

## Recent Selected Publications by EVBC Members

The new scope of virus taxonomy: partitioning the virosphere into 15 hierarchical ranks. *Nat Microbiol* [10.1038/s41564-020-0709-x](#)

Honey-bee-associated prokaryotic viral communities reveal wide viral diversity and a profound metabolic coding potential. *Proc Natl Acad Sci USA* [10.1073/pnas.1921859117](#)

Novel genome sequences of cell-fusing agent virus allow comparison of virus phylogeny with the genetic structure of *Aedes aegypti* populations. *Virus Evol* [10.1093/ve/veaa018](#)

Mechanism of Virus Attenuation by Codon Pair Deoptimization. *Cell Rep* [10.1016/j.celrep.2020.107586](#)

"Frozen Evolution" of an RNA Virus Suggests Accidental Release as a Potential Cause of Arbovirus Re-Emergence. *PLoS Biol* [10.1371/journal.pbio.3000673](#)

Monkeypox Virus Emergence in Wild Chimpanzees Reveals Distinct Clinical Outcomes and Viral Diversity. *Nat Microbiol* [10.1038/s41564-020-0706-0](#)

Integrative Functional Genomics Decodes Herpes Simplex Virus 1. *Nat Commun* [10.1038/s41467-020-15992-5](#)

Phages Actively Challenge Niche Communities in Antarctic Soils. *mSystems* [10.1128/mSystems.00234-20](#)

TaxIt: An Iterative Computational Pipeline for Untargeted Strain-Level Identification Using MS/MS Spectra From Pathogenic Single-Organism Samples. Now published in *J Proteome Res* [10.1021/acs.jproteome.9b00714](#)

A Coupled Mathematical Model of the Intracellular Replication of Dengue Virus and the Host Cell Immune Response to Infection. *Front Microbiol* [10.3389/fmicb.2020.00725](#)

Genomic Epidemiology, Evolution, and Transmission Dynamics of Porcine Deltacoronavirus. *Mol Biol Evol* [10.1093/molbev/msaa117](#)

Pervasive and non-random recombination in near full-length HIV genomes from Uganda. *Virus Evol* [10.1093/ve/veaa004](#)

Genomic Epidemiology of 2015-2016 Zika Virus Outbreak in Cape Verde. *Emerg Infect Dis* [10.3201/eid2606.190928](#)

A Near Full-Length HIV-1 Genome From 1966 Recovered From Formalin-Fixed Paraffin-Embedded Tissue. *Proc Natl Acad Sci USA* [10.1073/pnas.1913682117](#)

### Reviews

Viral Indicators for Tracking Domestic Wastewater Contamination in the Aquatic Environment. *Water Res* [10.1016/j.watres.2020.115926](#)

### Preprints

Type III interferons disrupt the lung epithelial barrier upon viral recognition. *bioRxiv* [10.1101/2020.05.05.077867](#)

Decoding the architecture of the varicella-zoster virus transcriptome. *bioRxiv* [10.1101/2020.05.25.110965](#)

EpiDope: A Deep neural network for linear B-cell epitope prediction. *bioRxiv* [10.1101/2020.05.12.090019](#)

PoSeiDon: a Nextflow pipeline for the detection of evolutionary recombination events and positive selection. *bioRxiv* [10.1101/2020.05.18.102731](#)

We are happy to announce your research in our newsletter. Send your publications to [evbc@uni-jena.de](mailto:evbc@uni-jena.de). For more frequent updates on publications, please follow us on Twitter [@EVirusBioinfC](#) or check our [publications website](#).

## Upcoming Events

EVBC does not endorse any of the listings and is only involved in events marked as **EVBC Events**.

[Subscribe to EVBC Event Calendar](#)

The following conferences have been postponed or cancelled due to the ongoing COVID-19 pandemic:

- **RECOMB 2020** will be a virtual conference to be held on **22-25 June 2020**.
- **VEME 2020** is postponed until late August, early September.
- **7th ESWI Influenza Conference** is postponed to **6-9 December 2020**.
- **HCV 2020** is rescheduled to **6-9 July 2021**.
- **ESCV 2020** is postponed to **15-18 September 2021**.
- **International Herpesvirus Workshop 2020** has been cancelled.
- **ASV 2020** has been cancelled. Virtual workshops to be held on **13-17 June 2020**.
- **International Hepatitis E Symposium 2020** has been cancelled.

## News and Announcements

**Innovative Training Network VIROINF** The European Commission has announced the successful applicants to Marie Skłodowska-Curie Actions (MSCA). We are very happy to announce that the EVBC together with 15 beneficiaries from 8 different countries will be recruiting 15 PhD students. Details will follow soon.

## Tools and Resources

We are curating a list of [useful tools in virus bioinformatics](#). Please let us know about the tools you have developed to advance the field.

- **HSV-1 genome browser** for easy accessibility of the complete viral transcriptome and translome of herpes simplex virus 1 (HSV-1), including 46 novel large ORFs.
- **EpiDope** uses a deep neural network to detect B-cell epitope regions on individual protein sequences.
- **PoSeiDon** is an easy-to-use pipeline that helps researchers to find recombination events and sites under positive selection in protein-coding sequences.
- **TaxIt** is an iterative workflow for untargeted accurate strain-level classification of a priori unidentified organisms using tandem mass spectrometry.
- **VADR**: validation and annotation of virus sequence submissions to GenBank.

News related to SARS-CoV-2 are covered in our [Special Issue Newsletter](#).

