

3rd Symposium for Emerging Viral Diseases

Campus Biotech, Geneva, Switzerland, 7-9 December 2022 https://www.unige.ch/emerging-virus-symposium/

Emma Hodcroft : "Genomics in a pandemic"



Photo by Oliver Hochstrasser

Main affiliation: University of Bern and University Hospitals of Geneva, Switzerland

Actual Position:

Postdoctoral Research Fellow, Bern Research assistant, Geneva

Web site: ispm.unibe.ch/about_us/staff/hodcroft_emma/index_eng.html

http://emmahodcroft.com/

Dr Emma Hodcroft began working in molecular epidemiology, phylogenetics, and modelling in HIV at the University of Edinburgh, where she investigated the heritability of viral load and developed an agent-based model simulating HIV phylogenies. In 2017, she moved to Basel and joined the Nextstrain project, becoming a co-developer of the project. Prior to the pandemic, Dr Hodcroft worked on projects with tuberculosis, campylobacter, influenza, and RSV, but primarily studied Enterovirus D68, where she has formulated new hypotheses about its evolution and transmission patterns.

Since February 2020, Dr Hodcroft has worked full-time on SARS-CoV-2, including identifying a key variant that dominated Europe in the summer of 2020 despite not being more transmissible (EU1). This work lead to her website CoVariants.org (recognised as an SIB Remarkable Output), which tracks SARS-CoV-2 variants. Currently her work focuses on better combining modelling & phylogenetics and the post-pandemic-restriction re-emergence of other respiratory viruses. Dr Hodcroft has also been very active in science communication during the pandemic, gaining over 82,000 twitter followers, and contributing to two BBC radio programmes every week in 2020 and 2021.