



**UNIVERSITY OF LEEDS**

## **CANDIDATE BRIEF**

**Research Assistant in Microbiology, Faculty of Medicine and Health**



**Salary: Grade 6 (£27,025 – £32,236 p.a.)**

**Reference: MHDEN1130**

**Fixed-term for 2 years**

**We are happy to consider job share applications and are committed to flexible working for all our employees.**

# Research Assistant in Microbiology

## School of Dentistry

### Division of Oral Biology

**Are you interested in fundamental and applied microbiology research? Do you have skills in microbiology and immunology? Would you like to join multidisciplinary team investigating ways to modulate the behaviour of oral commensal and pathogenic bacteria and biofilms?**

You will join a multidisciplinary team on a project funded by a large oral care company, investigating ways to influence the commensal and pathogenic properties of key oral bacteria and complex biofilms.

You will hold an honours degree in Microbiology (with an emphasis on bacteriology) or a cognate discipline and preferably a relevant higher degree (e.g., MSc, PhD) in the biomedical sciences with significant bacteriology content. You will have experience in bacteriology, both culture and molecular experimental approaches. Experience in mammalian cell culture or immunology, alongside a good track record of relevant publications and a proven ability to work on multidisciplinary projects, is also highly desirable.

You will be able to communicate well, both verbally and in writing. Good interpersonal skills are essential, together with the ability to work independently and as part of a larger team of researchers. You must be self-motivated and able to work without the need for close supervision, whilst showing a capacity to enthuse others. You must be able to plan and carry out experimental work efficiently, keeping detailed logs of your day-to-day activities, and be able to interpret practical and theoretical results. You will have a flexible approach to work and be able to perform well, while meeting deadlines.

You will be based in the Wellcome Trust Brenner Building, St. James' University Hospital, but may be required to conduct some aspects of your research on the University of Leeds main campus. The position is available immediately.



## What does the role entail?

As a Research Assistant in Microbiology your main duties will include:

- Growing and analysing cultures of oral bacteria, including facultative anaerobes and obligate anaerobes;
- Determining expression of key bacterial proteins, enzyme and genes;
- Generating biofilms using simple and complex *in vitro* model biofilm systems;
- Carrying out analyses of biofilm composition (e.g culture, metagenomics, RT-PCR), and functions (e.g transcriptomics, bioassays, RT-PCR);
- Carrying out co-culture of human cells with bacteria and biofilms;
- Carrying out immunological analyses, including ELISA, Luminex and FACS of laboratory samples;
- Carrying out wound healing and neutrophil activation assays;
- Determining gene expression by human cells;
- Providing weekly reports describing progress and intended plans for the following week, attend meetings as required to discuss the project, and maintaining a detailed scientific log;
- Provide monthly reports to be discussed with the project sponsor and liaise with the sponsor as necessary;
- Writing up results for publication and attending suitable conferences for their dissemination;
- Helping maintain the efficient and safe running of the laboratory;
- Assisting in the development of student research skills e.g. by assisting with the day-to-day supervision and training of new PhD students;
- Providing assistance to visiting scientists working on related projects;
- Developing research objectives and proposals and contributing to setting the direction of the research project and team;
- Continually updating your understanding of the field, applying this knowledge to your research;
- Working both independently and also as part of a larger team of researchers;
- Ensuring good day-to-day progress of work and that project objectives are met, and maintain good records and laboratory notebooks;
- Building contacts and participating in networks for the exchange of information and to form relationships for future collaboration;
- Helping to prepare proposals for funding in collaboration with others working on the project;



- Working within and applying the standard operating procedures, health and safety regulations and quality assurance procedures of the School, Faculty and University.

These duties provide a framework for the role and should not be regarded as a definitive list. Other reasonable duties may be required consistent with the grade of the post.

You will report to Professor Deirdre Devine, The Head of the Microbiology and Cell Biology Research Theme and line manager for this particular post.

## What will you bring to the role?

As a Research Assistant in Microbiology you will have:

- An honours degree in Microbiology (with an emphasis on bacteriology) or a cognate discipline with bacteriology as a significant component (and/or a relevant higher degree with a strong bacteriology component);
- Significant relevant postgraduate laboratory experience (which may have been spent studying for a higher degree);
- Experience in bacteriology, including culture and molecular experimental approaches;
- Excellent skills in record keeping and data analysis;
- Self-motivated with good interpersonal and communication skills with the capacity to enthuse others;
- Excellent time management and planning skills with the skills to perform well whilst meeting deadlines;
- The skills to work both independently, without the need for close supervision, and also as part of a larger team of researchers;
- The skills to plan and carry out experimental work efficiently and interpret practical and theoretical results;
- A flexible approach to work.

You may also have:

- A relevant higher degree (e.g., MSc, PhD) in the biomedical sciences with a strong bacteriology component;
- Experience in oral bacteriology;
- Experience in bacterial biofilms;



- Experience in anaerobic bacteriology;
- Experience in mammalian cell culture;
- Experience in immunological techniques;
- Experience in microbiome research;
- A proven track record of relevant peer-reviewed publications in high quality journals;
- A proven ability to work on multidisciplinary projects.

## How to apply

You can apply for this role online; more guidance can be found on our [How to Apply](#) information page. Applications should be submitted by **23.59** (UK time) on the advertised closing date.

## Contact information

To explore the post further or for any queries you may have, please contact:

**Samantha Pye, Academic Support Secretary**

Tel: +44 (0)113 343 8277

Email: [s.j.pye@leeds.ac.uk](mailto:s.j.pye@leeds.ac.uk)

## Additional information

To find out more about the School of Dentistry please visit our [website](#).

Find out more about the [Faculty of Medicine and Health](#)

Find out more about [Athena Swan](#) in the Faculty.

## Working at Leeds

Find out more about the benefits of working at the University and what it is like to live and work in the Leeds area on our [Working at Leeds](#) information page.



### **Candidates with disabilities**

Information for candidates with disabilities, impairments or health conditions, including requesting alternative formats, can be found on our [Accessibility](#) information page or by getting in touch with us at [disclosure@leeds.ac.uk](mailto:disclosure@leeds.ac.uk).

### **Criminal record information**

#### **Rehabilitation of Offenders Act 1974**

A criminal record check is not required for this position. However, all applicants will be required to declare if they have any 'unspent' criminal offences, including those pending.

Any offer of appointment will be in accordance with our Criminal Records policy. You can find out more about required checks and declarations in our [Criminal Records](#) information page.

