygroup.wordpress.com/>) at University of Gdańsk in Poland. Each PhD student will also have co-supervisor, for PhD #1 it will be prof. Małgorzata Lagisz-Nakagawa from (University of New South Wales, Australia) and for PhD #2 it will be prof Olivier Chastel from (Centre d'Etudes Biologiques de Chizé, France). Both students will work in the field on Spitsbergen (Arctic) during ~2.5 months (June-August) in two seasons, in a small research team. Field work will include nest searching, bird catching, blood sampling, and video recording. Analytical part of the project will be PhD specific. For

PhD #1 it will be analysis of some video material collected in the field and extensive literature search and complex statistical analyses (meta-analysis). For PhD #2 it will be analysis of the collected materials (molecular sexing, hormones analysis and analysis of video material) and data analysis using a (Bayesian) modelling approach. For the hormonal analyses 2-3 short (one-month) visits in the lab of prof. Chastel (Chize, France) are planned. Both students will be obliged to present their results at relevant thematic conferences, and prepare their chapters in the form of scientific manuscripts to be published in high-impacted journals.

Founding: A grant from the National Centre of Science, Poland covering costs of the fieldwork (lab visits and conference). The successful candidate will be awarded a Ph.D. scholarship for four years 5000 PLN per month (no other funds provided).

How to apply?

Interested candidates should contact dr. hab. Katarzyna Wojczulanis-Jakubas (Katarzyna.wojczulanis-jakubas@univ.gda.pl) at the University of Gdańsk appending:

- 1) CV with all relevant points, preferably demonstrating relevant skills for the present project [fieldwork/labwork experience, statistical analyses, programming (R preferred), scientific writing/presentation].
- 2) covering letter detailing reasons and motivation for applying for this specific project.
- 3) two letters of recommendation from a previous supervisor and/or collaborator (with an email address to contact them).

Candidates may be asked to participate in interview by internet communicators (Teams/Skype).

Deadline for applications: 26 May 2024

First decision (short list): 1 June 2024, final decision: 15 June 2024 (pre-selected candidates to be invited for an interview between 2-10 June 2024).

In the case of not finding the candidate fulfilling requirements, or resignation or disqualification of the successful candidate, the second recruitment will be organised.

The next step for the successful candidate is recruitment for Doctoral School of Natural Sciences of University of Gdańsk. The detailed information here:

<https://sd.ug.edu.pl/en/scisle/glowna>

Due to administrative reasons, Doctoral School enrollment (and so scholarship) will start in October 2024. The first field season May-August 2025.

Basic requirements

- M.Sc. degree in biology, ecology or similar sciences (with an appropriate diploma in English or Polish);
- candidate passes successfully through Doctoral Study recruitment.
- good conduct (certificate of good conduct is required for applying for borrowing a rifle for scaring off polar bears); carrying a rifle during fieldwork is mandatory on Spitsbergen.
- fluent English enabling communication and scientific writing;
- experience in statistical analyses (especially PhD#1) and motivation to further improve it;
- high ethical standards, reliability, precision, and persistence in work (fieldwork, lab work, literature reading and manuscripts preparation);

- cooperative attitude and inclusive approach in social interactions

Additional candidate features

- experience in publication preparation documented by authored/co-authored papers;
- experience in programming (R preferred);
- experience in laboratory work (PhD #2 specifically);
- experience in fieldwork (preferably with birds/seabirds: searching for nests, catching, measuring, blood sampling, ringing etc
- sense of humour and open attitude;

Additional information:

The application must include the following statement: “I hereby give consent for my personal data included in my application to be processed for the purposes of the recruitment process under the Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation).”

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://ncn.gov.pl/sites/default/files/pliki/uchwaly-rady/2019/uchwala25_2019-zal1_ang.pdf