EVBC Newsletter

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European
VIRUS BIOINFORMATICS
Center

Recent Selected Publications by EVBC Members

Non-retroviral Endogenous Viral Element Limits Cognate Virus Replication in *Aedes aegypti* Ovaries. *Curr Biol* **10.1016/j.cub.2020.06.057**

Relaxed Random Walks at Scale. *Syst Biol* **10.1093/sysbio/syaa056**

ganon: precise metagenomics classification against large and up-to-date sets of reference sequences. *Bioinformatics* **10.1093/bioinformatics/btaa458**

AncesTree: An interactive immunoglobulin lineage tree visualizer. Now published in *PLoS Comput Biol* **10.1371/journal.pcbi.1007731**

Kinetic Fingerprinting Links Bacteria-Phage Interactions with Emergent Dynamics: Rapid Depletion of *Klebsiella pneumoniae* Indicates Phage Synergy. *Antibiotics* **10.3390/antibiotics9070408**

Detection of low-level HCV variants in DAA treated patients: comparison amongst three different NGS data analysis protocols. *Virol J* **10.1186/s12985-020-01381-3**

Reviews
Challenges of Studying the Human Virome - Relevant Emerging Technologies. *Trends Microbiol* **10.1016/j.tim.2020.05.021**

Preprints
Next-generation diagnostics: virus capture facilitates a sensitive viral diagnosis for epizootic and zoonotic pathogens including SARS-CoV-2. *bioRxiv* **10.1101/2020.06.30.181446**

What the Phage: A scalable workflow for the identification and analysis of phage sequences. *bioRxiv* **10.1101/2020.07.24.219899**

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

EVBC Special Issues

Virus Bioinformatics in *Viruses*
Determining the Suitability of MinION's Direct RNA and DNA Amplicon Sequencing for Viral Subtype Identification. *Viruses* **10.3390/v12080801**

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 📅

7th ESWI Influenza Conference
06–09 December 2020, Valencia, Spain
The European Scientific Working group on Influenza (ESWI) organise the largest European scientific conference dedicated to influenza, bringing together experts in fundamental biological research, public health, healthcare and policy. This edition of the conference has expanded its scope to include RSV, and will also include a special session on SARS-CoV-2.

Deadline for abstracts and applications to the Young Scientist Fund: 07 August 2020

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.

- **AncesTree** is a graphical user interface designed to allow researchers to interactively explore the clonal evolution of antibodies.
- **ganon** is a k-mer-based read classification tool for metagenomics that provides an efficient method for indexing references, keeping them updated.
- **What the Phage** is an easy-to-use and parallel multitool approach for phage identification combined with an annotation and classification downstream strategy supporting the user's decision-making process when the phage identification tools are not in agreement to each other.

News and Announcements

Virus Bioinformatics 2020 in *Viruses*
We invite you to submit your research to our special issue covering computational approaches in virology.
Submissions deadline: 31 October 2020

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