

EASTBIO DTP Foundation Masterclasses 2018-2019 Genomic Approaches

Masterclass leader: Professor Mick Watson (The Roslin Institute, University of Edinburgh)

Date: 8 March 2019, 10:15-15:30

Venue: CTIR 2.84 Murray Seminar room (*@49 on the map*)

Schedule:

10:15-10:30	<i>Arrival and coffee/tea</i>
10:30-11:00	Introduction, background and sequencing technologies
11:00-11:30	Genome re-sequencing and variant-calling
11:30-12:15	<i>Lunch & coffee/tea</i>
12:15-12:45	RNA-Seq and other functional genomics
12:45-13:15	Genome assembly and contaminant identification
13:15-13:45	Metagenomics
13:45-14:15	<i>Coffee/tea</i>
14:15-14:45	Bioinformatics, open science, programming, Bio* projects
14:45-15:30	Panel session Q&A & close

Summary:

The aim of this masterclass is to introduce the students to the concepts involved in genomics, including sequencing technologies and large-scale data analysis. The masterclass will be run by a group of young, enthusiastic and practicing researchers from Scotland who have huge experience in analysing large genomic datasets.

On completion of the course, the students will be able to:

- Discuss the pros and cons of current sequencing technologies
- Understand the concepts and methods behind:
 - Genome re-sequencing and variant calling
 - RNA-Seq and functional genomics
 - Genome assembly and contamination
 - Metagenomics and the microbiome
 - Bioinformatics software development and open source projects

Requirements: Enthusiasm

For further questions, please email enquiries@eastscotbiodtp.ac.uk.