Faculty of Arts and Sciences Graduate Teaching Assistantships/PhD Studentships

About Us

The Faculty of Arts and Sciences is home to a large and diverse group of disciplines with a track record of excellence in research, much of which crosses traditional disciplinary boundaries. We are particularly keen to continue to build our research capacity, and welcome applications for studentships spread across all subject areas in the Faculty.

The University Research Institutes

In all Faculties successful candidates with appropriate projects will be associated with one of the University's three Research Institutes in addition to being based in a department or faculty:

The Institute for Creative Enterprise (ICE)

ICE is a practice-led and theoretically grounded interdisciplinary research forum which connects us with the digital and creative economy and with cultural institutions.
For further information see https://www.edgehill.ac.uk/ice/

The Institute for Public Policy and Professional Practice (I4P)

I4P Values Statement and Research Themes:

I4P was established to promote the following: that the relationship between academics both as researchers and as teachers **should be informed by and seek to inform the world of practice and public policy** ; that one important dimension of being a University is that it is located within and seeks to actively and consciously listen to and be engaged with those different communities that are or can be shaped by its work, its values and its ideas; and that **we should – explicitly – be promoting the importance of shared learning , knowledge creation and knowledge exchange**.

For further information see https://www.edgehill.ac.uk/**i4p**/

Postgraduate Medical Institute (PGMI)

The PGMI seeks to lead, support and drive evidence-informed research in health and social care that is sensitive to the needs of service users and providers.

For further information see https://www.edgehill.ac.uk/**pgmi**/

Biology

The Biology department has a thriving and supportive research culture across a range of disciplines with an emphasis on work that has potential for significant impact on society. Research is undertaken in our newly opened £13m Tech Hub building which houses state-of-the-art facilities (eg cell culture, histology, DNA sequencer and microbiology lab). Additional facilities are present in the Biosciences building (eg chemistry lab including HPLC; insectaries and entomology lab) and the ecology research has access to some of the best field sites in Britain with good relationships with conservation.

Applications are invited in the following areas.

Antibiotic discovery

- Identification of new antibiotic clusters from actinomycetes using genome sequencing.
- Characterisation of gene clusters of unknown function from *Streptomyces coelicolor*.
- Understanding global transcriptional patterns of industrial *Streptomyces* strains grown in soil.

New therapies for human disease

- Novel nanotherapeutics to target ocular fibrosis
- Combinatorial gene and drug therapies for neuroblastoma
- New gene therapy approaches for cardiovascular-related disorders (including lipoproteins)
- Exosome research for diagnostics of different disorders (including cardiovascular or cancer)
- New therapy strategies for genetic skin diseases

Extreme microbes

- Diversity, physiology, genomics and geotechnology of extremophilic bacteria and archaea
- Adaptations to environmental extremes and astrobiology
- Geomicrobiology and biomineral production

Ecology and Evolution

- Biodiversity of upland grassland landscapes and the impacts of grazing
- Connectivity in species rich meadows
- Conservation Genetics of High Brown and Pearl Bordered Fritillary Butterflies
- Remote sensing and mapping as tools to determine landscape drivers of forest biodiversity
- Landscape genetics of forest-associated invertebrates
- Managing for deadwood for saproxylic
- Forest soil microbial diversity and soil functioning in forests

Disease Vectors

- Competitive breeding of UK native and non-native species of mosquitoes
- Invasive mosquito surveillance for the UK
- Risk of the spread of vector borne-diseases from imported pineapples
- Preventing pest outbreak in plantation forests

Plant Science

- Effects of different light spectra on epiphyte water relations
- Effect of volcanic ash depositions on epiphytes in Papua New Guinea

Environmental chemistry

- Model based understanding for chemical weathering of underground rocks due to water harvesting in megacities
- Chemical aspects of water and soil pollution
- Food analysis including fats, sugars, salts, vitamins for herbicides, pesticides and metals.

Before making an application applicants are strongly advised to contact Professor Paul Ashton, Head of Department, Ashtonp@edgehill.ac.uk