Research Fellow
School of Biological Sciences

Closing date: 4 June 2019
Interview date: To be confirmed
Reference number: SBS058R
Introduction

Reproduction in Varroa mites

With one-third of our food dependent on insect pollinators, honey bees are vital to global food production. Worryingly, there is a serious honey bee health crisis worldwide. The honey bee mite *Varroa destructor* is considered a leading cause of the honey bee crisis. During work at the University of Aberdeen developing an artificial rearing system for Varroa, we have identified stimuli able to induce and inhibit reproduction of Varroa. This 3-year BBSRC-funded project aims to better understand the role and production of these egg-inducing factors, how they may explain apparent Varroa-resistance in certain strains of honey bees and whether these factors may be employed in form some of control approach.

Dr Alan Bowman heads a well-funded group investigating fundamental aspects of Varroa biology and associated viruses of honey bees and how that information can be used to aid honey bee health. Dr Bowman’s laboratory is well-equipped for modern molecular biology, proteomic and analytical biochemistry studies and runs two apiaries.

A Research Fellow is sought to join his team.
Job description

Main purpose of the role:

We seek to recruit a highly motivated Research Fellow committed to a career in research, providing consistent and continuous high level intellectual and practical input into a dynamic research group. You will have a PhD in Zoology, Entomology, or Biology with experience in a relevant area. Particular skills and experience include working with small arthropods such as mites, general bee keeping and handling, gene expression studies, and pheromone analysis. The successful candidate will be required to function as an outstanding post-doctoral fellow, running independent projects leading to publications and presentations. The successful candidate will also be required to supervise more junior laboratory members, namely as research assistant employed on this project.

In addition to the requirements above, the post holder will be required to work for several weeks in collaborators’ institutes in France, Germany and Sweden.

Key responsibilities:

Research Fellow

- Responsible for planning and conducting research on a day-to-day basis, ensuring that it is completed efficiently, on time and to the highest of research standards
- Taking a leading role in the preparation of research papers for publication and presentations at conferences
- Keeping up-to-date with the current literature and methodologies to gain expert working knowledge of the project topic
- Perform studies on artificial feeding systems of Varroa destructor, including gene expression analysis, hormone and pheromone analysis
- Perform studies on honey bees in the lab and in the field
- Assist in supervision of projects in the laboratory
- Assist with general running and organisation of the research laboratory
- Requirement to work in France, Germany and Sweden for several weeks
- Occasional requirement to work outside normal working hours

In addition to the key responsibilities above, the post holder will perform a supervisory role in managing a research assistant on this project at Aberdeen and liaise with the research partner at UHI, Inverness and collaborators in France, Germany and Sweden.
Candidate background

Candidates should meet the following criteria

Knowledge
- PhD in a relevant subject area
- Background in entomology, acarology, molecular biology, and pheromone analysis is required
- Knowledge of invertebrate reproduction

Skills
- Good communication skills, both written and oral
- Ability to work independently and as part of a team, as required
- Ability to think critically
- Skills in the relevant research techniques (e.g. gene expression, qPCR, gene knockdown, micro-injection, olfactory chamber studies, pheromone analysis, *in vitro* arthropod culture, bee handling)

Experience
- Experience of molecular biology studies
- Experience of pheromone studies
- Experience of bee handling at the apiary and in the lab
- Experience of *in vitro* culture of arthropods
- Experience in scientific publishing and in presenting to scientific conferences
- Ability to organise own workload, including forward planning
Terms of appointment

Salary will be at the appropriate point on the Grade 6 salary scale (£33,199 - £39,610 per annum) and negotiable with placement according to qualifications and experience. Consideration will be given to making an appointment at Research Assistant, Grade 5 level in the first instance (£31,302 per annum) for individuals in the final stages of completing their PhD.

Any appointment will be made subject to satisfactory references and a 12 month probation period.

As this post is externally funded by BBSRC it is available until 18 May 2022.

For further information on various staff benefits and policies please visit www.abdn.ac.uk/staffnet/working-here

Should you require a visa to undertake paid employment in the UK you will be required to fulfil the minimum points criteria to be granted a Certificate of Sponsorship and Tier 2 visa. As appropriate, at the time an offer of appointment is made you will be asked to demonstrate that you fulfil the criteria in respect of qualifications and competency in English. Please do not hesitate to contact Marian Elliott-Jones, HR Adviser on +44 (0)1224 273757 or email m.elliott-jones@abdn.ac.uk for further information.
# Person specification

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<th><strong>Education/Qualifications</strong></th>
<th><strong>Essential</strong></th>
<th><strong>Desirable</strong></th>
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<tr>
<td>Academic, technical and professional education and training</td>
<td>• PhD (or near completion) in a relevant subject area (e.g. Entomology, Zoology, Biology)</td>
<td>• Pheromone analysis</td>
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<td><strong>Work and Other relevant experience (including training)</strong></td>
<td>• Experience of in vitro arthropod culture systems</td>
<td>• Experience of presenting at non-scientific meetings</td>
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<td>eg Specialist knowledge, levels of experience, supervisory experience, research</td>
<td>• Experience of bee handling</td>
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<td>• Experience of micro-injection</td>
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<td>• Skills of modern molecular biological approaches</td>
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<td>• Experience of presenting at scientific conferences</td>
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<td><strong>Personal qualities and abilities</strong></td>
<td>• Excellent written and oral communication skills</td>
<td>• A highly motivated individual</td>
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<td>eg initiative, leadership, ability to work on own or with others, communication skills</td>
<td>• Ability to work independently and as part of a team</td>
<td>• Ability to teach</td>
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<td>• Ability to think critically</td>
<td>• Ability to obtain outside research funding</td>
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<td>• Ability to plan work load, forward plan and work to tight deadlines</td>
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<td>• Ability to lead, manage and train staff</td>
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<td><strong>Other</strong></td>
<td>• Requirement to work outside of normal working hours</td>
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<td>eg special circumstances (if any) appropriate to the role such as unsocial hours, travelling, Gaelic language requirements etc.</td>
<td>• Requirement of work for several weeks in France, Germany and Sweden</td>
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<td>• Travel to present results at conferences or scientific meetings which may require overnight stays</td>
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The University

Founded in 1495, Aberdeen is Scotland’s third oldest University and the fifth oldest in the UK. Ranked within the world top 160 in the Times Higher Education Rankings 2019 and named Scottish University of the Year in the Times and Sunday Times Good University Guide 2019. Aberdeen is ‘open to all and dedicated to the pursuit of truth in the service of others’.

Aberdeen is a broad based, research intensive University, which puts students at the head of everything it does. It has significant academic strengths and potential across a wide variety of disciplines. Outstanding in a wide range of discipline areas, Aberdeen has also been credited for its international reach and its commercialisation of research ideas into spin out companies.

The University has over 14,000 matriculated students and 3,600 staff representing 130 nationalities. We encourage bold thinking, creativity and innovation and we nurture ambition with many opportunities for professional and personal development in an inclusive learning environment which challenges, inspires and helps every individual to reach their full potential.

The University combines a distinguished heritage with a forward looking attitude. In the past few years, the University has encouraged creativity in its academic staff, broken new ground with an innovative curriculum, and developed state-of-the-art facilities including the new Sir Duncan Rice Library and the Aberdeen Sports Village and Aquatics Centre. In looking to the future, the University seeks to enhance its reputation as one of the world’s leading Universities by moving forward with ever more ground breaking research; ensuring students have an intellectual and social experience second to none; and capitalising upon the dual role as one of the major institutions of the north and as a cornerstone of regional economic and cultural life.
The city and the region

Aberdeen and Aberdeenshire

With a population of approximately 230,000, the city stands between the Rivers Dee and Don. This historic city has many architectural splendours and the use of its sparkling local granite has earned Aberdeen the name of the Silver City. Recognised as the oil capital of Europe, Aberdeen nevertheless retains its old-fashioned charm and character making it an attractive place in which to live.

Aberdeen enjoys excellent communication services with other European cities - e.g. flying time to London is just over one hour with regular daily flights. There are direct air links to London (City, Gatwick, Heathrow, and Luton), Manchester, Birmingham, Leeds, Southampton, Belfast and East Midlands within the U.K. There are also flights to international hub airports: Amsterdam (Schiphol), Paris (Charles De-Gaulle) as well as flights to other European destinations. http://www.aberdeenairport.com Road and rail links are also well developed.

The Grampian Region which took its name from the Grampian Mountains has a population of approximately 545,000. It is made up of five districts – Aberdeen, Banff & Buchan, Gordon, Kincardine & Deeside and Moray. The city and the surrounding countryside provide a variety of urban, sea-side and country pursuits. Aberdeen has first class amenities including His Majesty's Theatre, Music Hall, Art Gallery, the Aberdeen Exhibition Centre, Museums, and Beach Leisure centre. Within a short time, beach pursuits, equine activities, salmon, trout and sea fishing, hill-walking, mountaineering, golf, sailing, surfing and windsurfing can be reached. The city and the surrounding countryside are repeatedly given high ratings for quality of life in surveys.

Aberdeenshire is one of Scotland’s most appealing regions. Royal Deeside and the Cairngorms National Park are within easy access of the city, and there are a variety of towns and villages scattered along the coastline.

Aberdeen and Aberdeenshire cater for a wide range of tastes in sporting and cultural activities.

To find out more about Aberdeen and Aberdeenshire go to www.visitabdn.com
How to apply

Online application forms are available at www.abdn.ac.uk/jobs

The closing date for receipt of applications is 4 June 2019

Should you wish to make an informal enquiry please contact
Dr Alan Bowman
01224 272877
a.bowman@abdn.ac.uk

Please do not send application forms or CVs to Dr Bowman

Please quote reference number SBS058R on all correspondence

The University pursues a policy of equal opportunities in the appointment and promotion of staff.