



JOB DESCRIPTION

Job Title:	Postdoctoral Research Assistant
Department / Unit:	Biological Sciences
Job type	Fixed contract
Grade:	7
Accountable to:	Dr Steve Portugal
Purpose of the Post	
<p>This post is funded by the Leverhulme grant "Spots, stars or stripes? The evolution of eggshell surface topography". The aim of this grant is to characterise eggshell surface structure along the avian phylogenetic tree, and determine – through novel mechanical and structural engineering approaches – how different eggshell surface structures function. Moreover, we aim to determine what life-history traits determine eggshell surface structure.</p> <p>Based on a proven record of academic achievement in experimental approaches to physiology and/or biomechanics, she/he will design, set up and run experiments on eggshells, analyse the resulting data and prepare manuscripts for publication.</p>	
Key Tasks	
<ol style="list-style-type: none"> 1. Conduct detailed physiological and biomechanical experiments on eggshells. 2. Design novel approaches for measuring structural properties of eggshells. 3. Pilot, refine and optimise experimental techniques. 	
<ol style="list-style-type: none"> 4. Take a leading role in overcoming methodological problems that arise during the project lifespan, and keep the PI up-to-date with the project's progress. 5. Analysis of results, writing of scientific papers, and public outreach. 6. Formulate and test new hypotheses arising from the data, where relevant. 	
<ol style="list-style-type: none"> 7. Submit abstracts to and present research findings at international conferences. 8. Construction and curation of large data sets. 9. Competent and fluent in R to allow detailed data analyses within a phylogenetic framework. 	
<ol style="list-style-type: none"> 10. Working with postgraduate students in the laboratory. 11. Participate in lab meetings and events, including communicating recent findings to the research group. 12. Undertake training as required, including at UK locations outside London. 13. Undertake small scale project budget management, including requisition of laboratory supplies. 14. Develop an understanding of Health and Safety issues inherent in the research, and participate in the risk assessment and mitigation process. 	

Other Duties
<p>The duties listed are not exhaustive and may be varied from time to time as dictated by the changing needs of the College. The post holder will be expected to undertake other duties as appropriate and as requested by his/her manager.</p> <p>The post holder may be required to work at any of the locations at which the business of Royal Holloway is conducted.</p>
Internal and external relationships
<p>The following list is not exhaustive but the post holder will be required to liaise with:</p> <ul style="list-style-type: none">Dr James Bowen (The Open University)The Natural History Museum (Tring)Postgraduate research students and undergraduate project students within the group