
School of Natural & Environmental Sciences

Research Assistant/Associate (Molecular Biology and Control of Chronic Bee Paralysis Virus)

Grade: F

Vacancy Ref: D99224R

Main Purpose

The postholder will work on a collaborative project with the University of St Andrews to study the molecular biology and control of chronic bee paralysis virus (CBPV), an emerging pathogen of honey bees. The goal of the study is to develop honey bee management techniques that help bee farmers and amateur beekeepers prevent or mitigate CBPV disease in honey bee colonies.

Main Duties and Responsibilities

1. Establish methods for the detection, quantification and culture of viral and fungal pathogens.
2. Collate data on coinfection, pesticide contamination, weather and husbandry practices.
3. Use data from (2) to create biostatistical models to assess likely co-stressors.
4. Conduct field trials to gather new data on the disease dynamics within- and between-colonies.
5. Under guidance, create microsimulation models to capture the processes from (4).
6. Conduct transmission and pathogenesis studies in adult honey bees after challenge with one or more pathogens.
7. Set-up field trials in collaboration with members of the Bee Farmers Association.
8. Work independently, using problem solving skills to develop the project whilst remaining cognisant of novel strategies and opportunities for exploitation.
9. Keep up to date with relevant and related scientific literature.
10. Provide leadership within the research team, including supervision of postgraduate and undergraduate students.
11. Attend and contribute to national and international conferences.
12. Help prepare scientific papers for publication.
13. Communicate regularly with the research team in St Andrews, with commercial bee farmers and amateur beekeepers.

Research Role Profile

As part of our commitment to career development for research staff, the University has developed 3 levels of research role profiles. These profiles set out firstly the generic competences and responsibilities expected of role holders at each level and secondly the

general qualifications and experiences needed for entry at a particular level. It is unlikely that any single member of staff will be applying all these competences at any one time but he or she would be expected to display most of them over a period of time.

Please follow this link to our [Research Role Profiles](#)

Person Specification

Knowledge (inc. qualifications)

Essential

- PhD (awarded or near completion) in ecology or molecular biology

Skills (professional, technical, managerial, practical)

Essential

- Excellent oral and written communication skills □ Demonstrated ability to lead research initiatives.
- Proven ability to work successfully in a research team
- Ability to analyse data in R environment
- Personal skills necessary to interact with staff from other Universities as well stakeholders

Desirable

- Training in practical beekeeping would be an advantage
- A full and clean driving licence would be useful for field work

Experience and Achievements (paid or unpaid)

Essential

- Practical experience in a range of laboratory skills
- Practical experience in studying insects or their pathogens
- Practical experience of molecular techniques e.g. qRT-PCR

Desirable

- Experience of conducting fieldwork
- Experience of handling live insects
- Experience of biological modelling
- Experience of working with infective agents such as viruses, fungi or bacteria

Other

Essential

- The successful applicant will need to work with adult worker honeybees and so the post is not suitable for those with a known allergy to bee stings or a phobia about working with live insects.
- Due to the seasonal nature of field work involved in this project the candidate may be required to work at weekends at times between April and September.

For additional details about this vacancy and essential information on how to apply, visit our Job Vacancies web page at <http://www.ncl.ac.uk/vacancies/> or contact giles.budge@ncl.ac.uk.