



## The RdRp Summit 2025 Program

### Day 1 – May 11, 2025

10:00 - 10:10

#### Welcome & Opening Remarks

*Speaker: Ingrida Olendraite (VUGENE - Vilnius, Lithuania)*

An introduction to the RdRp Summit and a welcome to all participants.

10:10 - 10:40

#### Introduction: The RdRp summit initiative: An overview of the last 2 years

- 10:10 - 10:40

**Keynote talk:** An overview of the initiative based on the 2023 consensus statement perspectives.

*Speakers: Li Chuin Chong (Twincore GmbH / MHH / DKFZ - Hannover, Germany) and Hisham Shaikh (Ghent University - Ghent, Belgium)*

10:40 - 12:20

#### Session 1: RNA Virus Categorization (Classification, Taxonomy & Naming)

*Chair: Uri Neri (Joint Genome Institute - California, USA)*

- 10:40 - 11:20

**Keynote talk:** Perspectives on the ICTV Computational Taxonomy Challenge.

*Speaker: Cedric Lood (University of Oxford - Oxford, UK)*

- 11:20 - 11:40

High-throughput taxonomic assignments of environmental viromes based on the ICTV taxonomy framework.

*Speaker: Kaiyang Zheng (Ocean University of China - Qingdao, China)*

- 11:40 - 12:00

**Tracing Viral Histories: When and Where watermelon mosaic virus and grapevine pinot gris virus emerged.**

*Speaker: Karima Ben Mansour (Czech Agrifood Research Center- Prague, Czechia)*

- 12:00 - 12:20

**Phosphate amendment drives bloom of RNA phages after soil wet-up.**

*Speakers: Ella Tali Sieradzki (Aarhus University - Aarhus, DK)*

12:20 - 13:40 - LUNCH BREAK

13:40 - 15:20 pm

## **Session 2: Best Practices, Standards, and Annotations**

*Chair: Anne Kupczok (Wageningen University & Research - The Netherlands)*

- 13:40 - 14:20

**Keynote talk: Minimum Information about an Uncultivated Virus Genome (*MiUViG v2*) and best practices in viral genome annotation.**

*Speaker: Luke Hillary (University of California, Davis - Davis, USA)*

- 14:20 - 14:40

**suvtk: making viral genome submission FAIRly easy.**

*Speaker: Lander De Coninck (KU Leuven - Leuven, Belgium)*

- 14:40 - 15:00

**The Global RNA Virome in Urban Environments..**

*Speaker: Alexander Lucaci (Weill Cornell Medicine - New York, USA)*

- 15:00 - 15:20

**Metagenomic analysis of viral diversity in norwegian rats from Serbia.**

*Speaker: Vladimir Gajdov (Scientific Veterinary Institute Novi Sad - Novi Sad, Serbia) (remote)*

15:20 - 15:50 - AFTERNOON TEA/COFFEE BREAK

15:50 - 17:30

## **Session 3: Sequencing & Extraction methodologies for RNA virus discovery**

*Chair: Marco Forgia (Istituto per la Protezione Sostenibile delle Piante - CNR - Turin, Italy)*

- 15:50 - 16:30 pm

**Keynote talk: Nanopore sequencing for viral detection and surveillance.**

*Speaker: Anja Pecman (National Institute of Biology - Ljubljana, Slovenia)*

- 16:30 - 16:50

Different bio-fractionation methods select for unique DNA and RNA viruses, and unearth a multifaceted relationship between viruses and soil moisture.

*Speaker: Josue Rodriguez-Ramos (Pacific Northwest National Laboratory, - Washington state, USA) (remote)*

- 16:50 - 17:10

Portable viral genomic surveillance with ViMOP, an easy-to-use Nanopore field sequencing analysis tool.

*Speaker: Mia Le (Bernhard Nocht Institute for Tropical Medicine - Hamburg, Deutschland).*

- 17:10 - 17:30

Detection of viral sequences at single-cell resolution reveals putative novel viruses perturbing host gene expression.

*Speaker: Laura Luebbert (Broad Institute of MIT and Harvard - Massachusetts, USA)*

17:30 - 18:00

#### **Session 4: Community Project - Part 1 (Launch Session)**

- 17:30 - 17:50 pm

**Keynote talk:** RdRpCATCH: A unified framework for RNA virus discovery based on RdRp profile databases.

*Speaker: Dimitris Karaplaifis (Wageningen University & Research - The Netherlands)*

- 17:50 - 18:00 pm

**Flash talks:** to introduce new collaborative project ideas within our community.

*Speakers: Every participant who's interested in launching an initiative.*

### **Day 2 – May 12, 2025**

9:00 - 10:20

#### **Session 5: Data Mining and Metadata Analysis in RNA virus discovery**

*Chair: Justine Charon (Research Institute for Agronomy, Food and Environment (INRAE) - Bordeaux, France)*

- 09:00 - 09:40

**Keynote talk:** Logan: Planetary-scale assembly of DNA/RNA sequencing data.

*Speaker: Rayan Chikhi (Pasteur Institute - Paris, France)*

- 09:40 - 10:00

Identifying and characterising endogenous viral elements amongst uncharacterised proteins in public protein databases.

*Speaker: Katy Brown (University of Cambridge - Cambridge, UK)*

- 10:00 - 10:20

PREDICTORix: A scalable phylogeny-aware approach for quantifying viral spillover risk.

*Speaker: Li Chuin Chong (Twincore GmbH / MHH / DKFZ - Hannover, Germany)*

10:20 - 10:40

**PCI Sponsor talk: Peer Community In (PCI), PCI Plants and Peer Community Journal: from preprint recommendation to diamond open access publication**

*Speaker: Barbara Class (PCI support officer)*

10:40 - 11:10 - MORNING TEA/COFFEE BREAK

11:10 am - 12:50 pm

**Session 6: Viral Dark Matter: Detecting Divergent Viruses**

*Chair: Rachid Tahzima (Vrije Universiteit Brussel (VUB) - Brussels, Belgium)*

- 11:10 - 11:50

**Keynote talk #1: Using artificial intelligence to document the hidden RNA virosphere.**

*Speaker: Xin Hou (Pasteur Institute - Paris, France)*

- 11:50 - 12:30

**Keynote talk #2: BFVD-Foldseek: An integrative structure-based approach to highlight viral dark matter**

*Speaker: Rachel Seongeun Kim (Seoul National University - Seoul, Republic of Korea)*

- 12:30 - 12:50

**Soaring above profound depths of RdRP diversity**

*Speaker: Gytis Dudas (Vilnius University Life Sciences Center - Vilnius, Lithuania)*

12:50 - 14:10 - LUNCH BREAK

14:10 - 15:40

**Community Project - Part 2 (Group discussion)**

Participants can gather into study groups to discuss/develop the collaborative initiatives introduced during day 1.

15:40 - 16:10 - AFTERNOON TEA/COFFEE BREAK

16:10 – 18:00

## Conclusion: The RdRp summit initiative: A projection for the next 2 years

- 16:10 – 16:30 pm

**Keynote talk:** EVBC Projects and Initiatives - VirJenDB: FAIR resources for virus researchers

*Speaker: Noriko Cassman (Friedrich Schiller University Jena, Jena - Germany)*

- 16:30 – 17:15

**Community projects = main discussion outcomes/perspectives.**

*Speakers (flash talks): Selected community project representatives.*

- 17:15 – 18:00

## Future perspectives, Announcements & Closing remarks

**Discussion:** How to consolidate our community, to improve our inclusivity, to carry out community-based initiatives, to keep it active (etc...) ? Come with your ideas to make the RdRp summit a great and long-term story !

\* Announcements for upcoming initiatives, workshops, jobs (etc...)

\* Formation of the RdRp summit 2027 Organizing / Scientific Committee

\* Closing remarks