

CANDIDATE BRIEF

Research Fellow in Ultrasound and Drug Delivery Faculty of Medicine and Health



Salary: Grade 7 (£33,199 – £39,609 per annum) Reference: MHBCS1083 Closing date: 18 July 2019 Fixed-term for 5 months

We are happy to consider job share applications and are committed to

flexible working for all our employees.

Research Fellow in Ultrasound and Drug Delivery Leeds Institute of Medical Research at St James's School of Medicine

Are you an ambitious researcher looking for your next challenge? Do you have an established background in pre-clinical ultrasound and drug delivery? Do you want to further your career in one of the UKs leading research intensive Universities?

Based in the <u>School of Medicine</u>, but working closely with colleges from the <u>School of</u> <u>Physics and Astronomy</u>, you will work on the pre-clinical translation of therapeutic microbubbles. In both *in vitro* and *in vivo* models, you will be evaluating the efficiency of functionalised microbubbles to deliver therapeutic agents using ultrasound and photoacoustic imaging.

You will have experience of mouse models, including the use of pre-clinical mouse models for experimental research, as well as holding a home office personal licence. Experience of the development of protocols using sterile cell culture assays to study microbubble-cell interactions and working with high frequency ultrasound for pre-clinical imaging is also essential.

What does the role entail?

As Research Fellow your main duties will include:

- Designing, planning and conducting a programme of investigation, in consultation with Louise Coletta and Stephen Evans;
- Generating independent and original research ideas and methods in the development of *in vitro* and *in vivo* models for testing therapeutic microbubbles;
- Making a significant contribution to the dissemination of research results by publication in leading peer-reviewed journals, and by presentation at national and international meetings as appropriate;
- Working independently and as part of a larger team of researchers, both internally and externally to develop new research links and collaborations and engage in knowledge transfer activities where appropriate;
- Contributing to the supervision of junior researchers and PhD students and acting as a mentor to less experienced colleagues;



- Evaluating methods and techniques used and results obtained by other researchers and relating such evaluations to your own research;
- Contributing to, and encouraging, a safe working environment.

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 Dr Louise Coletta, Senior Lecturer, Leeds Institute of Medical Research at St James's.

What will you bring to the role?

As Research Fellow you will have:

- A PhD in a relevant biomedical discipline and experience in the development of *in vitro* and *in vivo* models for studying imaging and drug delivery and/or therapeutic agents.
- A home office personal licence and experience with mouse models including the use of pre-clinical mouse models for experimental research;
- Experience in the development of protocols using sterile cell culture assays to study microbubble-cell interactions;
- unctionalisation of agents using antibodies;
- Experience of working with high frequency ultrasound for pre-clinical imaging
- Ability to design, execute and write up research independently;
- Excellent communication skills, both written and verbal and the ability to communicate your research at national and international conferences and to liaise with industrial partners, regulators and clinicians.
- Good time management and planning skills, with the ability to meet tight deadlines;
- A proven ability to work well both independently and as part of a multidisciplinary team;
- Ability to work accurately and carefully;
- A strong commitment to your own continuous professional development;
- A willingness to develop *in vitro* models for single cells and spheroids as test platforms for nanoparticle research.



You may also have:

- A developing track record of peer reviewed publications in international journals;
- Evidence of pursuing external funding to support research;
- Evidence of successful supervision of research students;
- Experience of using photoacoustic imaging for quantitative analysis.

How to apply

You can apply for this role online; more guidance can be found on our <u>How to Apply</u> 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:

Dr Louise Coletta, Senior Lecturer

Tel: +44 (0)113 343 8446 Email: <u>P.L.Coletta@leeds.ac.uk</u>

Additional information

Find out more about the Faculty of Medicine and Health

Find out more about <u>Athena Swan</u> 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 <u>Working at Leeds</u> information page.

Candidates with disabilities

Information for candidates with disabilities, impairments or health conditions, including requesting alternative formats, can be found on our <u>Accessibility</u> information page or by getting in touch with us at <u>disclosure@leeds.ac.uk</u>.



Security checks

Appointment to this post will be subject to appropriate security checks being carried out with your permission by a third party company.

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 <u>Criminal Records</u> information page.

