

Course on Advanced Bacteriology

PGS_1810, 7.9.2023 – 6.11.2023 (18 one hour lectures, 3-4 pm)

This on-site and online lecture course is open nationwide. Lectures are open to all interested persons. Video of each lecture is saved for a fixed period, during which the course participant needs to pass a Moodle-based test related to the lecture. 2 ECTS points for post-graduate studies.

Registration (DL 31.8.) – <https://student.peppi.utu.fi> OR e-mail course contact

Programme

7.9. Introduction to the course - Bacteria pros and cons, Arto Pulliainen / Pentti Huovinen (Lauren 2)

11.9. Diet, lifestyle and microbiota, Kirsi Laitinen (Säätiö)

14.9. Population-level gut metagenomics in health and disease, Teemu Niiranen (Säätiö)

18.9. AMR surveillance using whole genome sequencing, Teemu Kallonen (Säätiö)

21.9. Antimicrobial resistance – mechanism of action, Kirsi Gröndahl-Yli-Hannuksela (Säätiö)

25.9. Statistical and machine learning aspects in microbiome research, Leo Lahti (Alhopuro)

28.9. Vaccine development for pertussis, Qiushui He (Skooppi 1)

2.10. Streptomyces cell factories for production of antibiotics, Mikko Metsä-Ketelä (Säätiö)

5.10. Exotoxin-targeted drug modalities as antibiotic alternatives, Arto Pulliainen (Lauren 2)

9.10. Faecal microbiota transplantation and Turku Microbiome Bank, Antti Hakanen (Säätiö)

12.10. Experimental evolution with bacterial model communities, Johannes Cairns (Alhopuro)

16.10. Modern bacterial ecology: metagenomics and single cell genomics, Manu Tamminen (Alhopuro)

19.10. Secretion systems in Gram-negative bacteria, Anton Zavialov (Alhopuro)

23.10. Bacterial adhesion in the oral cavity, Vuokko Loimaranta (Säätiö)

26.10. Oral bacteria, immune response, and treatment response prediction, Ulvi Gursoy (Säätiö)

30.10. Transposons and genome-wide insertion mutant libraries as tools in functional genomics of microbes, Harri Savilahti (no video recording, Osmo Järvi)

2.11. What's new in bacterial tick-borne infections, Jukka Hytönen (Alhopuro)

6.11. Bacteria as the workhorses of biotechnology, Urpo Lamminmäki (Osmo Järvi)

Institute of Biomedicine

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