



# MMI 291 Seminar Series

Current Theme: Interdisciplinary Research  
Winter Quarter 2021 – CRN 33311



**Friday Seminar – 12:10-1 p.m.**

*“Evolutionary conflicts between viruses and mammalian antiviral factors”*

## Research

**Dr. Lucie Etienne** studies the evolution of virus-host interactions, and how it impacts cross-species transmissions. Her research program combines approaches from evolutionary biology and virology. Lucie deciphered some of the key events at the origin of HIV-1. In her lab, they continue to investigate the evolutionary interplay between lentiviruses/HIV and primates. More recently, her work has also extended to other viruses and hosts, in particular to the coevolution of viruses and bats. Her group has further developed methods to detect diversification in protein-coding genes, and they are now studying the functional diversification of mammalian gene families that may impact viral replication, including of SARS-CoV-2.

## Publications

**Jacquet S, Pontier D\*, Etienne L\*. (2020)** Rapid evolution of mammalian HERC6 and independent duplication of a chimeric HERC5/6 gene in rodents and bats suggest an overlooked role of HERCs in antiviral innate immunity. **Frontiers in Immunology**. 2020 doi: <https://doi.org/10.3389/fimmu.2020.605270>

**Picard L, Ganivet Q, Allatif O, Cimarelli A, Guéguen L\*, Etienne L\*. (2020)** DGINN, an automated and highly-flexible pipeline for the Detection of Genetic INNOvations on protein-coding genes. **Nucleic Acids Research**. 2020 Oct 09; 48(18), Page e103. doi: <https://doi.org/10.1093/nar/gkaa680>

Choughi G, Munir-Matloob S, Matkovic R, Martin MM, Morel M, Lahouassa H, Leduc M, Ramirez BC, **Etienne L**, Margottin-Goguet F. (2018) HIV-2/SIV viral protein X counteracts HUSH repressor complex. **Nature Microbiology**. Nat Microbiol. 2018 Aug;3(8):891-897.

doi: <https://doi.org/10.1038/s41564-0180179-6> ; Epub 2018 Jun 11. Open access: <https://rdcu.be/VLPW>

Feb  
26



**Lucie Etienne Ph.D.,**  
Assistant Professor  
CIRI  
Lyon, France

**Feb. 26, 2021**  
**12:10 – 1 p.m.**  
**ZOOM Meeting**

Medical Microbiology  
& Immunology  
School of Medicine

Seminar Contact:  
Autumn Vega  
530-752-9401  
[advega@ucdavis.edu](mailto:advega@ucdavis.edu)

We hope to see you there!