Candidate Information Booklet

Principal Scientific Officer Immunologist

IRC332862

Completed Application Forms must be returned to HRConnect no later than 12 noon (UK time) on 27th November 2026.

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Communication between HRConnect and you

HRConnect will issue competition communications electronically. Please ensure you check your email account regularly, to make sure that you don't miss any important communications. There may be a requirement to issue competition communications by post.

Please update us with any changes to your email address and home address to ensure you are fully informed at all times.

Equal opportunities

Agri-Food and BioSciences Institute (AFBI) is an equal opportunities employer and has been awarded the Bronze Charter Mark in recognition for our commitment towards Diversity and Inclusion in the workplace. All appointments will be made strictly on the basis of merit. If you have any queries with regard to this recruitment process or require any documentation in an alternative format, please contact HRConnect via email Recruitment@HRConnect.nigov.net or call 0800 1 300 330. We will be happy to assist you.

Feedback - AFBI is committed to providing feedback to assist the development of current and future applications.

Recruitment Overview

Thank you for your interest in our organisation. At AFBI you will find a fantastic team spirit and a commitment to the development of both you and your skills so that you can choose to have a long-term career with us.

This Candidate Information Booklet offers specific information to applicants. **Please note (AFBI specific) - read across will not be undertaken by the panel. The candidate must demonstrate how they meet each criterion in the relevant response to each criterion.**

Please read this document carefully in advance of submitting your application and retain it for reference throughout the recruitment process.

At AFBI, we take great pride in the work we undertake. All AFBI employees are appointed on merit on the basis of fair and open competition.

We wish you every success in your application!

Important dates - It is intended that interviews for this post will take place in AFBI HQ, Newforge Lane, Belfast during week commencing Monday 4th January 2027.

Compulsory documentation - It is compulsory that all candidates invited to attend an assessment and/or interview, bring sufficient identification. Your attendance may not be permitted in instances where identification cannot be shown.

You want to change the world. So do we.

Agri-Food and BioSciences Institute (AFBI) is a leading provider of scientific research and services to government, non-governmental organisations and commercial organisations. We are sponsored by our key stakeholder, the Department of Agriculture Environment and Rural Affairs (DAERA).

Our customers include a range of local, national and international commercial companies, Northern Ireland and UK Departments, Agencies and associated bodies in the European Union.

As a leading institute of research, we tackle the complex challenges of our industry through purpose-driven science. We are a community with a common goal: to leave the world better than we found it. Are we ambitious? Definitely. Are our ambitions achievable? Absolutely. AFBI has been defying scientific boundaries to create measurable, scalable and enduring solutions to agri-food and marine science complexities in Northern Ireland - and beyond - since 2006.

We are delighted that you are considering joining us.

Of all the many factors that come together to make AFBI what it is, nothing is more important than our employees. Every area of our service delivery is underpinned by a number of dedicated teams working in synchrony to ensure the provision of scientific excellence. Across our four divisions, every team member, from those on the scientific front to those working behind the scenes in one of our offices, plays an essential role in delivering our long tradition of excellence, whilst helping to propel future discoveries.
Together we are better.

Our People Vision is to:

Attract, empower and grow purpose-driven staff with the passion and capability to pursue excellence, embrace technology and cultivate innovation and change.

This is how we do great science.

Great people. Great science.

About Veterinary Sciences Division

The role will be based within the Veterinary Sciences Division (VSD) but will also support and collaborate with all Divisions across AFBI.

VSD consists of veterinary, scientific, technical and support staff across its four branches (Bacteriology, Chemical and Immunodiagnostic Sciences, Disease Surveillance and Investigation, and Virology). The Division is predominantly based at Stoney Road, Belfast with a smaller disease surveillance centre based at Omagh, Co. Tyrone.

The division undertakes an integrated programme of statutory, disease surveillance, emergency response and R&D work on the diseases of major animal and human health significance, along with significant programmes of work on the chemical and microbiological safety of food. The work supports government policy and disease eradication and control programmes in areas such as bovine tuberculosis, food-borne zoonotic infections and transboundary diseases. One of the key roles of VSD is in delivering a laboratory response to local, national and international emergencies involving animal diseases, and food and feed contamination incidents.

VSD also provides a disease investigation service covering all of the major farm animal species and fish and provides commercial laboratory services in support of industry led disease eradication and control programmes. The work of VSD is underpinned by research and development (R&D) on animal diseases and food safety issues relevant to the local industry.

VSD Branches are-

Bacteriology Branch undertakes statutory, analytical and research work on the major bacterial pathogens of animal and public health significance. Much of this work underpins important DAERA animal disease control programmes in areas such as bovine tuberculosis and food-borne zoonoses.

Chemical Surveillance Branch undertakes a programme of scanning (passive) disease surveillance on behalf of DAERA and provides commercial laboratory services in support of industry led disease eradication and control programmes.

Disease Surveillance and Investigation Branch undertakes a programme of scanning (passive) disease surveillance on behalf of DAERA and provides commercial laboratory services in support of industry led disease eradication and control programmes.

Virology Branch aims to improve the diagnosis and control of viral diseases of farmed animals (pigs, poultry, cattle, sheep and aquaculture). It also has responsibility for the molecular confirmation of major infectious / epizootic diseases in animals. Immunodiagnostic testing in support of a number of disease control programmes including brucellosis, transboundary diseases, import/export testing and TSE is also undertaken.

Job Information and Employee Benefits

At present AFBI has one vacancy for this role. A reserve list will exist and will be held for a period of 12 months from the date of interview, to cover any similar vacancies which may arise at any AFBI location.

Salary

Currently the salary for the post will be within the range £61,673 - £64,469 (under review) within which pay increases will be on an incremental basis provided staff performance reports are satisfactory.

Starting salary will be at the minimum of the scale.

Working Hours

The successful candidate will normally be required to work 5 days each week, totalling 37 hours. They will also be required to occasionally work outside of normal office hours including weekends.

AFBI operates a flexi working system.

Location

The successful candidates will be based at AFBI VSD Stormont, Stoney Road, Belfast. The post holder may, on occasion, also be expected to work at other sites in Northern Ireland as required.

Hybrid working can also be considered.

Travel

The post may entail some travel throughout the UK, Republic of Ireland and internationally and for this reason the successful candidate will require access to a form of transport that will permit them to meet the requirements of the post in full.

Pre-employment checks

Pre-employment checks consist of a qualification check and an AccessNI check. The security check required for this post is basic level. HRConnect will provide your details to Experian who will undertake this check. This is a two-part process during which all communications will be issued to you electronically.

VISAs (if applicable)

If there is a requirement for a VISA/VISA renewal, AFBI would not be responsible for the financial costs, this would be the onus of the candidate. AFBI will however support the Certificate of Sponsorship.

Annual Leave

In addition to the usual public and privilege holidays, there is an annual leave allowance of 25 days, increasing to 30 after five year's satisfactory service.

Probationary Period

The post holder will serve 12 months' probation in the new post. This will commence from the date of appointment. At the end of the probation period a formal review will be conducted.

Professional Development

We believe in our employees and understand the importance of investing in ongoing development. Support for professional development will always be considered.

Employee Benefits

AFBI offers employees an unrivalled benefits package. For further information please click here.

Further Information

Further Information about the post may be obtained from VSDpeopleandculture@afbini.gov.uk

For information on how the recruitment process will be managed and for further recruitment and selection resources, please click here.

For information on our equal opportunities, please click here.

IMMUNOLOGY WORK AREA

This Principal Investigator (PSO) vacancy offers the opportunity to join a well-established, multi-disciplinary team of Principal Investigators (PIs) based in the Bacteriology Branch at VSD Stormont and to lead the Immunology work area alongside other key disciplines. This PI will also have the opportunity to collaborate productively with PIs and researchers in the Virology Branch and across other Branches, who have similar immunology interests.

It is anticipated that the work will initially focus on current programmes relating to the immunology and pathogenesis of important mycobacterial diseases of cattle (bovine tuberculosis and bovine paratuberculosis). The successful candidate will support existing service delivery and research and will be expected to develop their own portfolio of projects across the area of animal diseases and become increasingly self-sufficient and self-financing.

The Bacteriology Branch has an international reputation for research work on bovine tuberculosis with key staff active in collaborative, international research networks. The work includes both applied (translational) and basic research, reflecting the mix of DAERA- and externally-funded research work, respectively.

Immunology research
Within the Bacteriology Branch, bovine tuberculosis and paratuberculosis immunology research at AFBI have included the investigation of cellular and humoral immune responses to infection and co-infection with pathogens; disease transmission studies involving cattle and other animal models; development of new diagnostics reagents; trialling novel vaccine candidates and adjuvants; characterising the effects of co-infection on disease development and diagnosis; and applied research including studies on the evaluation and validation of immunological test performance.

Virology Branch R&D has included: understanding the early immune response; disease transmission routes; developing new diagnostics reagents; trialling novel vaccine candidates and novel vaccine carrier systems; and characterising the effects of co-infection on disease development and diagnosis. Work has included genetic sequencing studies to determine viral strain variation for the development of accurate molecular and serological diagnostic tests and genetic susceptibility to infection.

AFBI research is audited to the ISO9001(2025) certification standard.

Facilities
Bacteriology Branch is housed within a modern laboratory complex incorporating containment level 2 and 3 facilities that support diagnostic, statutory and research activities. The Branch maintains strong expertise in immunology, microbiology and molecular biology and genomics, with established capability in the analysis of cellular and humoral immune responses. The successful candidate will have the opportunity to build on this foundation, helping to shape future laboratory capability and develop new approaches by informing the implementation of strategically relevant new technologies to increase the analytical complexity and relevance of research outcomes

Statutory and analytical work

The statutory and analytical work on bovine TB undertaken at AFBI is in direct support of the NI control programme, and as required by European legislation. This work includes confirmation of bovine TB using a combination of histology, culture and molecular confirmation; performance of supplementary (blood) testing using interferon gamma release assays. All statutory tests are performed to EU and international methodology and to the ISO/IEC 17025 (2017) accreditation quality standard.

KEY RESPONSIBILITIES

There is currently one vacancy at Principal Scientific Officer (PSO - Immunology). The PSO will be based in the Bacteriology Branch VSD, and report directly to the Head of Bacteriology Branch. This vacancy offers the opportunity to join and lead on immunological aspects of a well-established research group. The post-holder will also be required to oversee and manage the delivery of a key element of the Branch's statutory and analytical work programme specifically the interferon gamma testing scheme. The successful applicant will play a key role in helping the Branch and the Division to deliver its animal health commitments by maintaining and extending the Branch's track-record for research into immunology and bacterial pathogenesis.

It is anticipated that, at least initially, a significant part of the PSO work will be related to current and future research projects on bovine tuberculosis and bovine paratuberculosis (Johne's disease). The post-holder will be the Principal Investigator responsible for provision of research project leadership. The main duties and responsibilities of the post will include:

1. Delivery of research and development programmes

The post-holder will be responsible for developing, leading and delivering high-quality research programmes, on time and within budget. They will engage effectively with DAERA and other national and international funding bodies, contributing to the expansion and sustainability of the Branch's research portfolio through the development of competitive funding proposals and strategic partnerships.

Initially, the role will focus on advancing research into bovine tuberculosis, with particular emphasis on understanding host immune responses, factors influencing disease susceptibility and transmission, and the development of improved diagnostic and disease control tools. The successful candidate will be expected to lead innovative, multidisciplinary research integrating immunological approaches with work from bacteriology colleagues in genomics, epidemiology, bioinformatics and veterinary pathology to address key evidence gaps and support policy development.

The post-holder will provide scientific leadership in the development of new approaches to studying host-pathogen interactions, including advanced laboratory and in vitro model systems where appropriate, and will help shape a long-term programme of research that strengthens AFBI's expertise and capability in TB research in the first instance but also in broader animal health immunology.

They will lead scientific and technical staff and develop productive collaborations across AFBI and with external research organisations, industry stakeholders and government partners nationally and internationally. The post-holder will be expected to maintain expertise in immunology, identify emerging scientific opportunities and provide strategic leadership in the development of future research capability within the Branch.

2. Secure funding and work with funders

The successful candidate will be required to lead in the preparation of bids to secure research funding from DAERA, EU, industry and other funders, as appropriate, and to establish and maintain good relationships with funders, leading to self-sufficiency and self-financing for the Section. To manage the contractual and financial commitments associated with research projects and contracts. To ensure that allocated budgets are handled in a fully auditable manner, compliant with AFBI governance procedures, and to supply appropriate financial data to project funders when required to do so. To collaborate effectively across Branches and Divisions on relevant areas of immunology.

3. Establish and maintain linkages with other research groups

To establish and maintain linkages with other relevant research groups in the UK, Republic of Ireland and internationally to ensure that, where possible, research is carried out collaboratively and that AFBI's research is recognised internationally. To identify and capitalise on potential externally-funded and relevant immunology collaborations with external experts.

4. Delivery of statutory and analytical work programmes

The post-holder may also be required to oversee the delivery of aspects of the statutory and analytical work programme to required standards and timescales. This is likely to include the delivery of bovine tuberculosis blood testing (interferon gamma).

5. Expert scientific advice

To provide expert scientific advice to DAERA Veterinary/Policy leads, other government and external customers on immunology issues related to animal disease to AFBI senior management and relevant stakeholders as required.

6. To undertake data interpretation, the publication of results and scientific paper/report writing and dissemination of research findings

The postholder will be required to produce high-quality scientific papers to a standard necessary to ensure publication in high impact peer-reviewed scientific journals, to prepare reports (e.g. press articles, quarterly/annual reports, industry reports, and other material) as required to ensure effective technology transfer of relevant results, and to meet the contractual requirements of research programmes. To communicate the outcomes of research projects to industry, stakeholders and to the scientific community at local, national and international fora, and to provide a lead and response to policy colleagues on issues arising from research programmes, when appropriate.

7. Manage staff and resources

The post-holder will be required to deliver efficient management of projects, staff, resources and finances. They will be required to assist senior management in the management of staff and other resources as required. This will include

contributing to the preparation of Section, Branch and Division business planning, staff reporting, management of budgets and ensuring compliance with Health and Safety, bio-containment, bio-transport and other relevant legislation.

To assist with the management of all aspects of the Section and related work areas as necessary, and to take full management responsibility for the leadership and due diligence of the staff and resources. Manage and deliver an experimental research programme and statutory analytical programme under ISO9001 and ISO17025, respectively, as required.

8. Support the Head of Bacteriology Branch

To support and assist the Head of Branch (HOB) as a senior manager, Project Leader and PI, including deputising for the HOB, inputting to Branch strategic planning, ensuring adequate corporate governance is in place, budgetary planning and control, staff management and responding to queries from AFBI senior managers and DAERA Veterinary/Policy leads. To establish and undertake the day-to-day management of the Immunology Section and associated research programmes.

9. Student supervision

The post holder may be required to supervise/co-supervise postgraduate and undergraduate students involved in research programmes.

10. To undertake continuous professional development

To maintain an up-to-date knowledge of scientific literature and commercial developments in relevant areas and to demonstrate personal development in all relevant areas of managing research programmes, staff and resources. To maintain and communicate to colleagues an awareness of developments in immunology and the relevance of such developments to this post.

11. To fulfil other duties

The post holder may be required to fulfil other duties and responsibilities as determined by management including as part of the Institute's response to major epizootic disease, food-chain or other emergency situations. They may also be required to teach university or other students, deliver talks to groups of industry representatives. Applicants should be aware that they may also be expected to deal with blood samples and/or animal tissue samples which may be contaminated with transmissible diseases.

The job description is not intended to be rigid and inflexible. Rather, it should be regarded as working guidelines within which the postholder will work.

The above is not meant to be an exhaustive or prescriptive list but to provide a good indication of the main duties of the post.

ELIGIBILITY CRITERIA

Applicants **must**, by the closing date for applications provide evidence in their application form that they meet the following eligibility criteria.

1. A PhD in a scientific discipline related to infection and immunity, or a closely related natural science discipline related to the post.

AND

At least 3 years post-doctoral* experience in infection and immunity.

AND

2. Authorship of peer reviewed publications in areas relating to immunology with at least one being first or last author which have been published in peer reviewed ISI listed scientific journals.

AND

3. Proven experience in securing and the delivery of competitive research funding.

***Post-doctoral experience:** is considered experience gained after successfully completing a PhD.

Please Note for Scientific Publications:

* Published is defined as papers either accepted for publication or published.

**Applicants must provide evidence of eligibility criterion 2 by submitting a fully cited bibliography (authors, paper title, journal title, volume and page numbers) of all publications offered. For the papers submitted applicants must demonstrate the contribution made under the following author roles from the Elsevier Credit taxonomy: conceptualization, methodology, formal analysis, investigation, writing – original draft, and supervision.

Relevant or equivalent qualifications: Applications will also be considered from applicants with relevant formal qualifications considered by the selection panel to be of an equivalent or higher standard to those stated.

Give the type of qualification and date awarded (the date awarded is the date on which you were notified of your result by the official awarding body). If you believe your qualification is equivalent to the one required, the onus is on you to provide

the panel with details of modules studied etc so that a well-informed decision can be made.

Further information on determining the equivalence of relevant formal qualifications can be found at www.gov.uk/what-different-qualification-levels-mean/compare-different-qualification-levels

In providing evidence for each criterion, it will be essential that candidates draw upon specific examples of work they have undertaken to illustrate the extent to which they possess the experience and skills required. It will not be sufficient simply to list duties and responsibilities of posts held.

PERSON SPECIFICATION

This position is analogous to Grade 7 in the NICS.

Candidates will be expected to demonstrate the skills and competencies set out in the Essential Criteria. In addition, they will also be required to demonstrate competency in Professional Knowledge & Skills pertaining to this post together with the skills and competencies set out in the Northern Ireland Civil Service (NICS) competency framework at Level 4 for the purpose of personal and professional development.

Selection panels will design questions to test the applicant's knowledge and experience in each of the above areas and award marks accordingly.

You should refer to the behaviours listed under level 4 of the relevant competence areas.

To view the NICS Competency Framework, please click here.

INTERVIEW CRITERIA

In addition to satisfying the eligibility criteria, applicants will also be expected to display the following qualities and skills at interview-

PRESENTATION

Before the competence based interview, candidates will be required to deliver a presentation, lasting no more than 5 minutes, the subject of which will be provided to candidates in the invitation to interview letter.

Candidates should fully prepare their presentation in advance of the interview and no preparation time will be provided on the day of interview. Your presentation should be delivered via PowerPoint and you will be asked to submit it to HRConnect by a specific date prior to your interview. Full details will be provided should you be invited to interview.

Following the presentation, the panel may elect to ask questions on the presentation.

The presentation will be used to assess against the **Professional Skills and Knowledge** and **Leading & Communicating competencies.**

Marks Available: 15

1. Professional Skills and Knowledge

Demonstrates an in-depth knowledge and understanding of current developments and best practice in Immunological research. Develops and updates professional/specialist/technical knowledge and skills to meet objectives and improve performance. Applies knowledge and skills in the collection, collation, manipulation, analysis and interpretation of scientific data. Applies knowledge and skills in writing scientific papers and technical reports.

Marks available: 30 Minimum Standard: 18

2. Seeing the Big Picture

Marks available: 15

3. Making Effective Decisions

Marks available: 10

4. Leading and Communicating

Marks available: 15 Minimum Standard: 9

5. Collaborating and Partnering

Marks available: 15 Minimum Standard: 9

Total Marks Available: 100
Over Pass Mark: 60 (60%)