

# Advanced Biology Course — Epidemiology Phylodynamics

Sept 11 to Dec 18, 2024  
Wednesday, 17h15 to 19h15  
at CIRB (11 pl. Marcelin Berthelot 75005)



Samuel Alizon (CNRS, Paris) – coord.

- Introduction to epidemiology & phylodynamics



Joëlle Barido-Sottani (CNRS, Paris)

- Phylodynamics hands on (practical on Beast2)
- Software package development



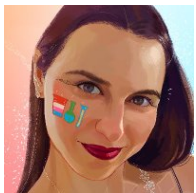
François Blanquart (CIRB, Paris)

- molecular epidemiology of *E. Coli*
- antibiotic resistance and phylogenies



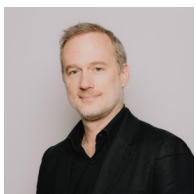
Sebastian Duchene (Institut Pasteur, Paris)

- Time calibration of phylogenies
- SARS-CoV-2 pandemic dynamics



Emma Hodcroft (Swiss TPH, Basel)

- virus phylodynamics
- Nextstrain



Amaury Lambert (ENS, Paris)

- birth-death & coalescent models
- applications to cancer and tumoral heterogeneity



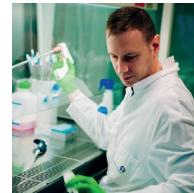
Katrina Lythgoe (Big Data Institute, Oxford Univ.)

- Evolution within patients during an infection
- HIV and SARS-CoV-2 genomic evolution



H el ene Morlon (CNRS, Paris)

- from epidemics to biodiversity
- integrating incidence and genetic data



 tienne Simon-Lori re (Institut Pasteur, Paris)

- next-generation sequencing from the field to the lab
- human vector-borne virus outbreaks



Julien Th ez  (INRAE, Clermont Ferrand)

- genomic epidemiology of epizootic and enzootic diseases
- surveillance, management & interactions with stakeholders



Anna Zhukova (Institut Pasteur, Paris)

- machine learning in phylodynamics
- dealing with huge HIV phylogenies

