

THE POST

College/Service:	College of Medicine & Health
Post:	Senior Lecturer or Clinical Senior Lecturer in Bayesian Statistics (Education and Research)
Reference No:	P01267
Grade:	G
HERA:	SLEC
Reporting to:	Pro Vice Chancellor (PVC) or nominee

This permanent, full time or part time post is available at the University of Exeter Medical School, College of Medicine & Health, based in Exeter.

Job Description and Person Specification

University of Exeter Medical School is renowned for its world leading diabetes research <http://www.exeter.ac.uk/diabetes/> which is led by Professor Andrew Hattersley, FRS, a world renowned leader in the field who has published >600 original articles in leading journals such as Nature, Nature Genetics, the New England Journal of Medicine and the Lancet and is a Reuters highly cited scientist (top 1% for citations in field). Hattersley's research excellence has been recognised by over 50 international and national awards and prizes. He was elected Fellow of the Royal Society in 2010, and made a Commander of the Order of the British Empire (CBE) in 2017.

In recognition of our excellent diabetes research, University of Exeter Medical School has recently been awarded major funding to grow Diabetes Research.

Our Diabetes Centre of Excellence is therefore expanding substantially and we are looking to **appoint ambitious academic staff, at Senior Lecturer or Clinical Senior Lecturer level, who are excited by the opportunity to apply their discipline expertise in novel approaches to investigate diabetes.**

This funding will provide a step change in our capabilities to respond to the diabetes challenge. We are seeking to increase our interdisciplinary and multidisciplinary research by the appointment of world-class academics in Data Science, Artificial Intelligence, Immunology and Cell biology. We will build on our international reputation by combining these novel approaches, tools and techniques with Exeter's current expertise and distinctive patient resources. In research, we excel at swiftly translating our discoveries into new treatments and therapies that have real impact in the South West, nationally and internationally.

The Diabetes Research unit has an international reputation for delivering excellent, clinically-relevant and distinctive patient-based research. The delivery of scientific advances will be facilitated by the state-of the art facilities such as the latest sequencing and imaging equipment. Implementation of new solutions will also be enhanced by working with our many commercial partners which will include the development of new clinical tools.

The University of Exeter Medical School has a proven track record of world-leading research, excellent education and high student satisfaction. Since the creation of a medical school in the south west in 2001, we have seen substantial investment, growth and development, and this trajectory is set to continue as we develop new programmes and recruit world-class researchers. All of our activities have one goal in mind: to improve people's lives, through better care, treatments, therapies and healthcare systems.

In education, we specialise in research-led teaching and in developing socially accountable graduates who are collaborative leaders, committed to life-long scholarship for the service of patients and the public. We work closely with our healthcare collaborators in the region, to ensure we are meeting the complex needs of a changing healthcare sector. We are training tomorrow's doctors, scientists and healthcare professionals, and supporting them to be empathic and inquisitive, and to adopt our ethos of putting people first. Medicine at the University of Exeter has entered the top 10 in the Times and The Sunday Times Good University Guide.

Main purpose of the job

The post holder will be recognised internationally as a research rising star. They will lead a dynamic research group which will take forward novel ideas, secure funding sufficient to ensure the sustainability of the research team and deliver innovative research projects. They will supervise and enthuse undergraduate and postgraduate students in research and excel at teaching. The post holder will produce research outputs at an appropriate level and disseminate their research to academic, healthcare and patient communities. Collaboration with other colleagues in the College of Medicine and Health, the Living Systems Institute, Centre for Medical Mycology and Institute for Data Science and Artificial Intelligence is very much encouraged as is the development of external national and international collaborations.

We are particularly interested in academics whose research expertise is in the following areas. We welcome applications from individuals with the following skills, both those who have already applied these skills to diabetes research and those who are keen to do so:

- **Diabetes**

Our world-leading diabetes research and outstanding postgraduate and professional education are underpinned by our expertise in genomics, molecular biology and cell biology, physiology and cutting-edge innovation in technology. Our advances span from discovering biological causes and mechanisms, to improving diagnosis and treatment worldwide, to prevention and supporting people to live healthier lifestyles. The post holder will lead and develop research supporting existing and future strategies and working in a multi-disciplinary and interdisciplinary way.

- **AI and Data Sciences**

We are particularly interested in specialists in Bayesian Statistics and Artificial Intelligence who can collaborate with our current teams to provide a step change in capacity and expertise in data handling, programming and Bayesian statistics. This interface between novel data methodology and clinical data is a national priority and will be an important part of this expansion. Interdisciplinary work will be with the University's Institute of Data Science and Artificial Intelligence and the Turing Institute. Previous experience in applying these skills in Diabetes Research is not necessary.

- **Immunology**

Applications from specialists in Immunology are very welcome. The immunologists will be able to work on novel and pioneering approaches using unique human pancreas samples obtained at the time of diagnosis of type 1 diabetes. The ultimate aim is to understand the underlying disease processes in order to stimulate the development and application of novel immunotherapies and inform the design of new clinical trials. The availability of our new high-resolution, automated, digital pathology system will support this work by superseding current more laborious methods of image analysis. Interdisciplinary work will be with our Living Systems Institute.

- **Cell and Molecular Biology and Experimental Biology**

Specialists in Clinical Science, Cell and Molecular Biology, and Experimental Medicine are encouraged to apply. They will work on innovative research of the human beta-cell, exploring the effects of genetic mutations identified in patients with diabetes on for example beta cell development and function in order to improve the understanding of the development and function of the human insulin producing beta-cell. A key link with our work on human beta-cell development will be the establishment of beta-cell models based on pluripotent stem cells. Experimental medicine investigation of patients with genetic mutations will be crucial in this area. This work will be facilitated by the NIHR Exeter Clinical Research facility, which can provide patient specimens from genotyped patients as well as state of the art clinical facilities. Interdisciplinary work will be with our Living Systems Institute

Main duties and accountabilities

To fulfil research, teaching and administration duties as a Senior Lecturer in one/more of the area(s) outlined above.

To contribute to the general operation of the College as a member of its academic team.

Research

To contribute to enhancing the quality and quantity of research at Exeter in an area related or complementary to existing research strengths in diabetes and associated conditions,

To conduct independent research and act as principal investigator and project leader, and in so doing:

- Enhance the College's international reputation through research publications of appropriate quantity and quality, and contribute to worldwide debate at national and international conferences, and
- Win research earnings through carefully prepared and successful grant applications as well as identifying potential income-generating programmes and collaborative partnerships.

To supervise research projects, managing any dedicated research staff and postgraduate research students.

To help promote a collegiate working atmosphere and stimulating environment that will attract further research staff of the highest quality as well as good postgraduate research students.

To contribute to the further and ongoing development of the research area(s) outlined above.

Teaching

To develop and deliver undergraduate courses to appropriate academic standards such that:

- Knowledge acquired from research translates to teaching
- Accreditation by professional bodies is obtained where appropriate
- Students are challenged but also tutored and supported with individual care
- Teaching and learning techniques are innovative and inspiring
- Students are supervised appropriately
- Assessment criteria are appropriate, and fairly applied with results fed back to students appropriately
- Module content is continuously reviewed to identify areas for improvement

General

To contribute to the overall general and academic management in the College by undertaking activities that may be required such as:

- Developing overall academic content and structure of modules with colleagues
- Developing ideas for generating income
- Supporting admissions processes and procedures
- Supporting examinations processes and procedures
- Contributing to the work of College committees
- Contributing to accreditation and quality control processes

Person Specification

The successful applicant will have an independent, internationally-recognised research programme in an active field of research related or complementary to existing Exeter strengths. They will be able to demonstrate the following qualities and characteristics:

- A PhD or equivalent qualification/experience in the subject or a closely related discipline
- A strong, demonstrable record in attracting research funding.
- Teamwork skills to work in collaboration with existing group members
- An active and supportive approach to inter-disciplinary and multi-disciplinary research that will help to foster interactions and links both within the University and externally
- The attitude and ability to engage in continuous professional development
- The aptitude to develop familiarity with a variety of strategies to promote and assess learning
- Enthusiasm for delivering undergraduate and postgraduate programmes
- A strong record of research outputs of appropriate quality and quantity
- Proven academic leadership skills
- Be an externally recognised authority in the broader subject area.

This job description summarises the main duties and accountabilities of the post and is not comprehensive: the post-holder may be required to undertake other duties of similar level and responsibility.

If this opportunity is of interest we would be delighted to hear from you. Please contact Starr Young, Recruitment Lead, to arrange an informal discussion in the first instance at diabetescareers@exeter.ac.uk

Terms & Conditions

Our Terms and Conditions of Employment can be viewed [here](#).

Further Information

Please see our [website](#) for further information on working at the University of Exeter.