



SFM days 2024

April 25-26, Stockholm University
Svante Arrhenius väg 20A, Vivi Täckholmssalen

Day 1, April 25

12:00 Arrival, lunch, mounting of posters
13:00 Welcome

Session 1 – Molecular mechanisms in microbes

13:10 **Keynote lecture: Klas Flärdh**, Lund University
Building the wall from one end – Control of polarity and cell shape in Streptomyces

13:40 **Hanna Eriksson**, Uppsala University
Dynamics of CDI-mediated DNA damage: Kin- and target inhibition by the o11 toxin from E. coli EC869

13:55 **Sofia Bergman**, Uppsala University
ProQ affects expression levels of the stress responding sigma factor RpoS

14:10 **Karin Ernits**, Lund University
Mechanism of phage sensing and abortion by toxin-antitoxin-chaperone systems

14:25 **Andrea Fossati**, Karolinska Institute
Next-generation proteomics for quantitative Jumbophage-bacteria interaction mapping

14:40 **Aswathy Kallazhi**, Stockholm University
Two Lon proteases contribute to the regulation of motility and antibiotic tolerance in Pseudomonas aeruginosa

14:55 **Athina Eleftheraki**, Uppsala University
An RNA pseudoknot enables translation and inhibition of a type 1 toxin in Salmonella

15:10 Coffee break, poster viewing

Session 2 – Antimicrobials and resistance

15:40 **Keynote lecture: Michaela Wenzel**, Chalmers University of Technology
Breaking intrinsic antibiotic resistance

16:10 **Justina Zigmantaviciute**, Uppsala University
BK polyomavirus in kidney transplant recipients and donors

16:25 **Philip A. Karlsson**, Uppsala University
Polymicrobial biofilm formation on urinary catheters

16:40 **Elin Svedholm**, Uppsala University
Plasmid copy number increase: a mechanism generating transient antibiotic resistance

16:55 Short break

17:00 SFM annual member meeting

17:45 Poster session
19:00 Dinner and mingle

Day 2, April 26

Session 3 – Host-microbe interactions

- 08:30 **Keynote lecture: André Mateus**, Umeå University
Functional proteomics of human gut microbiome species
- 09:00 **Petra Geiser**, Uppsala University
Determinants of the divergent Salmonella and Shigella colonization strategies in human intestinal epithelia
- 09:15 **Ana S. Luis**, University of Gothenburg
Microbiota-human mucin interactions: Identification of key enzymes to prevent mucus barrier dysfunction
- 9:30 **Petra Muir**, Uppsala University
Identification and characterization of factors contributing to the successful colonization of mice by the E. coli strain R12
- 9:45 **Maria Letizia Di Martino**, Uppsala University
The Shigella flexneri invasome revealed by human intestinal epithelial organoid infections
- 10:00 Coffee break

Session 4 – Microbial diversity and evolution

- 10:30 **Keynote lecture: Siv Andersson**, Uppsala University
Evolutionary genomics of honeybee gut bacteria and the Planctomycetota
- 11:00 **Jon Jerlström Hultqvist**, Uppsala University
A unique symbiosome in an anaerobic single-celled eukaryote
- 11:15 **Joel Hallgren**, Stockholm University
Expanding the functional and genomic diversity of Caulobacteraceae
- 11:30 **Zélia Bontemps**, Uppsala University
Genome analysis of the novel Legionellales 'Ca. Pokemonas kadabra' and 'Ca. Fiscibacter pecunis' suggests an obligate parasitic relationship with their amoebal hosts, the rhizarian Fisciculla
- 11:45 **Stefan Bertilsson**, SLU
Single cell approaches to study microeukaryote-bacterial interactions in aquatic systems
- 12:00 Announcement of Kurt Nordström Award winners, concluding remarks
- 12:15 Lunch, afterwards departure