

## **JOB DESCRIPTION**

<b>Job Title</b>	Research Associate in Population Biology
<b>Department / Section</b>	Division of Biology, Ecology and Evolution
<b>Job Family / Level</b>	Research and Education, Level B
<b>Salary</b>	£26,720 - £33,080 per annum
<b>Location</b>	Silwood Park, Ascot
<b>Reporting to</b>	Prof T Coulson
<b>Working relationships</b>	Other academic and research staff, members of the laboratory, administrative staff.
<b>Working Hours</b>	Not normally less than 35 hours per week
<b>Length of Appointment</b>	60 months

### **Summary of Post**

To develop and apply theory and models to investigate linkages between the dynamics of populations and the dynamics of heritable of phenotypic traits, genotypes and alleles. Models will range from simple models to those tailored to specific field and laboratory systems.

### **Main Duties**

- Development and implementation of stochastic models of populations and heritable characters
- To learn new approaches and latest research results through searching the biology literature
- To critically analyse existing and new experimental data
- To work in close collaboration with empiricists and other modelers to achieve high impact in life sciences
- Informing models and testing model predictions
- To take initiatives in the planning of research
- To help direct the work of small research teams including undergraduate and postgraduate students
- To identify and develop suitable techniques, and apparatus, for the collection and analysis of data
- To conduct data analysis to parameterize models
- To ensure the validity and reliability of data at all times
- To maintain accurate and complete records of all findings
- To write regular (monthly) internal reports
- To contribute short sections of reports required by the research sponsors
- To attend relevant workshops and conferences
- To prepare material for presentation in oral and poster formats
- To present findings to colleagues and at conferences

- To draft publications and prepare them for submission to refereed journals
- To submit publications to refereed journals
- To contribute to writing bids for research grants
- To provide guidance to staff and students
- To undertake instruction of PhD students as agreed
- To supervise practical work and advise students on techniques
- To take responsibility for organising resources and effective decision making in support of research
- To attend relevant workshops and conferences as necessary
- To develop contacts and research collaborations within the College and the wider community
- To promote the reputation of the Group, the Department and the College

### **Other Duties**

- To undertake appropriate administration tasks
- To undertake limited teaching duties
- To attend relevant meetings
- To comply with relevant College policies, including Financial Regulations, Equal Opportunities Policy, Promoting Race Equality Policy, Health and Safety Policy, Information Systems Security Policy and Intellectual Property Rights and Register of Interests Policies
- To undertake any necessary training and/or development
- To maintain safe workplace practice and procedures in accordance with the requirements of Health and Safety legislation;
- To maintain an up to date knowledge of relevant statutory Health and Safety legislation and recommendations and attend safety training as required.
- Any other duties commensurate with the grade of the post as directed by line manager / supervisor

**To observe and comply with all College policies and regulations, for example Health and Safety, Data Protection, etc.**

**Job descriptions cannot be exhaustive and the post-holder may be required to undertake other duties, which are broadly in line with the above key responsibilities.**

**Imperial College London is committed to equality of opportunity and to eliminating discrimination. All employees are expected to adhere to the principals set out in its Equal Opportunities in Employment Policy, Promoting Race Equality Policy and Disability Policy and all other relevant guidance/practice frameworks.**

## PERSON SPECIFICATION

**Job Title** Research Associate in Population Biology

**Department / Section** Division of Biology, Ecology and Evolution

### Qualifications

- PhD (or equivalent) in Population Biology, Evolutionary Ecology, Mathematical Biosciences, or a related field, or equivalent vocational qualifications

### Experience and Knowledge

#### Essential:

- Experience in the construction and analysis of models of populations, and/or heritable characters.
- An interest in collaborating with empiricists
- Publication track record in recognised, refereed journals

#### Desirable:

- Previous experience with collaborating with empiricists

### Skills and Abilities

- Ability to conduct a detailed review of recent literature
- Ability to develop and apply new concepts
- Creative approach to problem-solving
- Excellent verbal communication skills and the ability to deal with a wide range of people
- Excellent written communication skills and the ability to write clearly and succinctly for publication
- Excellent organisational skills
- Excellent critical, communication and scientific writing ability
- Able to work in a multidisciplinary research environment
- Ability to organise own work with minimal supervision
- Ability to prioritise own work in response to deadlines
- Advanced computer skills, including word-processing, spreadsheets, Internet

In addition the Research Associate should be able to demonstrate:

- Ability to direct the work of a small research team and motivate others to produce a high standard of work
- High level analytical capability
- Ability to communicate complex information clearly
- Ability to apply relevant models, techniques and methods and develop new ones
- Ability to assess resource requirements and deploy them effectively
- Ability to encourage research culture in others

## **Personal Attributes**

- Willingness to work as part of a team and to be open-minded and cooperative
- Commitment to meeting deadlines
- Commitment to maintaining and enhancing facilities and training others in their use
- Flexible attitude towards work
- Discipline and regard for confidentiality and security at all times
- Willingness to undertake any necessary training for the role
- Willingness to travel both within the United Kingdom and abroad to conduct research and attend conferences/workshops and other meetings