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Announcements

★ New Coordinator

Dear EVBC Community,

I am excited to finally introduce myself today as the **new scientific coordinator of the EVBC**.



I'm not a bioinformatician (please don't hold it against me:) - I have a PhD in Environmental Microbiology from Friedrich Schiller University Jena. My research focused on microbial communities and especially iron-oxidizing bacteria in a heavy metal-contaminated creek.

Since 2016, I have been the scientific coordinator and manager of the Collaborative Research Centre AquaDiva at Uni Jena, which concluded this June after 12 years of interdisciplinary Critical Zone research. During this time, I gained extensive experience in event organization, science communication, and member relations, among other areas.

I hope to follow in Franziska's and Paula's footsteps and continue the mission of advancing the field of virus bioinformatics. I look forward to coordinating the EVBC, to many exciting years of projects and collaborations ahead, and – most of all – to getting to know all of you!

Please don't hesitate to reach out via evbc@uni-jena.de!

Warm regards, Maria

Selected Publications by EVBC Members

📖 All publications on PubMed

Immunity

- 🔗 DIGGER 2.0 integrates domain-domain interaction data and an RNA seq based splicing analysis tool (NEASE) to interpret how alternative splicing rewires interaction networks in human and mouse disorders. (NAR: [10.1093/nar/gkaf384](https://doi.org/10.1093/nar/gkaf384))
- 🔗 The study reveals that advanced age and spike protein escape mutations compromise CD4+ T cell recognition of a conserved pan coronavirus epitope (iCope), while antibody cross-reactivity is affected primarily by viral evolution (Eur J Immunol: [10.1002/eji.202551888](https://doi.org/10.1002/eji.202551888))
- 🔗 Genome-wide screening of E3 ubiquitin ligases identifies TRIM48 as a negative regulator of RIG I mediated antiviral signaling, offering insight into host virus interaction modulation (Cell Signal: [10.1016/j.cellsig.2025.111973](https://doi.org/10.1016/j.cellsig.2025.111973))

Virome, Diversity, and Phylogeny

- Benchmarking across phylogeographic approaches for RNA viruses reveals relative strengths in reconstructing viral spread under different epidemiological scenarios (PNAS: [10.1073/pnas.2506743122](https://doi.org/10.1073/pnas.2506743122))
- 🔗 MPACT combines sequence- and structure-based similarity metrics to improve demarcation across multiple viral taxonomic levels, offering a unified approach to viral classification (Viruses: [10.3390/v17050642](https://doi.org/10.3390/v17050642))
 - 🔗 Virome mining uncovers functional factorless IRES-like RNA structures, revealing new mechanisms of translation initiation across diverse viruses (PLoS Pathog: [10.1371/journal.ppat.1013255](https://doi.org/10.1371/journal.ppat.1013255))
 - 🔗 This paper presents a Bayesian framework using tree structured genealogies to infer viral fitness landscapes from sequence phylogenies (Bioinformatics: [10.1093/bioinformatics/btaf193](https://doi.org/10.1093/bioinformatics/btaf193))

Cultivation and Preservation Methods

- 🔗 The SPEEDY protocol enables generation of large-scale LUHMES derived dopaminergic neurons, facilitating scalable infection studies of neurotropic viruses (Viruses: [10.3390/v17071001](https://doi.org/10.3390/v17071001))
- 🔗 The study compares storage methods for diverse bacteriophages, revealing which protocols best preserve morphology and infectivity over long-term storage (Microbiol Spectr: [10.1128/spectrum.01442-24](https://doi.org/10.1128/spectrum.01442-24))

🔗 – open access ✖ – preprints 📄 – reviews, meta analyses 🔗 – tools

Announcements

★ Humboldt Fellowship Opportunity

EVBC member **Denise Kühnert** from Robert Koch Institute was selected as a Henriette Hertz Scout by the Humboldt Foundation. She can recommend three **candidates for a Humboldt Fellowship** within the area of phylogenomics/phylodynamic of infectious diseases over the next three years, without them going through the competitive selection process. Guidelines on the recommendation procedure can be found [here](#).

If you are interested, please contact Denise directly with your CV attached: KuehnertD@rki.de.

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.

German Conference on Bioinformatics (GCB) 2025

22-24 September 2025 | Düsseldorf, Germany

This annual international conference is devoted to all areas of bioinformatics as a platform for the whole bioinformatics community.

Poster abstract submission deadline: **7 August 2025**

4th International Conference on Microbiology and Immunology

3-4 November 2025 | Las Vegas, USA

Theme: Innovative Approaches and Advanced Research in Microbiology and Immunology.

Registration deadline: **7 August 2025**

Abstract submission deadline: **9 August 2025**

2nd Edition of World Congress on Pharmaceutical Research and Biotechnology (PBCV)

23-24 April 2026 | Shanghai, China

This meeting for researchers (in the fields of active molecules, biotechnology, and bioinformatics), drug development specialists, specialist doctors, pharmacists, and health and industrial experts includes a session on "Bioinformatics and Data-Driven Research in Biotechnology."

Abstract submission / early bird registration deadline: **20 August 2025**

Vaccines, Virology and Immunology Conference (VVIC-2025)

09-10 October 2025 | Geneva, Switzerland

VVIC provides a comprehensive platform for vaccine research and technologies and discusses strategies to enhance immunization impact worldwide. There are sessions on "Computational Immunology and Vaccine Modeling" and different virus disease vaccines.

Abstract submission / early bird registration deadline: **29 August 2025**

[BC]² Basel Computational Biology Conference 2025

7-9 October 2025 | Porto, Portugal

"Bioinformatics meets AI: shaping the future of data-driven biology" Flagship scientific meeting of the SIB (Swiss Institute of Bioinformatics), packed with cutting-edge science and practical insights.

Registration deadline: **1 September 2025**

27th Annual Conference of the European Society for Clinical Virology (ESCV)

17-20 September 2025 | Thessaloniki, Greece

The ESCV conference will be covering all topics of clinical virology, enabling delegates to exchange knowledge with world-class experts, network with colleagues, and vividly discuss the latest advances on "traditional" and emerging viruses with the global virology community.

Registration deadline: **10 September 2025**

Aging and Microbiome Conference 2025

28-29 October 2025 | Jena, Germany

This conference will bring together leading researchers to explore the interactions between aging and microbiomes, highlighting cutting-edge research and opportunities for interdisciplinary collaboration.

Late registration deadline: **14 September 2025**

New Members

 [EVBC members website](#)

We are happy to welcome our new members! The EVBC now has 352 members.

Since June 2025:

- **Amanda Araujo Serrao de Andrade**, University of Calgary, Canada
- **Emma Harding**, University of Oxford, UK
- **Jenna Kelly**, Federal Institute of Virology and Immunology and University of Bern, Switzerland
- **Büsrâ Külekci**, University of Vienna, Austria
- **Gorka Lasso Cabrera**, Albert Einstein College of Medicine, NY/USA
- **Marie Lataretu**, Robert Koch Institute, Germany
- **Laura Luebbert**, Broad Institute of MIT and Harvard, MA/USA
- **Kalo Musukuma**, The Centre for Infectious Disease Research in Zambia (CIDRZ), Zambia
- **Fabiana Neves**, University of Porto, Portugal
- **Bolaji Osundahunsi**, University of Arkansas, AR/USA
- **Milica Raco**, Oregon State University, OR/USA
- **Paula Ruiz Rodriguez**, University of Valencia, Spain
- **Hanno Schmidt**, University Medical Center of Johannes Gutenberg University Mainz, Germany
- **Bariş Ethem Süzek**, Muğla Sıtkı Koçman University, Turkey
- **Alexandra Valeanu**, Maastricht University, The Netherlands
- **Eman Wehedy Abdelsalam**, Sidra Medicine Research, Qatar
- **Ming Zhang**, Los Alamos National Laboratory, NM/USA
- **Tomaž Mark Zorec**, University of Ljubljana, Slovenia

Since July 2024:

- **Joana Abrantes**, University of Porto, Portugal
- **Fabian Amman**, Medical University of Vienna / CeMM Research Center for Molecular Medicine, Austria
- **Charlie Franck Amoia**, Sokoine University of Agriculture, Tanzania
- **Alix Armero Villanueva**, EcoHealth Alliance, USA
- **Jasmijn Baaijens**, Delft University of Technology, The Netherlands
- **Leticia Botella Sánchez**, Mendel University in Brno, Czech Republic
- **Tatiana Demina**, University of Helsinki, Finland
- **João Fagundes Silva**, Institute for Integrative Systems Biology (I2SysBio), Spain
- **Vladimir Gajdov**, Scientific Veterinary Institute 'Novi Sad', Serbia
- **Bartłomiej Grygorzewicz**, Pomeranian Medical University in Szczecin, Poland
- **Eero Hietanen**, University of Leeds, UK
- **Zainab Kamel Hammouda**, MSA University, Egypt
- **Rainer König**, Jena University Hospital, Germany
- **Zhao Lei**, Xiamen University, China
- **Sunitha Manjari Kasibhatla**, Centre for Development of Advanced Computing (C-DAC), India
- **Jonathon Mifsud**, University of Sydney, Australia
- **Andres Moreira-Soto**, Charité – Universitätsmedizin, Germany / National University, Costa Rica
- **Babatunde Motayo**, University of Ibadan, Nigeria
- **Pascal Mutz**, National Institutes of Health, USA
- **Ali Pasha**, Julius Kühn Institute / Technical University of Braunschweig, Germany
- **Miguel Ramos Pascual**
- **Vincent Wilde**, CNRS - The French National Centre for Scientific Research, France

EVBC Special Issues

Special issue list


We are again running a [Special Issue "Virus Bioinformatics 2025"](#) alongside ViBioM 2025. We encourage you to publish your work in this Special Issue - **MDPI grants a discount of 20 % for submissions from ViBioM attendees and EVBC members!**

Submission deadline:

31 December 2025

Tools and Resources

Virus tools website

Tools developed by EVBC members are marked .

★ **CoVerage**: A platform that uses country-wise lineage dynamics and antigenic scoring to predict and characterize SARS CoV 2 variants of interest in real-time.

★ **vPro MS**: A workflow that leverages proteomics-based, untargeted mass spectrometry for broad-spectrum detection of human-pathogenic viruses directly from patient-derived material, bypassing targeted assays.

★ **LegionProfiler**: A computational pipeline for annotating virulence factors and classifying *Legionella pneumophila* serogroup 1 isolates from whole-genome sequencing data, improving environmental pathogen surveillance.

★ **BEAST X**: A scalable Bayesian platform for phylogenetic, phylodynamic, and phylogeographic inference with improved computational performance.

★ **SuperMetal**: A generative diffusion-based AI tool for accurate and rapid prediction of metal ion binding locations in proteins, with implications for enzyme annotation and drug design.

ECR Viromics Webinar Series

Register

This [lecture series](#) features early career researchers studying viruses in complex communities. It is organized together with the [Center of Microbiome Science](#) at Ohio State University and the [NSF EMERGE Biology Integration Institute](#). You can register [here](#) for the ECR Viromics mailing list and receive the access details for every webinar. You can unsubscribe at any time.

Upcoming talk:

Chronotyping the Ocean Virome: Fine-Scale Temporal Clustering Reveals Viral Ecological and Evolutionary Patterns

Luis Bolaños Avellaneda, Exeter University, UK

10 September 2025 | 4 pm CEST

[online](#)

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. You can register [here](#) for the viruses *in silico* mailing list and receive the access details for every lecture. You can unsubscribe at any time.

Upcoming talk:

Emma Hodcroft, Swiss Tropical & Public Health Institute, Switzerland

27 November 2025 | 4 pm CET

[online](#)

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Email us

We want to know about your **publications, tools, workshops and other events, vacancies** or anything important you would like to share with the EVBC community.

[Email us here!](#)