

College:	College of Medicine & Health
Post:	Associate Professor of Bayesian Statistics (Education and Research)
Grade:	H
Reference No:	P01249
Reporting to:	Pro Vice Chancellor (PVC) or nominee

This permanent full or part time post is available at the University of Exeter Medical School, College of Medicine & Health, one of the fastest growing medical schools in the UK.

Job Description and Person Specification

The 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, the 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 Associate Professor (Reader) 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. 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

The Diabetes Research unit has an international reputation for delivering excellent, clinically-relevant and distinctive patient-based 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 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.

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.

Summary of position(s) available

Associate Professors will engage with and support research and teaching activities. The post holder will be an innovative researcher with a strong and current record of research funding and international quality publications. Therefore the post holder will be a leading international figure with the ability to attract funding and world-class academics to their research group.

The post holder will support a dynamic team in developing and delivering research. The post holder will collaborate with our research centres and individual staff to develop and deliver our research strategy, build research capabilities and support staff in developing their careers. The post holder will have a key role in developing the research culture, and international reputation of the College of Medicine & Health.

Main duties

Teaching and Learning Support

1. Oversee the design and development of the overall curriculum in particular the area(s) outlined above.
2. Design, develop and deliver a range of programmes of study at various levels.
3. Lead the development and clarification of academic standards and quality for the subject area
4. Working closely with the Associate Dean for Education in the development and implementation of teaching and learning strategy.
5. Make a significant contribution to the development of academic policies across the Institution.

Research and Scholarship

1. Support the development and implementation of the research strategy in particular the area(s) outlined above.
2. Lead and co-ordinate research activity in the subject area of the area(s) outlined above.
3. Manage research and other collaborative partnerships with other educational institutions or other bodies.
4. Lead bids for research, consultancy and other additional funds, including leading collaborative bids.
5. Write publications of the appropriate defined standard or disseminate research findings using media appropriate to the discipline.
6. Conduct research into learning and teaching methodologies and disseminate best practice within the Institution and externally.
7. Develop and promote the use of innovative assessment methods.

Liaison and Networking

1. Lead and develop internal and external networks to foster collaboration and share information and ideas and to promote the subject and the Institution.
2. Participate in internal and external networks in relation to research and research funding. Teaching and teaching funding, and consultancy.
3. Promote and market the work of the College in the subject area both nationally and internationally.
4. Contribute to the enhancement of research quality and thinking in the field by being involved in quality assurance and other external decision making bodies.

Managing people and managing resources

1. Act as line manager for matters relating to the employment of staff and ensuring the work is allocated fairly, according to skills and capacity.
2. Carry out the role of an Academic Lead i.e. sustaining a shared sense of direction for the discipline and a shared participation in the University and Colleges' success through engagement with University and College strategies ensuring decisions are taken forward effectively by all staff they lead enabling, supporting and celebrating individual achievement.
3. Take overall responsibility for the organising and deployment of resources within own areas of responsibility

Person Specification

1. Be a leading authority in the area(s) outlined above with an international reputation.
2. Have a PhD or equivalent qualification/experience in the subject or a closely related discipline.
3. Possess in depth knowledge of specialism to enable the development of new knowledge, innovation and understanding in the field.
4. Be recognised as an excellent educator, locally and nationally.
5. Demonstrate enthusiasm for the creation, management and delivery of undergraduate and postgraduate programmes.
6. Possess a thorough understanding of institutional management systems and the wider higher education environment, including equal opportunities issues.
7. Have a strong record in attracting sufficient research and studentship funding to ensure sustainability of the research group.
8. Have a strong record of research outputs of appropriate quality and quantity.
9. Have 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.
10. Ideally be a member of the HEA at Principle Fellow level..

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.