Research Assistant
School of Biological Sciences

Closing date: 03 May 2019
Interview date: TBC
Reference number: SBS060R
Introduction

New approaches to discovering honey bee medicines

Honey bees are important pollinators and contribute massively towards global food production. Recently, a serious health crisis has been affecting honey bees. An important cause of the crisis are pests and diseases including Varroa mites and viruses. Currently, there are limited compounds for Varroa and no effective antiviral treatments. Development of honey bee medicines represents a small market, yet efficacy testing of new treatments is complicated by the requirement for honey bees, which are seasonal in nature and expensive to maintain.

This DEFRA / Veterinary Medicines Directorate-funded project is designed to provide impetus for the pharmaceutical industry to utilise research findings to facilitate the development of veterinary medicinal products to protect honey bee health. It will offer new insight for the use of alternative drugs, repurposing from other animal systems, to treat the major threats to honey bee health. The project will also develop new tools to speed up the discovery of efficacious treatments and reduce the cost of using live animals. These tools will be used to screen drugs providing evidence for companies to further develop new and innovative treatments.

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 Assistant is sought to join his team.
Job description

Main purpose of the role:

We seek to recruit a highly motivated research assistant to aid in developing new tools for the testing and identification of potential new drugs to aid honey bee health, namely varroa control and anti-viral agents. You will have a BSc in Biology, Zoology or similar. Work will involve developing and standardising bioassays using mites and bees, drug efficacy trials, viral titre determination by PCR and report writing. Full training will be given. Experience in these areas would be advantageous, but enthusiasm and willingness to learn are the priority. The successful candidate will also be required to help undergrad and visitors to the lab.

In addition to the requirements above, the post holder will be required to liaise with other academic partners on the project and industrial companies.

Key responsibilities:

Research Assistant

- 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
- Develop, conduct and analyse bioassays for the testing of novel anti-Varroa compounds
- Conduct and analyse bioassays for anti-viral treatments in honey bees
- Collect honey bees and mites from hives
- Contribute to 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
- Assist with general running and organisation of the research laboratory
- Occasional requirement to work outside normal working hours

In addition to the key responsibilities above, the post holder will communicate with potential bee health and other animal health companies of the project’s intentions and findings and organise meetings and workshops.

At a glance

Salary:
Grade 5, £27,831 per annum

Hours of work:
37.5 hours per week

Contract type:
Project Limited until 31 March 2022
Candidate background

Candidates should meet the following criteria:

Knowledge
- BSc in a Biology, Zoology or relevant subject area
- Interest in arthropods

Skills
- Skills in, or the willingness to learn, the relevant research techniques (e.g. arthropod culture, bee handling, bioassay development and analysis, molecular biology)
- Good communication skills, both written and oral
- Ability to work independently and as part of a team, as required
- Ability to think critically

Experience
- Ability to organise own workload, including forward planning
- Ability to work as a team

Terms of appointment

Salary will be at the appropriate point on the Grade 5 salary scale (£27,831 per annum)

Any appointment will be made subject to satisfactory references and a 6 month probation period.

As this post is externally funded by DEFRA it is available until 31 March 2022.

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

This post does not meet the minimum requirements as issued by UK Visas & Immigration (UKVI) to qualify for an employer-sponsored visa. We are therefore unable to consider applications from candidates for this post who require sponsorship to work in the UK.
**Person specification**

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<tr>
<th>Education/Qualifications</th>
<th>Essential</th>
<th>Desirable</th>
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<tbody>
<tr>
<td>Academic, technical and professional education and training</td>
<td>• BSc in a relevant subject area (e.g. Biology, Zoology)</td>
<td>• Experience of working with insects or other arthropods</td>
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<td>Work and Other relevant experience (including training)</td>
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<td>• Experience of bee handling</td>
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<tr>
<td>eg Specialist knowledge, levels of experience, supervisory experience, research</td>
<td>• Experience of working with insects or other arthropods</td>
<td>• Experience of molecular biology</td>
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<td>• Experience of bee handling</td>
<td>• Knowledge of basic statistics</td>
<td>• Experience of presenting at non-scientific meetings</td>
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<th>Personal qualities and abilities</th>
<th>Essential</th>
<th>Desirable</th>
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<tr>
<td>eg initiative, leadership, ability to work on own or with others, communication skills</td>
<td>• Highly motivated and enthusiastic individual</td>
<td>• Current driving licence advantageous, but not essential</td>
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<td>• Ability to work independently and as part of a team</td>
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<td>• Excellent written and oral communication skills</td>
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<td>• Ability to plan work load, forward plan and work to tight deadlines</td>
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<td>Other</td>
<td>• Willingness to work with honey bees</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 to occasionally work outside of normal working hours</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 03 May 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 SBS060R on all correspondence

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