EVBC Newsletter

Special Issue • SARS-CoV-2 • August 2020

European VIRUS BIOINFORMATICS Center

Recent Selected Publications on SARS-CoV-2 by EVBC Members

Safety and immunogenicity of the ChAdOx1 nCoV-19 vaccine against SARS-CoV-2: a preliminary report of a phase 1/2, single-blind, randomised controlled trial. *Lancet* 10.1016/S0140-6736(20)31604-4

Chloroquine does not inhibit infection of human lung cells with SARS-CoV-2. *Nature* 10.1038/s41586-020-2575-3

Longitudinal Isolation of Potent Near-Germline SARS-CoV-2-Neutralizing Antibodies from COVID-19 Patients. Now published in *Cell* 10.1016/j.cell.2020.06.044

Rapid SARS-CoV-2 whole-genome sequencing and analysis for informed public health decision-making in the Netherlands. Now published in *Nat Med* 10.1038/s41591-020-0997-y

COVID-19 in health-care workers in three hospitals in the south of the Netherlands: a cross-sectional study. Now published in *Lancet Infect Dis* 10.1016/S1473-3099(20)30527-2

Viral CpG deficiency provides no evidence that dogs were intermediate hosts for SARS-CoV-2. *Mol Biol Evol* 10.1093/molbev/msaa178

Ultra-High-Throughput Clinical Proteomics Reveals Classifiers of COVID-19 Infection. Now published in *Cell Syst* 10.1016/j.cels.2020.05.012

Main Routes of Entry and Genomic Diversity of SARS-CoV-2, Uganda. *Emerg Infect Dis* 10.3201/eid2610.202575

International external quality assessment for SARS-CoV-2 molecular detection and survey on clinical laboratory preparedness during the COVID-19 pandemic, April/May 2020. *Euro Surveill* 10.2807/1560-7917.ES.2020.25.27.2001223

Lower nasopharyngeal viral load during the latest phase of COVID-19 pandemic in a Northern Italy University Hospital. *Clin Chem Lab Med* 10.1515/cclm-2020-0815

Age-Dependent Progression of SARS-CoV-2 Infection in Syrian Hamsters. Now published in *Viruses* 10.3390/v12070779

A putative new SARS-CoV protein, 3c, encoded in an ORF overlapping ORF3a. *J Gen Virol* 10.1099/jgv.0.001469

No SARS-CoV-2 detection in the German CAPNETZ cohort of community acquired pneumonia before COVID-19 peak in March 2020. *Infection* 10.1007/s15010-020-01471-y

SARS-CoV-2 vaccination-A plea for fast and coordinated action. *Zoonoses Public Health* 10.1111/zph.12740

Rapid Quantification of SARS-CoV-2-Neutralizing Antibodies Using Propagation-Defective Vesicular Stomatitis Virus Pseudotypes. *Vaccines* 10.3390/vaccines8030386

Preprints

Early postmortem mapping of SARS-CoV-2 RNA in patients with COVID-19 and correlation to tissue damage. *bioRxiv* 10.1101/2020.07.01.182550

Daily viral kinetics and innate and adaptive immune responses assessment in COVID-19: a case series. *medRxiv* 10.1101/2020.07.02.20143271

Molecular tracing of SARS-CoV-2 in Italy in the first three months of the epidemic. *medRxiv* 10.1101/2020.07.06.20147140

Seroprevalence of SARS-CoV-2 antibodies in an entirely PCR-sampled and quarantined community after a COVID-19 outbreak - the CoNAN study. *medRxiv* 10.1101/2020.07.15.20154112

Probability of aerosol transmission of SARS-CoV-2. *medRxiv* 10.1101/2020.07.16.20155572

The short- and long-range RNA-RNA Interactome of SARS-CoV-2. *bioRxiv* 10.1101/2020.07.19.211110

Bacterial but no SARS-CoV-2 contamination after terminal disinfection of tertiary care intensive care units treating COVID-19 patients. *Research Square* 10.21203/rs.3.rs-47872/v1

Genome-wide bioinformatic analyses predict key host and viral factors in SARS-CoV-2 pathogenesis. *bioRxiv* 10.1101/2020.07.28.225581

For more frequent updates on SARS-CoV-2 publications, please follow us on Twitter EVirusBioinfC or check our publications website.

SARS-CoV-2 Bioinformatics Tools and Resources

We are curating a list of bioinformatics tools specifically for coronaviruses. Please let us know about the tools you have developed to advance the field.

– **COVIDep** is a web-based platform for real-time reporting of vaccine target recommendations for SARS-CoV-2.

Special Issues

Special Research Topic in *Frontiers in Microbiology*: Coronavirus Evolution, Cross-Species Transmission and Recombination.

This Research Topic will accept articles focused on the molecular mechanisms and processes underlying cross species transmission and evolution of coronaviruses. Reviews as well as original articles will be welcomed. Abstract submission deadline: 04 September 2020

Virus Bioinformatics 2020 in *Viruses*

Covid-19 Transmission Trajectories—Monitoring the Pandemic in the Worldwide Context. *Viruses* 10.3390/v12070777

Deploying Machine and Deep Learning Models for Efficient Data-Augmented Detection of COVID-19 Infections. *Viruses* 10.3390/v12070769

FRIEDRICH-SCHILLER-UNIVERSITÄT JENA

evbc@uni-jena.de
+49-3641-9-46482
http://evbc.uni-jena.de/
Leutragraben 1, 07743 Jena