Microbial Community Analysis
Using DADA2 and PhyloSeq

Dates: 9 am – 5 pm, Tuesday 7th May and Wednesday 8th May 2019

Location: B28, St. Mary’s Building, University of Aberdeen, Old Aberdeen Campus.

Format: Instructor led computer based tutorial with support demonstrators.

Instructors: Dr. Sophie Shaw (CGEBM) with lecture from Dr. Alan Walker (Rowett Institute)

Description: The workshop will give the knowledge and skills to be able to carry out microbial community analysis with 16S rRNA gene data using the R-based analysis software, DADA2. This tool encompasses quality control, sequence variant identification and quantification, and taxonomic assignment. The outputs can then be processed using PhyloSeq to compute and compare diversity statistics and abundance of specific taxa. Dr. Walker will also provide a lecture highlighting the importance of appropriate study design and analysis.

Topics:
- Introduction to R
- Data quality filtering
- Sequence variant identification
- Taxonomic classification
- Alpha and Beta diversities
- Statistical analyses and Best Practices

Who should attend: This workshop is aimed at researchers, staff and PhD students, interested in microbial community analysis. The aim of the workshop is to provide understanding of the fundamentals of microbial community analysis and allow participants to be able to run their own analysis through DADA2. A brief introduction to R will be provided, so no previous experience is necessary.

Pre-requisites: None

Closing Date for registrations: 30/04/2019 or when capacity is reached.

Closing Date for cancellations: Cancellations received before 07/04/2019 will receive a full refund minus a £25 admin fee. Cancellations received by 30/04/2019 will receive a 50% refund minus a £25 admin fee. Full course fees will be charged for cancellations after this date.

Cost: For University of Aberdeen staff and PhD students the workshop is £160. Details on how to complete payment are provided on the registration form.

For external delegates from academic institutions the workshop fee is £300. Please contact Sophie Shaw (s.shaw@abdn.ac.uk) for details on commercial rates.

Registrations: To register please follow the relevant link at http://www.abdn.ac.uk/genomics/bioinformatics/training/ and complete the registration form.

Further Information: Please contact Sophie Shaw (s.shaw@abdn.ac.uk)

NOTE! This workshop will only run if a minimum number of attendees register. In circumstances of cancellation, full refunds will be given.