EMBL

Microbial Communities: Modelling Meets Experiments

EMBL COURSE

We have moved our website to embl.org/events. The content below is no longer being updated.

EMBL Courses and Conferences during the Coronavirus pandemic

With the onsite programme paused, many of our events are now being offered in virtual formats.

Registration is open as usual for many events, with back-up plans in place to move further courses and conferences online as necessary. Registration fees for any events affected by the COVID-19 disruption are fully refundable.

More information for participants of events at EMBL Heidelberg can be found here.

Programme

Got something to say? Tweet it with #EMBLmicrobial

HIDE ALL

Day 1 - Monday 3 December 2018

Time	Speaker	Location
08:00 - 09:00	**Arrival, Registration & Welcome**	Flex Labs A & B
09:00 - 09:30	**Course Introduction** Kiran Patil - EMBL Heidelberg, Germany	Flex Labs A & B
09:30 - 10:30	**Inferring community composition and species interaction networks from metagenomic data** Georg Zeller - EMBL Heidelberg, Germany	Flex Labs A & B
10:30 - 11:00	**Coffee break and Meet the Speakers**	Flex Labs A & B

Time	Speaker	Location
11:00 - 13:00	**Computer Practical:** **Inferring community composition and species interaction networks from metagenomic data** Alessio Milanese - EMBL Heidelberg, Germany Georg Zeller - EMBL Heidlerberg, Germany	Computer Training Lab
13:00 - 14:00	**Lunch break**	EMBL Canteen
14:00 - 18:00	**Experimental Practical:** **Group I: Microbial Community Dynamics (barcoded amplicon sequencing)** Sonja Blasche - EMBL Heidelberg, Germany **Group II: Microbial Interactions (GC-MS metabolomics)** Eleni Kafkia (data analysis) - EMBL Heidelberg, Germany Dimitrios Konstantinidis - EMBL Heidelberg, Germany	Training Lab B
18:00 - 20:30	**Flash Talk Session and Pizza night**	ATC Rooftop Lounge

Day 2 - Tuesday 4 December 2018

Time	Speaker	Location
09:00 - 10:15	**Analysis of the human gut microbiome and beyond** Peer Bork - EMBL Heidlerberg, Germany	Flex Labs A & B
10:15 - 10:45	**Coffee break and Meet the Speaker**	Flex Labs A & B
10:45 - 11:45	**Kinetic population models and high-throughput measurements of microbial interactions** Tobias Bollenbach - University of Cologne, Germany	Flex Labs A & B
11:45 - 12:15	**Coffee break and Meet the Speaker**	Flex Labs A & B

Time	Speaker	Location
12:15 - 13:00	**Computer Practical:** **Kinetic population models and high-throughput measurements of microbial interactions** Gerrit Ansmann - University of Cologne, Germany Tobias Bollenbach - University of Cologne, Germany	Computer Training Lab
13:00 - 14:00	**Lunch break**	EMBL Canteen
14:00 - 16:15	**Computer Practical:** **Kinetic population models and high-throughput measurements of microbial interactions** Gerrit Ansmann - University of Cologne, Germany Tobias Bollenbach - University of Cologne, Germany	Computer Training Lab
16:15 - 16:30	**Coffee break**	Flex Labs A & B
16:30 - 18:45	**Experimental Practical:** **Group I: Microbial Community Dynamics (barcoded amplicon sequencing)** Sonja Blasche - EMBL Heidelberg, Germany **Group II: Microbial Interactions (GC-MS metabolomics)** Eleni Kafkia (data analysis) - EMBL Heidelberg, Germany Dimitrios Konstantinidis - EMBL Heidelberg, Germany	Training Lab B
18:45 - 19:45	**Dinner**	EMBL Canteen

Day 3 - Wednesday 5 December 2018

Time	Speaker	Location
09:00 - 10:00	**Introduction to genome-scale metabolic models and FBA** Paula Jouhten - VTT Technical Research Centre of Finland, Finland	Flex Labs A & B
10:00 - 10:30	**Coffee break and Meet the Speaker**	Flex Labs A & B

Time	Speaker	Location
10:30 - 11:30	**Mapping metabolic interactions in large communities** Kiran Patil - EMBL Heidelberg, Germany	Flex Labs A & B
11:30 - 12:00	**Coffee break and Meet the Speaker**	Flex Labs A & B
12:00 - 13:00	**Computer Practical:** **Genome scale metabolic models for single species and microbial communities** Paula Jouhten - VTT Technical Research Centre of Finland, Finland Daniel Machado - EMBL Heidelberg, Germany Kiran Patil - EMBL Heidelberg, Germany	Computer Training Lab
13:00 - 14:00	**Lunch break**	EMBL Canteen
14:00	**Group photo**	Flex Labs A & B
14:00 - 16:15	**Computer Practical:** **Genome scale metabolic models for single species and microbial communities** Paula Jouhten - VTT Technical Research Centre of Finland, Finland Daniel Machado - EMBL Heidelberg, Germany Kiran Patil - EMBL Heidelberg, Germany	Computer Training Lab
16:15 - 16:30	**Coffee break**	Flex Labs A & B
16:30 - 18:45	**Experimental Practical:** **Group I: Microbial Interactions (GC-MS metabolomics)** Eleni Kafkia (data analysis) - EMBL Heidelberg, Germany Dimitrios Konstantinidis - EMBL Heidelberg, Germany **Group II: Microbial Community Dynamics (barcoded amplicon sequencing)** Sonja Blasche - EMBL Heidelberg, Germany	Training Lab B
from 18:45	**Course Dinner**	Restaurant in downtown Heidelberg

Day 4 - Thursday 6 December 2018

Time	Speaker	Location
09:00 - 10:00	**Spatio-Temporal Genome-Scale Modeling of Microbial Communities** Ilija Dukovski - Boston University, USA	Flex Labs A & B
10:00 - 10:30	**Coffee break and Meet the Speaker**	Flex Labs A & B
10:30 - 12:30	**Computer Practical:** **Spatio-Temporal Genome-Scale Modeling of Microbial Communities** Ilija Dukovski - Boston University, USA	Computer Training Lab
12:30 - 13:30	**Lunch break**	EMBL Canteen
13:30 - 14:30	**Computer Practical:** **Spatio-Temporal Genome-Scale Modeling of Microbial Communities** Ilija Dukovski - Boston University, USA	Computer Training Lab
14:30 - 14:45	**Coffee break**	Flex Labs A & B
14:45 - 18:45	**Experimental Practical:** **Group I: Microbial Interactions (GC-MS metabolomics)** Eleni Kafkia (data analysis) - EMBL Heidelberg, Germany Dimitrios Konstantinidis - EMBL Heidelberg, Germany **Group II: Microbial Community Dynamics (barcoded amplicon sequencing)** Sonja Blasche - EMBL Heidelberg, Germany	Training Lab B
18:45 - 19:45	**Dinner**	EMBL Canteen

Day 5 - Friday 7 December 2018

Time	Speaker	Location
09:00 - 10:00	**Genome-based Modeling of Microbial Communities Relevant to Bioremediation** Radhakrishnan Mahadevan, University of Toronto, Canada	Flex Labs A & B
10:00 - 10:30	**Coffee break and Meet the Speaker**	Flex Labs A & B

Time	Speaker	Location
10:30 - 12:30	**Computer Practical:** **Dynamic Community Modeling using** **Dynamic Flux Balance Analysis** Olivia Bulka - University of Toronto, Canada Ruhi Choudhary - University of Toronto, Canada Radhakrishnan Mahadevan - University of Toronto, Canada	Computer Training Lab
12:30 - 13:30	**Lunch break**	EMBL Canteen
13:30 - 14:30	**Computer Practical:** **Dynamic Community Modeling using** **Dynamic Flux Balance Analysis** Olivia Bulka - University of Toronto, Canada Ruhi Choudhary - University of Toronto, Canada Radhakrishnan Mahadevan - University of Toronto, Canada	Computer Training Lab
14:30 - 14:45	**Coffee break**	Flex Labs A & B
14:45 - 16:45	**Analysis of experimental data and** **presentation**	Flex Labs A & B