

Dynamics of flocking in birds: the role of individual recognition and social learning

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Project Description

Many birds travel in flocks comprising many individuals. During flights, decisions have to be made about who leads and follows, who is positioned where in the flock, and who you want to be flying beside. In bird flocks, these decisions have to be made rapidly during flight. This project aims to (a) investigate the roles that individual personality traits and morphological/physiological parameters play in determining flock behaviour and flock positioning, (b) understand how individuals recognise one another and make decisions about whom to position themselves with, and (c) determine whether individuals extract more information and learn socially from preferred individuals within a flock. This inter-disciplinary project will use free-flying captive homing pigeons (*Columba livia*) and southern bald ibis (*Geronticus calvus*) to address these three key questions. Key methodological approaches will involve the use of accelerometer and GPS loggers, construction of social networks, personality testing, social learning trials, respirometry, and designing experiments to test and manipulate individual recognition and appearance.

This is a funded 3-year PhD (fees covered with £16,296 annual stipend). For further information and how to apply, please visit: <https://www.findaphd.com/phds/project/dynamics-of-flocking-in-birds-the-role-of-individual-recognition-and-social-learning/?p56553>

The deadline for applications is **5pm on February 15th**. Interviews will be held at Royal Holloway (Egham, Surrey) at the end of February. This studentship is only available to UK or EU applicants. Applicants need a minimum of a 2.1 degree in biology (ecology, zoology, behaviour), and preferably a Master's degree in a relevant subject. The anticipated start date is September 23rd 2019.



Enquiries

For enquiries, contact Dr Steve Portugal (Steve.Portugal@rhul.ac.uk) For more information about the lab group and RHUL, please visit: www.sjportugal.com; www.rhul.ac.uk. (Photos: W. Kruger, L. Taylor). Please note, due to the nature of the work, a clean driving license is essential for this project.