## **CENTRE FOR GENOME ENABLED BIOLOGY AND MEDICINE**University of Aberdeen



## **Microbial Community Analysis**

Using DADA2 and PhyloSeq

Dates: 9 am – 5 pm, Thursday 30th April and Friday 1st May 2026

**Location:** Computer Room 3, Polwarth Building, University of Aberdeen, Foresterhill Campus.

Format: Instructor led computer-based tutorial with support demonstrators.

**Instructors:** CGEBM Bioinformaticians (Dr Louie van de Lagemaat, Dr Antonio Ribeiro, Dr Tilly Scott) 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 provide a lecture highlighting 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:** Wednesday, 23/04/2026, one week prior to the workshop, or when capacity is reached. This course will only run if there is sufficient interest, so register early!

**Closing Date for cancellations:** Cancellations received by 23/04/2026 will receive a full refund minus a £40 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 £300, and payment information (internal order details) must be provided with registration. Details on how to complete payment are provided on the registration form. Fees are £395 for students and £450 for staff of external academic institutions. Please contact Elaina Collie-Duguid (e.collie-duguid@abdn.ac.uk) for commercial rates.

**Registrations:** To register, please complete the registration form here, or scan the QR code:



Further Information: Please contact Elaina Collie-Duguid (e.collie-duguid@abdn.ac.uk).