Department of Biology & Biochemistry
Department of Pharmacy & Pharmacology

Professor of Regenerative Medicine

The University of Bath is seeking to recruit a Professor of Regenerative Medicine as a critical addition to the Bath Centre for Regenerative Medicine (www.bath.ac.uk/crm/). The Bath Centre for Regenerative Medicine is a unique and highly innovative research centre that brings together developmental biology, stem cell research and tissue engineering. The Centre currently comprises 12 research groups based in the Departments of Biology & Biochemistry, Pharmacy & Pharmacology and Chemical Engineering. The position will be a joint appointment between the Departments of Biology & Biochemistry and Pharmacy & Pharmacology.

The post holder will be expected to have an internationally competitive research programme relevant to Regenerative Medicine. In particular the person appointed will have a proven track record of publishing in top-ranked journals and obtaining external grant funding. The ability to lead a successful team able to pursue its own globally-leading research and effect collaborations with interdisciplinary colleagues is also required.

The successful candidate will be at the forefront of basic research in the area of Regenerative Medicine but will have the vision and ability to translate their fundamental research findings into clinical or industrial applications. An ability to complement the ongoing and future research projects based at the University of Bath would also be an advantage. The person appointed will undertake research, teaching and other senior academic duties.

Informal enquiries about the post may be made to:

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Dr David Tosh
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Professor Rex Tyrell, Head of Department of Pharmacy and Pharmacology
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Professor Melanie Welham
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A strategic appointment: investing in research, inspiring minds, creating knowledge.

The University

The University of Bath is proud to be one of the UK's leading universities, with an international reputation for the quality of our research and teaching.

Our mission is to deliver world-class research and teaching, educating our graduates to become future leaders and innovators, and benefiting the wider population through our research, enterprise and influence.

We have a strong commitment to the people we employ and value the contributions made by all our staff. We offer an excellent working environment, great benefits and a compact and friendly campus.

We have over 2500 staff and nearly 15,000 students. Further facts and figures are available from: www.bath.ac.uk/about/facts/

Research

Our research excels across science, engineering, management, social sciences and the humanities. It influences national and international policy debates, and contributes to sustainable development and technology.

The 2008 Research Assessment Exercise placed Bath's position as one of the top research universities in the UK. Our research portfolio of grants and contracts is worth about £100 million.

Some key areas of research include: built environment; complex systems; digital entertainment; drug development; genomics and biological development; health and wellbeing; innovative manufacturing; low carbon energy; organisation studies; photonics; probability; regenerative medicine; social, political, economic and environmental security; sustainable chemical technologies; sustainable construction; sustainable energy and the environment.

Teaching

We pride ourselves on the student experience we provide. Bath produces well rounded, highly successful graduates who command excellent jobs in the graduate market. In addition to ranking as one of the top universities for employability, our placement programmes give our graduates a real advantage with starting salaries over £4,000 higher than the average for UK graduates.

Our students have access to teachers who are themselves pushing back the boundaries of knowledge through research and innovation.

Academic Investment

The University is making a significant new investment in academic staff in order to further enhance our research profile and the learning environment for our students. This investment will enable us to enhance key areas of existing research strength and teaching.

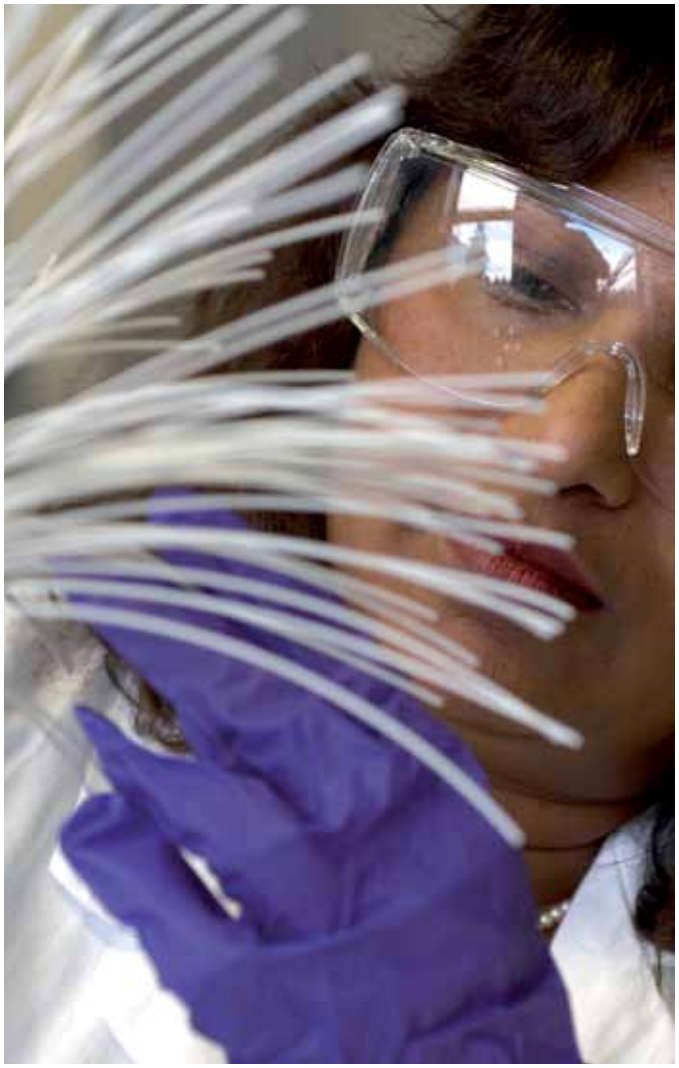
We are seeking to appoint people to professorial positions in a range of areas covering: energy materials, probability, regenerative medicine, healthcare engineering, low carbon vehicles, sustainable construction, security and resilience, public policy, health economics, family business and entrepreneurship, consumer marketing, and management accounting.

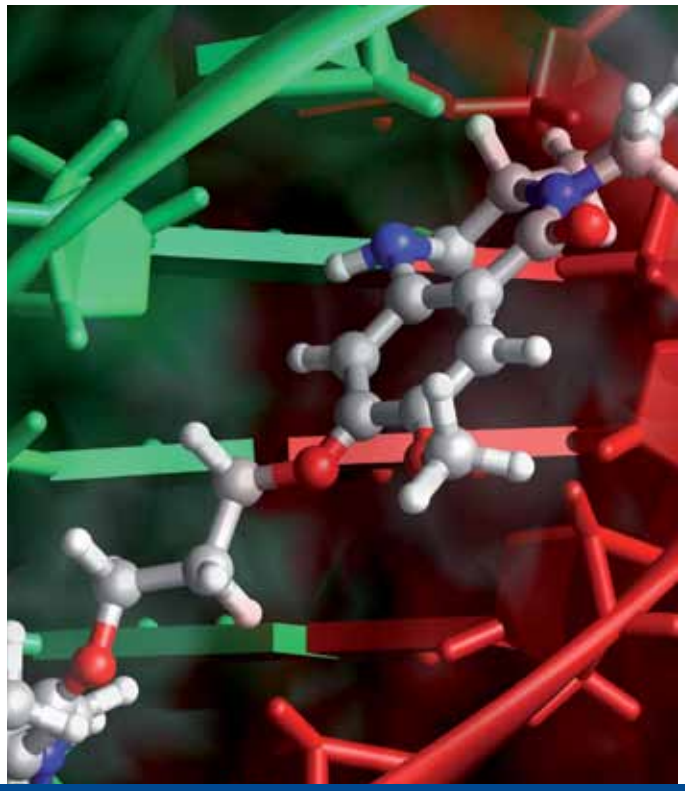
The University is committed to appointing world-leading research academics to these posts. Details of responsibilities will be subject to further discussion with the preferred candidates.

However we expect that those appointed will provide outstanding research leadership, including:

- Publishing research in leading academic journals
- Generating significant grant income
- Enhancing our research culture and activities
- Supporting collaborative research activity
- Promoting our research to external bodies such as funding agencies, industry, and government

Those appointed will also: contribute to academic strategic planning; engage in teaching; and undertake administrative and associated tasks, as appropriate.





Faculty of Science

We are the largest Faculty in the University, and currently have nearly 3,000 undergraduate students and over 500 postgraduate students. In total there are over 600 staff, of whom some 300 are academic and research staff.

The Faculty comprises six departments and a cross-faculty degree programme:

- Biology & Biochemistry
- Chemistry
- Computer Science
- Mathematical Sciences
- Natural Sciences (cross-faculty degree programme)
- Pharmacy & Pharmacology
- Physics

The Faculty prides itself on its excellence in research that provides the foundation from which our unique style of teaching and learning has developed. Total research income for the last academic year was in excess of £15 million.

Undergraduate and postgraduate teaching in the Faculty provides our students with a breadth of knowledge, and quality and flexibility of learning. There are opportunities for placements, research projects and study year abroad options. The Faculty has strong links with business and is keen to build on this and encourage an enterprise culture amongst our staff and students. In addition our graduates are highly successful in the employment market.

Graduate School

We are home to postgraduate students engaged in research or taking taught courses within life sciences, physical sciences and mathematics. Our role is to provide a forum for formal and informal interdisciplinary exchanges, offering both academic and social activities. Generic skills training courses are provided by the Graduate Centre via the Graduate School. The Graduate School is responsible for supporting postgraduate students throughout their lifecycle at the University; from admission, through progression stages to submission and completion.

The Department of Biology & Biochemistry

The Department of Biology and Biochemistry was rated 10th among all UK universities in the most recent Independent league table for biological sciences. With 46 academic staff our research is diverse and in the Research Assessment Exercise 2008, 90% of our research was judged to be internationally recognised, excellent or world-leading. The department publishes approximately 125 papers each year in peer reviewed journals and our current research grant portfolio stands at £12.2 million. There are over 80 full time postgraduate students.

Areas of Departmental strength include: developmental biology and regenerative medicine, cell biology and molecular neuroscience, infection and immunity, molecular structure and function and extremophile research, and evolutionary genomics and biodiversity. Three Interdisciplinary Centres link activities to labs in other departments. These are the Centre for Regenerative Medicine (developmental biology, stem cell biology, tissue engineering; **www.bath.ac.uk/crm/**), the Centre for Extremophile Research (chemistry and biochemistry of enzymes from archaea; **www.bath.ac.uk/cer/**) and the Centre for Mathematical Biology (evolution and population biology; **www.bath.ac.uk/cmb/**).

The Department consists of two adjacent buildings well equipped for modern Life Science research. Building 4 South was completely refurbished in 1997, and Building 3 South was newly built in 2004. The whole Department has been recently re-equipped with growth facilities including *Xenopus* and zebrafish aquaria, six insectaries, three plant growth rooms and a cooled GM glasshouse. A state of the art biosciences services unit was opened in 2008. A new tissue engineering laboratory has recently been commissioned. Other Departmental facilities include protein purification, a crystallisation robot, histology lab, fluorescent microscopes, optical tomography, virus preparation laboratory and molecular biology services including a microarray reader, and phosphorimaging. Also available at close proximity is the Microscopy and Analysis Suite **www.bath.ac.uk/mas/** which includes an electron microscope suite, and the Bio-imaging Suite, comprising confocal microscopes and a fluorescence activated cell sorter, Concorde calcium imaging system and Mesoscale multi-analyte instrument.

The Department of Biology and Biochemistry operates undergraduate degrees in Biology, Molecular and Cellular Biology and Biochemistry. There is a total annual intake of about 150 undergraduates. Approximately two thirds of our undergraduates are on placement degrees where they spend one year in research laboratories around the world before entering their final year. The Department also runs MRes and MSc degrees in a range of Bioscience subjects and in Regenerative Medicine, with a total annual intake of about 25.

The Department of Pharmacy & Pharmacology

The internationally acclaimed research profile of the Department of Pharmacy and Pharmacology further consolidated its position as a leading research Department among UK Schools of Pharmacy in the 2008 RAE. The mission is to sustain and enhance a cutting-edge, critical mass of interdisciplinary and interactive scientists focused on the creation and application of novel therapeutics. Key areas in medicinal chemistry are drug design and discovery related to receptors and signal transduction, and to neoplastic and infectious diseases while efforts in pharmacology have focused on inflammatory pathways and cytokine mediators, stem cell biology, vascular control mechanisms in health and disease and neuropharmacology. Pharmaceutics research concentrates on the pulmonary and topical/transdermal routes of administration, new vectors for macromolecular and gene delivery, and the development of novel "bioengineering" technology.

The Department of Pharmacy and Pharmacology's core activities continue to centre around drug discovery including target identification, drug design and optimization, and various aspects of biopharmaceutics through to clinical application. We are expanding our considerable expertise in receptor pharmacology and addressing emerging frontiers such as stem cell biology. New areas of Chemical Biology are being developed where drug design, in silico and in the laboratory, is juxtapositioned with integrative physiology and pharmacology, with emphasis in key areas of molecular signalling in which the department has existing strengths. Further, towards practical application, we have strongly developed our biopharmaceutical expertise to facilitate development of new non-invasive drug delivery technologies, the prediction and optimisation (drug and formulation) of oral administration, and novel matrices for cell and tissue growth to improve the validity of in vitro testing and to develop new modalities of live tissue delivery.

In addition to new imaging facilities and biosciences services unit shared with Biology and Biochemistry we have a Biomedical Spectroscopy Suite housing three NMR spectrometers (600MHz, 400MHz and 270MHz), new mass spectrometers and a molecular modelling suite with workstations and Linux cluster.

The Department is based in a cluster of purpose built accommodation comprising the original Pharmacy & Pharmacology building, 5-West and its more recently constructed annexe, 7-West, and the newer 9-West, (which also houses Chemical Engineering). The interface of the pharmaceutical and biological sciences, encompassing the sub-disciplines associated with the whole drug discovery and development process, is a major focus for the future. Clear biological 'targets' are being identified through fundamental work on cellular processes in normal and disease states, and the whole process is increasingly facilitated by post-genomic technologies, novel small molecule drug design, and the ability to address the rational development of molecules into effective medicines. Recent appointments of exceptionally talented colleagues, who work at the boundaries of their discipline, has, for example, enabled work in pharmaceutical engineering encompassing cutting-edge stem cell and biomaterials research in the Centre for Regenerative Medicine. Demonstrably, the stem cell biology/regenerative medicine area provides numerous synergies with the crucial areas of drug development, design and delivery and these are cornerstones of our future development and research sustainability as a Department.

The Department of Pharmacy and Pharmacology runs two main undergraduate programmes for MPharm and MPharmacol (with placement) degrees with a total annual intake of around 180 students.

Further Information

Salary will be commensurate with the position.

Full details of the role and associated Person Specification, together with how to apply can be found at **www.bath.ac.uk/excellence**

The City

Living in Bath

The World Heritage City of Bath is one of the most interesting, elegant and vibrant cities in the UK. The city is known for its many beautiful buildings and the natural hot springs which gave the city its name.

From the historic Roman Baths to the contemporary Thermae Bath Spa, the city has a unique blend of architectural heritage and modern living.

Bath is home to several excellent museums and galleries, and hosts various arts festivals throughout the year.

There are over 150 restaurants, cafés and traditional pubs set within a great range of shopping from high street stores and small specialist shops to a flea market.

Bath is a beautifully green city, adorned with floral displays and bounded by wooded hills.

The mainline railway means London is within easy reach and the nearby motorway connects Bath to the rest of the UK.

Bath has an excellent range of schools with a wide choice of secondary education. There are numerous parks, play areas and open spaces including the wonderful Royal Victoria Park, one of the first public parks in the country.

Bath is surrounded by magnificent countryside and interesting places. Stonehenge, Salisbury, Wells, Glastonbury, Cheddar Gorge, Oxford and Bristol are all within easy reach of Bath.

The city offers many enjoyable outdoor activities. You can take a boat trip on the River Avon, walk beside the Kennet and Avon Canal or make use of the superb sports facilities.