

Schedule for Metagenomics NGS practical course

Day 1 – Monday

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| 09:00-09:10 | Welcome and Introduction: Aims and outline of the course |
| 09:10-10:15 | Lecture: Introduction to NGS and Metagenomics |
| 10:15-10:35 | Coffee break |
| 10:35-12:00 | Practical session: Illumina 16S amplicon generation: part1 |
| 12:00-13:00 | Lunch break |
| 13:00-14:45 | Practical session: Illumina 16S amplicon generation: part2 |
| 14:45-15:05 | Coffee break |
| 15:05-15:45 | Lecture: Short read sequencing technology |
| 15:45-17:00 | Practical session: Sequencing on Nextseq2000 |

End of day 1

Day 2 – Tuesday

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| 09:00-10:00 | Lecture: Introduction to long read sequencing |
| 10:00-12:30 | Practical session: Oxford Nanopore DNA Library preparation |
| 12:30-13:30 | Lunch break |
| 13:30-15:30 | Practical session: Set up and start of GridIONX5 sequencing run |
| 15:30-15:50 | Coffee Break |
| 15:50-16:20 | Practical session: Sequencing data QC in real time |
| 16:20-17:15 | FGCZ tour |

End of day 2

Schedule for Metagenomics NGS practical course

Day 3 - Wednesday

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| 09:00-10:00 | Lecture: Introduction to data analysis; format and QC of raw data |
| 10:00-10:30 | Lecture: Introduction to SUSHI |
| 10:30-11:00 | Coffee break |
| 11:00-11:30 | Practical: Data QC |
| 11:30 -12:15 | Lecture: Introduction to 16S data analysis |
| 12:15-13:15 | Lunch |
| 13:15-16:15 | Practicals: 16S data analysis with QIIME2 (including coffee break) |

End of day 3

Day 4 – Thursday

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| 08:15-10:15 | Project discussion |
| 10:15-11:00 | Seminar: “Avidity Sequencing on the AVITI System - Sequencing Reimagined” Molly He, CEO of Element Biosciences |
| 11:00-12:00 | Lecture: Introduction to shotgun metagenomics and Metagenome Atlas |
| 12:00-13:00 | Lunch |
| 13:00-14:00 | Guest talk: Dr. Silas Kieser |
| 14:00-16:00 | Practical: Metagenomic data analysis with Metagenome Atlas Part 1 |

End of day 4

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Day 5 - Friday

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| 09:15-11:00 | Practical: Metagenomic data analysis with Metagenome Atlas Part 2 |
| 11:00-12:00 | Lecture and Practical: Assembly free approach to shotgun metagenomics |
| 12:00-13:00 | Lunch |
| 13:00-14:00 | Guest talk: Dr. Jonas Grossmann |
| 14:00-15:00 | Lecture: Introduction to metatranscriptomics |
| 15:00 – 15.15 | Coffee break |
| 15:15– 16.15 | Practical: Metatranscriptomic data analysis with Samsa2 |
| 16:15-16:30 | Course feedback |

End of course