



## INFO

For questions, please contact [cmross@utu.fi](mailto:cmross@utu.fi)



**05/10/2023**



**13:00 - 17:00**  
(Coffee served  
12:30 onwards)



**Säästöpankki hall**  
**Main Building,**  
**University of Turku**  
([here](#))



Supported by the CompLifeSci Biocity research program, Turku Microbe Centre, Alhopuro Foundation, & Research Council of Finland

<a href="https://www.freepik.com/free-vector/bacteria-concept-illustration\_2871373.htm#query=microbes&position=49&from\_view=search&track=sph">Image by macrovector</a> on Freepik

# Computational Methods in Antimicrobial Resistance Research

13:00

Opening remarks

*Prof. Leo Lahti*

Dept. of Computing, University of Turku, FI

Microbial secondary metabolism gene clusters in antibiotic discovery

*Prof. Mikko Metsä-Ketelä*

Dept. of Life Technologies, University of Turku, FI

KEYNOTE: Studies of microbiome response to antibiotics across multiple scales

*Dr. Christopher Quince*

Earlham and Quadram Institutes, Norwich, UK

Population level variation in human gut resistomes

*Dr. Katariina Pärnänen*

Dept. of Computing, University of Turku, FI

14:15

## COFFEE AND SNACKS



14:45

Role of rapid evolution & connectivity in community response to antibiotic disturbance

*Dr. Johannes Cairns*

Dept. of Computer Science, University of Helsinki, FI

Jointly linear & nonlinear GWAS of penicillin resistance in *Streptococcus pneumoniae*

*Dr. Tommi Mäklin*

Dept. of Mathematics and Statistics, University of Helsinki, FI

Linking antibiotic resistance genes to larger context with long read-sequencing and methylation patterns

*Dr. Antti Karkman*

Dept. of Microbiology, University of Helsinki, FI

Dispersal models for antimicrobial resistance

*Dr. Aura Raulo<sup>1</sup> & Dr. Guilhem Sommeria-Klein<sup>2</sup>*

<sup>1</sup>Dept. of Biology, University of Oxford, UK

<sup>2</sup>Dept. of Computing, University of Turku, FI

16:00

## DISCUSSION

17:00

