

# LIFE SCIENCES MINI LECTURES



#### **Allied Health Professions**

Our NHS is full of amazing personnel from a wide variety of academic backgrounds. Our School of Health Sciences is a leading provider of preregistration courses, from Diagnostic Radiography, to Speech and Language Therapy and Biomedical Sciences. This talk highlights a number of less well known, but no less important, careers in healthcare.

### **BIOMEDICAL SCIENCES**

#### **Know your Organs**

Using porcine and ovine tissue, students are provided with the opportunity to explore organ systems in detail relating to the appearance, texture and function to clinical relevance. This session can be tailored to specific requirements exploring a specific organ system in detail, or an overview of multiple organs systems.

#### **Patient Detectives**

Analysis of urine, blood and faecal samples (all fake but authentic!) reveals clues about disease. Using case studies based on patients with diabetes, cancer, urinary tract infections and kidney disease you will have a chance to see how results from the clinical chemistry lab are used to help diagnose the physiological basis of illness.

# **BIOMEDICAL ENGINEERING**

#### Introduction to Biomedical Engineering

This lecture is an overview of biomedical engineering and its branches of specialisation. This session also introduces students to careers in the biomedical engineering field, including designing prosthetics, research and development in healthcare technology industry and clinical engineering opportunities in the NHS.

## **Biomedical Signal and Image Analysis**

This lecture introduces the field of biomedical signal and image processing. It focuses on different biomedical signals, biomedical images and data analysis to extract parameters useful for healthcare professionals to make decisions on patient care pathways. The students will be introduced to different career prospects in the biomedical engineering field.

#### Biomechanics, Prosthetics and Paralympics

This lecture focuses on biomechanics and its applications in prosthetics. The students will also be introduced to different career prospects in the biomedical engineering field.

#### Wearable Sensors and Health Monitoring

This lecture introduces wearable sensors which are used to monitor physiological measurements unobtrusively for various healthcare applications. The student will also be introduced to different career prospects in the biomedical engineering field.



#### Studying Sport at BCU

In 2022, the Commonwealth Games are being held in Birmingham. Students on sports courses at BCU will benefit directly from the legacy of this mega-event. This talk will cover the three sport programmes on offer at BCU, as well as highlight some of the amazing career opportunities that graduates can aim for.