MSc Precision Medicine: Genomics & Analytics

Using **big data** to develop **targeted therapies** and **diagnostics** for **disease**
Join the emerging and rapidly expanding area of precision medicine. Learn the skills needed to utilise the huge volumes of data generated by biomedical research encompassing genomics, proteomics, metabolomics and clinical trial investigation. Make an impact on the creation of new tailored therapies for a range of illnesses including cancer, diabetes and arthritis.

INTRODUCTION
This highly interdisciplinary programme has been designed in collaboration with the Faculties of Biological Sciences, Medicine and Health and Mathematics and Physical Sciences. It will equip the next generation of scientists with the combination of biological knowledge and analytical skills necessary to revolutionise the way we diagnose and prevent genetic disease.

COURSE BENEFITS
- Receive a research-led education at the forefront of cutting-edge analytics research at Leeds
- Learn the analytical skills required to analyse a wide range of biomedical data across many medical areas
- Work with researchers from across three faculties active in the fields of genomics and data science
- Be exposed to cutting-edge methodologies such as artificial intelligence and machine learning
- Apply your learning to real-life data sets
- Develop transferable skills valued by employers
- Join a growing community of data scientists at Leeds through the Leeds Data Science Society

CAREER OPPORTUNITIES
This distinctive programme has been designed to meet demand in industry and academia for scientists with both biological knowledge and computational, statistical and analytical skills. Upon completion of this programme you will be well-placed to undertake a PhD in this field. You will have the knowledge to work in a variety of areas in industry or the NHS such as computational biology, data analytics, clinical genetics, disease biology and clinical science.

MODULES INCLUDE
- High-Throughput Technologies
- Biopharmaceutical Development: Clinical
- Analytical Skills in Precision Medicine
- Research Project: Genomics and Analytics
- Introduction to Genetic Epidemiology
- Statistical Theory and Methods
- Statistical Learning
- Big Data and Rare and Common Disorders
- Cancer Biology and Molecular Oncology

The University of Leeds is a proud partner of The Alan Turing Institute.

Full-time and part-time study options available.