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Selected Publications by EVBC Members

 [All publications on Pubmed](#)

A widespread family of phage-inducible chromosomal islands only steals bacteriophage tails to spread in nature. (Cell Host Microbe: [10.1016/j.chom.2022.12.001](#))

Drug repurposing tool uses network-based approaches to identify and rank candidate drugs for a specific pathogen, combining different information. (Brief Bioinform: [10.1093/bib/bbac536](#))

Bacterial ribosomal RNA detection in cerebrospinal fluid using a viromics approach. (Fluids Barriers CNS: [10.1186/s12987-022-00400-5](#))

Computational tool for comparing contacts and contact interfaces in all kinds of macromolecules and macromolecular complexes, including proteins, nucleic acids, and other molecules. (Protein Sci: [10.1002/pro.4503](#))

Endogenous lentivirus lineage in the genome of the South African springhare demonstrates that the host range of lentiviruses has historically extended to rodents. (Retrovirology: [10.1186/s12977-022-00615-2](#))

Current model of varicella-zoster virus phylogeography including the number and structure of geographic clades and the role of recombination in reshaping these. (Curr Top Microbiol Immunol: [10.1007/82_2021_238](#))

Phylogeography of hepatitis B virus: The role of Portugal in the early dissemination of HBV worldwide. (PLoS One: [10.1371/journal.pone.0276618](#))

Impact of HIV and integrase strand transfer inhibitors-based treatment on the gut virome. (Sci Rep: [10.1038/s41598-022-25979-5](#))

Command-line tool for phasing and phasing-related tasks to infer haplotypes in diploid and polyploid samples based on (preferably long) reads covering at least two heterozygous variants. (Methods Mol Biol: [10.1007/978-1-0716-2819-5_8](#))

Fatal cases after Omicron BA.1 and BA.2 infection: Neither vaccination nor known risk factors were significantly associated with a direct cause of death by COVID-19. (Int J Infect Dis: [10.1016/j.ijid.2022.12.029](#))

Reviews / Commentaries / Editorials / ...

The RNA virosphere: How big and diverse is it? (Environ Microbiol: [10.1111/1462-2920.16312](#))

Overview of different classes of fitness landscapes and implications of the landscape concept for virus evolution. (Curr Top Microbiol Immunol: [10.1007/978-3-031-15640-3_1](#))

Overview on the computational integration of multiple types of "omics" data on lytic herpes simplex virus 1 (HSV-1) infection. (Methods Mol Biol: [10.1007/978-1-0716-2895-9_3](#))

A guideline for academic software life cycle processes tailored to the needs and capabilities of research organizations. (iScience: [10.1016/j.isci.2022.105534](#))

Preprints

Deep investigation of the viral genomic information in wastewater that underlines the value of sewage surveillance for both public health purposes and planetary virome research. (bioRxiv: [10.1101/2022.12.16.520800](#))

Diversity and pathobiology of an ilarvirus unexpectedly detected in diverse host plants and in global sequencing data. (bioRxiv: [10.1101/2022.12.15.520526](#))

Unravelling the effect of winter holiday celebrations on SARS-CoV-2 transmission. (Research Square: [10.21203/rs.3.rs-2365444/v1](#))

Genomic assessment of invasion dynamics of SARS-CoV-2 Omicron BA.1. (medRxiv: [10.1101/2023.01.02.23284109](#))

Publication shortcuts: If you would like us to add a shortcut to a specific virus (family) or topic, drop us an [email](#).

SARS-CoV-2


influenza


HIV


monkeypox


Tools and Resources

 [Virus tools website](#)

Tools that have been added to our [collection](#) this month, or have now been published in a journal. Tools developed by EVBC members are marked .

 **1D2DSimScore:** comparing contacts in biomacromolecules and their complexes.

 **Vir2Drug:** Drug repurposing based on protein similarities between pathogens.


 **WhatsHap:** phasing genomic variants using DNA sequencing reads.

Request

PhD student Martin Lubocki from the University of Gdańsk is looking for help designing his experiment. If you have any advice on how to deal with intraspecific variation in viruses (SARS-CoV-2 in his case) when analyzing functional motifs, please contact [Martin](#).

Upcoming Events


 [Subscribe to Calendar](#)

We do not endorse any of the listings and do not take any responsibility for the accuracy of the information. EVBC members are involved in events marked .

32nd Annual Meeting of the Society for Virology 2023

28–31 March 2023 | Ulm, Germany

Abstract submission deadline: **15 January 2023**

 Thomas Mettenleiter, Lars Dölken, Noam Stern-Ginossar (plenary speakers)

27th Annual International Conference on Research in Computational Molecular Biology

16–17 April 2023 | Istanbul, Turkey

Poster submission deadline: **21 January 2023**

Highlights submission deadline: **22 January 2023**

RECOMB satellite conference on Comparative Genomics

14–15 April 2023 | Istanbul, Turkey


Draft submission deadline: **11 January 2023**

(title and abstract is sufficient)

8th European Congress of Virology 2023

4–7 May 2023 | Gdańsk, Poland

Abstract submission deadline: **06 February 2023**

 Krystyna Bienkowska-Szewczyk, Thomas Mettenleiter (organizers); Sébastien Calvignac-Spencer, Mart Krupovic (speakers)

ViBioM 2023

 [Save the date](#)



We are happy to announce further keynote speakers:



Christian Eggeling

Superresolution Microscopy,
Friedrich Schiller University Jena, DE

Abstract submission and registration opens:	09 Jan 2023
RdRp Summit abstract submission and registration opens:	09 Jan 2023
Submission deadline for oral presentations:	15 Mar 2023
Notifications for oral presentations:	05 Apr 2023
Submission deadline special issue:	30 Jun 2023

viruses *in silico* lecture series

 [Register](#)

This lecture is designed to keep you up to date with the latest developments in virus bioinformatics, especially new tools that might help you in your research.

Virus genome resource comparison

30 January 2023 | 04 pm CET

online

Noriko Cassman & Muriel Ritsch, Friedrich Schiller University Jena, Germany

You can also already [register](#) for our upcoming lectures:

- | | |
|-------------------|--|
| 27. February 2023 | Mart Krupovic, Institut Pasteur, France |
| 27. March 2023 | Tomasz Wirecki, International Institute of Molecular and Cell Biology Warsaw, Poland |
| 24. April 2023 | Masayuki Horie, Osaka Metropolitan University, Japan |

You can now also choose to be permanently registered to the “viruses *in silico*” lecture. You will be added to the mailing list and receive the access details every month. You can unsubscribe at any time.

ECR Viromics Webinar Series

 [Register](#)

This lecture for early career researchers studying viruses in complex communities is organized together with the [Center of Microbiome Science](#) at Ohio State University and the [NSF EMERGE Biology Integration Institute](#).

Computational host discovery for stray viruses in the metagenomic age

11 January 2023 | 04-05 pm CET

online

Cormac M. Kinsella, Amsterdam UMC, The Netherlands

Member Profile: Ingrida Olendraite



Name: Ingrida Olendraite

Position: Postdoctoral researcher at University of Cambridge

Research focus: RNA virus discovery and molecular biology



What do you love about viruses?

I think they are very fun and I love how every time there is something unexpected hiding in their small RNA genomes. Never ending exploration for a molecular biologist.

On what topic could you give a 30-minute presentation without any preparation?

COVID and emerging infectious diseases - I have given such talk for non-scientific audience very many times already.

What is your favourite way to spend a day off?

Endurance exercise (running, swimming etc), taking a bath and a speciality coffee with my family.

What are you currently learning?

How to take better care of myself.

What is the most interesting question or challenge in science that is still unanswered?

I am very interested in Astrobiology and extremophiles. So in the overlap with my current research, I would say RNA viruses in Archaea - do they actually exist?

What was your biggest achievement, and what your biggest failure?

Easily, growing and giving birth to my baby is my biggest life-changing achievement - way much more difficult and challenging than anything else I've done before. Biggest failure - I had to take multiple English language exams and barely made it (so could study in the UK).

Which scientific topic (outside of your field of research) do you think should have more scientific attention?

Rare diseases - some of them are very heavily influencing lives of many people, but due to the cost are quite frequently overlooked and even less frequently making it to the medical treatment options. Also muscular dystrophy is, in my opinion, very life-impacting disorder and based on its severity - should have much more attention.

If you had the option to advise a younger version of yourself, what would that be?

Life work balance is the key - take care of yourself.

Member Profile: Matthew B. Sullivan



Name: Matthew B. Sullivan

Position: Professor of Microbiology and Civil, Environmental, and Geodetic Engineering

Research focus: viruses of microbes in complex systems (oceans, soils, humans, extreme environments)



What do you love about viruses?

The constant mysteries

Who is your favourite scientist and why?

Phil Hugenholtz, creative and unbounded by past ideas and genuinely wants to help the microbial ecologists make the most of genomes

On what topic could you give a 30-minute presentation without any preparation?

Viruses in nature

What is your favourite way to spend a day off?

Hiking in the mountains with friends or family

What is the most interesting question or challenge in science that is still unanswered?

Which viruses infect which microbes in the wild

What is the coolest thing about your research?

It is constantly changing and pushing boundaries and looking for new ways to learn

What was your most surprising scientific finding?

photosynthesis genes in virus genomes; I thought it was an assembly error

What was your biggest achievement, and what your biggest failure?

achievement: Learning enough about RNA viruses to publish, failure: not learning enough about viral taxonomists to get our cyanophage population genomics / speciation published higher tier

Which scientific topic (outside of your field of research) do you think should have more scientific attention?

How to help people do the right thing w.r.t. behavioral changes so that together we can overcome the biggest societal challenges out there like climate change and public health and loss of biodiversity.

Is there anything else you would like to share with other EVBC members?

So excited to be part of the EVBC, and to be partnering with EVBC to highlight early career researchers in our [ECR Viromics Webinar Series](#). If you've not joined, please do ... great science and great discussions - once monthly!