



# inauguration day of the Ecology & Evolution of Health team

Wednesday September 21<sup>st</sup>, 2022

Collège de France, Salle 5

- 9:00 Welcome and introduction by **Samuel Alizon & Olivier Espeli**
- 9:30 **Johanna Holm** (University of Maryland) — Deciphering mechanisms and improving outcomes through computational investigations of the vaginal microbiome
- 10:00 **Silvia De Monte** (CNRS Paris) — Modelling artificial selection of community function
- 10:30 **Laurent Jacob** (CNRS Lyon) — Microbial GWAS beyond k-mers
- 10:50 Cofee break
- 11:30 **Jérémie Guedj** (INSERM Paris) — SARS-CoV-2 viral dynamics and the role of antiviral treatments
- 12:00 **Claude Loverdo** (CNRS Paris) — Modeling bacterial dynamics in the digestive tract: inference, adaptive immunity, and evolution
- 12:30 **Minus van Baalen** (CNRS Paris) — Information, experience and stress
- 12:50 Lunch break
- 14:00 **Christophe Fraser** (Oxford University) — HIV virulence evolution
- 14:30 **Anna Zhukova** (Institut Pasteur Paris) — Epidemiological parameter estimation for large-scale pathogen sequence datasets
- 14:50 **Mircea Sofonea** (Université de Montpellier) — Ode to parsimony. A retrospective on 2 years of COVID-19-related critical care overload modelling in France
- 15:10 **Michael France** (University of Maryland) — Insight into the ecology of vaginal bacteria through integrative analyses of metagenomic and metatranscriptomic data
- 15:30 Tea break
- 16:00 **Anne Chevallereau** (CNRS Paris) — How bacteria defend against their viruses and how viruses fight back? The tale of CRISPR versus anti-CRISPR
- 16:20 **Pawel Gajer** (University of Maryland) — Unified framework for multi-omics analysis of a disease or adverse outcome
- 16:40 **Philippe Sansonetti** (Institut Pasteur) — Child stunting and the gut microbiome in sub-saharan Africa (Afribiota): from descriptomics to experimentomics
- 17:30 Final discussion

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[https://alizon.ouvaton.org/EEH\\_symposium2022.html](https://alizon.ouvaton.org/EEH_symposium2022.html)

