



Funded PhD Studentship: *Exploring the evolution of vocal learning through comparative cultural evolution*

Primary supervisor: Dr Robert Lachlan

Institution Details: Department of Psychology, Royal Holloway University of London

Collaborative partner: British Trust for Ornithology (BTO)

Degree structure: full-time four-year PhD programme

Project background:

Vocal culture is central to human life, but we know little of how its key underlying trait, vocal learning, evolves. Bird song provides an ideal system to explore this topic, due to its diversity of species, each with its own style of vocal learning. In this project, we will make use of recently developed techniques to measure song and infer learning abilities from simulations of cultural evolution. We will compare vocal learning across one taxon (*Emberiza* buntings) and conduct a citizen science project to explore cultural evolution in garden bird species. Our project will provide insight into the evolution of cultural behaviour, while involving birdwatchers in a cultural evolutionary and evolutionary research project.

Project description:

The PhD project will be based around two top-level studies:

Project 1. Comparative cultural evolution in *Emberiza*. We will combine existing data-sets with data collected by the student during the project in Scandinavia (Norway/Finland) and Japan to make inferences about how learning abilities vary within this genus.

Project 2. Cultural evolution in song at a national scale. In collaboration with the BTO we will set up a national citizen-science survey of how garden bird song varies across the UK, to explore how song varies at this scale.

Who we are looking for:

We are looking for a PhD candidate with the potential to conduct ornithological fieldwork in remote locations, to engage people in a citizen science project, and to learn the bioacoustics and cultural evolutionary analytical tools needed to analyse the data you will collect.

Who we are:

The project is based at the [Department of Psychology at Royal Holloway](#) – a friendly and supportive department with an excellent research reputation. Our research group (<https://www.cuco.group>) is made up of researchers with expertise in animal communication and cultural evolution. We have pioneered the bioacoustics and cultural evolutionary techniques that will underpin this project. The project will be carried out in collaboration with [Dr Joe Cooper](#) an expert in citizen science based at the BTO.

Please feel free to get in touch to discuss the project in more detail:

Robert.Lachlan@rhul.ac.uk



Training Opportunities:

A comprehensive package of training will be agreed in consultation with the supervisors. Elements of training will be provided by the supervisors, Royal Holloway, University of London, and by other providers.

Applicants: essential and/or desirable attributes/skills:

The ideal candidate will show an interest in animal behaviour. Applicants should have the equivalent of a 2.1-honours in Psychology, or a related discipline, and meet [College requirements for English](#) (for international students). Strong communication, quantitative, field and organisational skills are necessary. Field ornithology skills are desirable.

Studentship Details:

This studentship is funded for four years.

- The studentship award covers Home (UK) fees and provides you with a stipend of £18,489 per year.
- Funding is provided for research costs (e.g. fieldwork, and cloud computing) and conference attendance.

Note: applications may be considered from applicants from outside the UK. But applicants not eligible for “Home” student status will be required to provide evidence of additional funding that you have secured to cover the difference between home and International fee rates across the four years of study.

How to apply for this studentship:

Please apply via the [College online application system](#).

Provide your c.v. and a personal research statement. The personal research statement should detail: (a) your research skills and experiences to date in areas relevant to this PhD project and (b) your reasons for applying for this particular studentship.

Deadline:

The deadline for applying to Royal Holloway University of London for a place is **23:59 GMT on 21st March 2022**. No extensions to this deadline will be permitted.

For further enquiries:

For enquiries related to the studentship topic, please email Dr Robert Lachlan (Robert.Lachlan@rhul.ac.uk)