



UNIVERSITY OF LEEDS

CANDIDATE BRIEF

Research Fellow in Synthetic Organic or Medicinal
Chemistry, School of Chemistry



Salary: Grade 7 (£33,797 - £40,322 p.a.)

**Due to external funding, the maximum salary for this position will be
£35,845 p.a.**

Reference: EPSCH1007

Closing date: 08 December 2019

Fixed term for 8 months

We will consider flexible working arrangements

Research Fellow in Synthetic Organic or Medicinal Chemistry

School of Chemistry, Faculty of Engineering and Physical Sciences

Are you an ambitious researcher looking for your next challenge? Do you have an established background in synthetic organic or medicinal chemistry? Do you want to further your career in one of the UKs leading research intensive Universities?

We are looking for an ambitious, practical and enthusiastic scientist who can work well as part of an active team. You will contribute to a multi-disciplinary project working on the development of small molecule antagonists of a TRP ion channel being developed for the treatment of cardiovascular disease.

You should hold a PhD or equivalent in synthetic organic or medicinal chemistry. Detailed knowledge of, and experience in, synthetic methods, route design and characterisation of organic compounds is essential. Experience in the design of biologically active compounds is desirable.

You will be based in the laboratory of Dr Richard Foster, and work closely with our collaborator Professor David Beech (Faculty of Medicine and Health, University of Leeds).

Further information about the project is available within the additional information section at the end of the candidate brief.



What does the role entail?

As a Research Fellow your main duties will include:

- Leading in the application of organic synthesis to solve significant chemical problems
- Leading in the application of synthetic and medicinal chemistry concepts into the delivery of biologically active molecules
- Generating and pursuing independent and original research ideas in the appropriate subject area;
- Developing research objectives and proposals and contributing to setting the direction of the research project and team including preparing proposals for funding in collaboration with colleagues;
- Evaluating methods and techniques used and results obtained by other researchers and to relate such evaluations appropriately to your own work;
- Preparing papers for publication in leading international journals and disseminating research results through other recognised forms of output;
- Working both independently and also as part of a larger team of researchers, engaging in knowledge-transfer activities where appropriate and feasible;
- Maintaining your own continuing professional development and acting as a mentor to less experienced colleagues as appropriate;
- Contributing to the training of both undergraduate and postgraduate students, including assisting with the supervision of projects in areas relevant to the project.

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

What will you bring to the role?

As a Research Fellow you will have:

- A PhD in synthetic organic chemistry or medicinal chemistry (or have submitted your thesis prior to starting the role);
- Ability to apply extensive knowledge of organic synthesis to solve significant chemical problems;
- Ability to successfully design and synthesise biologically active molecules;
- Good time management and planning skills, with the ability to meet tight deadlines, manage competing demands and work effectively under pressure without close support;



- A proven track record of peer-reviewed publications in high impact factor journals;
- Excellent written and verbal communication skills including presentation skills;
- A proven ability to work well both individually and in a team;
- A strong commitment to your own continuous professional development.

You may also have:

- Experience of medicinal chemistry concepts and techniques;
- Experience of pursuing external funding to support research;
- Evidence of undertaking interdisciplinary and translational research;
- Experience in computer-aided drug design.

How to apply

You can apply for this role online; more guidance can be found on our [How to Apply](#) information. 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 Richard Foster](#)

Tel: +44 (0)113 343 5759

Email: R.Foster@leeds.ac.uk

Additional information

Background to the Project and Composition of the Research Team

Project Title: Optimization of small molecule antagonists for the treatment of cardiovascular disease

The aim of this project is to optimise novel small molecules as modulators of a transient receptor potential (TRP) ion channel for the treatment of unmet cardiovascular disease. The aim of the project will be to optimise previously identified small molecule antagonists of the ion channel for improvement in potency, selectivity and physicochemical properties.



The programme will ultimately employ two PDRA's with complementary skills. This currently advertised post will be based in the research group of Dr Richard Foster in the School of Chemistry. Exploiting your skills in synthetic organic chemistry and/or medicinal chemistry you will be responsible for optimising the small molecule hits for improvement in potency, selectivity and molecular properties (e.g. solubility). You will use organic synthesis to design and synthesise new compounds and work closely with others working on the project to interpret the results of *in vitro* and *in vivo* biological and physicochemical/ADME assays to establish the pharmaceutical and pharmacokinetic properties of your compounds. The overall vision of the project is to deliver a potent, selective small molecule with properties suitable for further development as a potential therapeutic. The second PDRA will work under the direction of Prof David Beech (Faculty of Medicine and Health, University of Leeds) and this person will be responsible for biological characterisation of synthesised compounds.

The project is run in collaboration with Professor David Beech. Richard Foster and David Beech have a long established track record of successful collaboration, and the successful applicant will be welcomed into an energetic and inclusive research group.

Research Environment in Leeds

The School of Chemistry has outstanding facilities for small molecule research and development. The department is equipped with a suite for the analysis and purification of small molecules, state-of-the-art organic synthesis and computational laboratories and modern facilities for high-throughput screening, including access to small molecule libraries, plate-readers and robotic handling dispensers.

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.

A diverse workforce

The Schools in the Faculty of Engineering & Physical Sciences are proud to have been awarded the Athena SWAN [Bronze](#) or [Silver](#) Award from the Equality Challenge Unit, the national body that promotes equality in the higher education sector. Our [equality and inclusion webpage](#) provides more information.



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.

Criminal record information

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

