# **EVBC Newsletter**

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# **Recent Selected Publications by EVBC Members**

Field-based sciences must transform in response to COVID-19. Nat Ecol Evol 10.1038/s41559-020-01317-8

Bayesian Evaluation of Temporal Signal in Measurably Evolving Populations. Mol Biol Evol 10.1093/molbev/msaa163

Improved reference genome of the arboviral vector Aedes albopictus. Now published in Genome Biol 10.1186/s13059-020-02141-w

OGRE: Overlap Graph-based metagenomic Read clustEring. Bioinformatics 10.1093/bioinformatics/btaa760

Discrete spatio-temporal regulation of tyrosine phosphorylation directs influenza A virus M1 protein towards its function in virion assembly. PLoS Pathog 10.1371/journal.ppat.1008775

RNA secondary structure at the transcription start site influences EBOV transcription initiation and replication in a length- and stability-dependent manner. RNA Biol 10.1080/15476286.2020.1818459

Recombination at the emergence of the pathogenic rabbit haemorrhagic disease virus Lagovirus europaeus/GI.2. Sci Rep 10.1038/s41598-020-71303-4

Sequence Analysis of Egyptian Foot-and-Mouth Disease Virus Field and Vaccine Strains: Intertypic Recombination and Evidence for Accidental Release of Virulent Virus. Now published in Viruses 10.3390/v12090990 Evolutionary Study of the crAssphage Virus at Gene Level. Viruses

10.3390/v12091035 Rapid multiplex MinION nanopore sequencing workflow for Influenza A viruses. BMC Infect Dis 10.1186/s12879-020-05367-y

Experimental infection of bumblebees with honeybee-associated viruses: no direct fitness costs but potential future threats to novel wild bee hosts. R Soc Open Sci 10.1098/rsos.200480

2020 taxonomic update for phylum Negarnaviricota (Riboviria: Orthornavirae), including the large orders Bunyavirales and Mononegavirales. Arch Virol 10.1007/s00705-020-04731-2

Beyond Cytomegalovirus and Epstein-Barr Virus: a Review of Viruses Composing the Blood Virome of Solid Organ Transplant and Hematopoietic Stem Cell Transplant Recipients. Clin Microbiol Rev 10.1128/CMR.00027-20

Mumps Vaccines: Current Challenges and Future Prospects. Front Microbiol 10.3389/fmicb.2020.01999

#### **Preprints**

Hamiltonian Monte Carlo sampling to estimate past population dynamics using the skygrid coalescent model in a Bayesian phylogenetics framework. Wellcome Open Res 10.12688/wellcomeopenres.15770.1

AnnapuRNA: a scoring function for predicting RNA-small molecule interactions. bioRxiv 10.1101/2020.09.08.287136

CIAlign - A highly customisable command line tool to clean, interpret and visualise multiple sequence alignments. bioRxiv 10.1101/2020.09.14.291484

High transmissibility and fetal pathogenicity of recent Zika virus strains from the African lineage. bioRxiv 10.1101/2020.09.01.277673

For more frequent updates on publications, please follow us on Twitter > EVirusBioinfC or check our publications website.

## **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.

- OGRE (Overlap Graph-based metagenomic Read clustEring) for clustering reads in species-specific clusters for large metagenomic datasets.
- · AnnapuRNA is a scoring function for predicting RNA-small molecule interactions.
- ClAlign effectively removes poorly aligned regions and sequences from MSAs and provides novel visualisation options.

# **Upcoming Events**

EVBC does not endorse any of the listings and is only involved in events marked as **EVBC Events \pi**. Subscribe to EVBC Event Calendar

★ International Virus Bioinformatics Meeting 2020 08-09 October 2020 online | free of charge Join us for our annual meeting focussing on bioinformatics approaches in virology. Drop us an email to receive access information.

#### **Vacancies**

#### 15 PhD positions in VIROINF Network

The EU funded MSCA-ITN VIROINF (Understanding (harmful) virus-host interactions by linking virology and bioinformatics) will recruit fifteen early stage researchers at fifteen institutes in eight countries. Check out the list of projects and application details.

Application deadline: 21 October 2020

### **News and Announcements**

The Special Issue The Complex Roles of Viruses in Agroecosystems in Agronomy is guest edited by EVBC member Laura Miozzi and welcomes contributions that improve the understanding of plant-virus interactions and explore the complex role of viruses in agroecosystems, with the ultimate aim of improving the sustainability of agronomic practices.

Submission deadline: 30 June 2021

News related to SARS-CoV-2 are covered in our Special Issue Newsletter.

FRIEDRICH-SCHILLER-**UNIVERSITÄT** 

+49-3641-9-46482

ttp://evbc.uni-jena.de/

