

# 21<sup>st</sup> Smögen Summer Symposium on Virology

August 22-24, 2024

## Program

Arranged by Virus- och pandemifonden –

Swedish Society for Virology

<http://www.swedishvirology.se>

## Welcome to the 21<sup>st</sup> Smögen Symposium on Virology!

It is a pleasure for the Organizing Committee to announce that the 21st symposium will be held at Smögens Hafvsbad, Smögen, Thursday August 22 to Saturday August 24, 2024 with the possibility to participate online as well.

The scientific as well as the social agenda will be very much like previous Smögen meetings. This year we will have the pleasure to listen to, and discuss with Dr. Mart Krupovic, Dr. Karl Ståhl and Dr. Mattias Forsell on the subjects archaeal viruses, infectious disease epidemiology in animals and viral immune response.

Smögens Havsbad or “Havsbadet” is a famous spa establishment with traditions from 1903, and with a splendid view of the beautiful archipelago north-west of Smögen. Havsbadet is a fully modern hotel with high-class cuisine, and an excellent conference facility, including an indoor swimming pool. This year we wish to acknowledge the support from LidPol AB as well. Also, take the opportunity to inform yourself about the activities by Virus- och pandemifonden and the aim to strenghten Swedish Virology. We wish you all very welcome in Smögen!

*Kristina Nyström, Ali Mirazimi och Johan Nordgren*



Olink  
Accelerating proteomics together



## Thursday, August 22

All events are at Smögen's Havsbad unless otherwise stated and sessions also through zoom.

*Please note that all information provided during the sessions is considered as privileged. You are therefore not allowed to take any photographs of the slides.*

**12.00** Lunch + Registration (collect information and nametag outside conference hall)

**13.30** Welcome and Practical Information: Kristina Nyström

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**13.45-14.30** **Keynote 1**  
Introduction: Tomas Bergström

<b>Dr. Mart Krupovic</b>	Paris, France	A kaleidoscope of archael viruses
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**14.30-15.00** **Session 1: Virus-Cell Interactions**  
Chair: Anna Överby

<b>Benjamin Nilsson-Payant</b>	Stockholm	Molecular basis of hantavirus defective viral genomes in innate immune regulation
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<b>Pia Madeleine Leipe</b>	Münster, Germany	Inhibition of phosphorylation of TRIM28-S473 as a therapeutic strategy to prevent hyperinflammation
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<b>Tessy Hick</b>	Umeå	Single nucleotide mutations allow rapid adaptation of o'nyong'nyong virus to overcome host restriction
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**15.00-15.30** Coffee Break

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**15.30-17.10** **Session 2: Virus-Cell Interactions II**  
Chair: Anna Överby

<b>Anders Kvarnheden</b>	Uppsala	Responses of sugar beet to infection by beet mild yellowing virus
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<b>Aleksandra Pettke</b>	Stockholm	Differentiation of infection- and vaccination-induced mpox antibody responses – Evaluation of neutralization assay, immunofluorescence and Mesoscale
<b>Elin Hahlin</b>	Umeå	Co-infection of HAdV-F41 and AAV-2 as a possible aetiology behind acute hepatitis of unknown origin in children
<b>Erik Schubert</b>	Uppsala	Complex Regulation of Mitochondrial Signaling by Human Adenovirus Minor Capsid Protein VI
<b>Katarina Danskog</b>	Umeå	Lactoferricin-enhanced adenovirus infection of muscle cells
<b>Marie Peters</b>	Umeå	NUP98 is important in flavivirus infection through binding of viral RNA
<b>Jinlin Li</b>	Uppsala	Dual Roles of Exostosin Glycosyltransferase 1 in Zika Virus Infection
<b>Marie Sorin</b>	Tübingen, Germany	Structural and functional analysis of natural capsid variants suggests sialic acid-independent entry of BK polyomavirus
<b>Hudson Pace</b>	Umeå	Investigating glycan-mediated norovirus attachment to plasma membranes using enzymatic digestion of host receptor structures
<b>Maryna Chaika</b>	Lübeck, Germany	Human intestinal enteroids, a versatile tool to study human norovirus biology

**17.10-17.30 Pandemifonden and Sigvard Olofsson Award prize recipients**  
Chair: Ali Mirazimi

<b>Max Renner</b>	Umeå	The complex lives of nucleoproteins in Mononegavirales
<b>Jiaxin Ling</b>	Uppsala	Genomic and experimental investigations on emerging and re-emerging RNA virus infections

**17.30-17.45 Technical News Flash**

**17.45-17.50 Virus- och pandemifonden**

**18.30** Welcome Reception, *Smögen Fishing Harbour*

**20.00** Dinner

## Friday, August 23

07.30 Breakfast

09.00-09.45

### Keynote 2

Introduction: Niklas Arnberg

**Dr. Mattias Forsell**

Umeå

Generation of antiviral immunity in older adults

09.45-10.45

### Session 5: Erik Lycke Memorial Session

Chair: Tomas Bergström

**Jeanette Tingstedt**

Copenhagen

A Candidate Influenza A DNA Vaccine Induces Polyfunctional Antibody Responses in Nonhuman Primates

**Rita Jaafar**

Örebro

Pre-Clinical Development of a Novel Tick-Borne Encephalitis Vaccine for Mucosal Immunization

**Philip Podschwadt**

Essen,  
Germany

Immune suppression of vaccine-induced CD8+ T-cell responses by gamma retrovirus envelope is mediated by IL-10-producing CD4+ T cells

**Moa Bjerhem Viklund**

Gothenburg

Imprinting of type I and type III interferons after HSV-2 meningitis

**Benedikt Strunz**

Stockholm

IL-12 is a key responsive element to corticosteroid treatment in COVID-19

**Ulf Dittmer**

Essen,  
Germany

Eliminating the retroviral reservoir by immunotherapy

10.45-11.15

Coffee Break

11.15-11.55

### Session 6: Molecular and Structural Virology

Chair: Magnus Lindh

**Friedemann Weber**

Giessen,  
Germany

An exposed RNA sequence in the genomic S segment of Rift Valley fever virus

**Lars-Anders Carlson**

Umeå

Cryo-electron tomography of neurotropic flavivirus replication

**Steinar Mannsverk**

Uppsala

Influenza Viral Fusion to Endosomal versus Plasma Membranes

**Ylva Ivarsson**

Uppsala

Extensive viral mimicry of host short linear motifs revealed by large-scale phage-based screening

<b>11.55-12.25</b>	<b>Session 7: Tumor Virology</b>	
	Chair: Stefan Schwarz	
<b>Joakim Bedner Stenbäck</b>	Gothenburg	A novel long-read sequencing method for characterization of hepatitis B virus transcripts show high expression of chimeric HBV/human RNA
<b>Lourenço Roque Pombo Cardoso</b>	Uppsala	HPV16 oncogene expression is induced by the Arginine-Serine rich (RS) domain in N-terminal of TRAP150
<b>Yani Zhao</b>	Uppsala	SRSF5 Strongly Induces Production of an Alternative Spliced E2 mRNA also Encoding the Elusive E1C protein
<b>12.35</b>	Lunch	
<b>14.30-15.00</b>	<b>Session 8: Pathogenesis</b>	
	Chair: Marianne Jansson	
<b>Ujjwal Neogi</b>	Stockholm	Brain Exposure to Japanese Encephalitis Virus Perturbs Metabolic Homeostasis
<b>Amanda Lappalainen</b>	Umeå	Host response to tick-borne flavivirus infection at the blood-cerebral spinal fluid interface
<b>Zsófia Szojka</b>	Lund	Identification of HIV-2 extreme elite controllers
<b>15.00-15.40</b>	<b>Session 9: SARS Coronavirus-2</b>	
	Chair: Clas Ahlm	
<b>Angèle Ahebla</b>	Umeå	Association of Meningitis, Encephalitis and Myelitis with COVID-19: A Self-Controlled Case Series Study
<b>Anna Székely</b>	Uppsala	Lessons from wastewater-based surveillance of SARS-CoV-2 variants in Sweden during the Covid19 pandemic
<b>Maireid Bull</b>	Copenhagen	Temporal growth kinetics of 11 SARS-CoV-2 variants in 6 cell lines
<b>Marcos Cervantes</b>	Uppsala	Characterizing Biochemical factors that impact SARS-CoV-2 membrane fusion and entry kinetics using plasma membrane vesicles

- 15.40**      **Poster Session** including Coffee  
Posters the floor below the venue, short presentation of posters in the lecture hall
- 18.30**      Archipelago Cruise & Seafood buffet or Gourmet Dinner (see page 12)

## Saturday, August 24

07.30 Breakfast

### 09.00-09.45 Keynote 3

Introduction: Ali Mirazimi

<b>Dr. Karl Ståhl</b>	Stockholm	15 years with African swine fever- from Uganda to Fagersta
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### 09.45-10.15 Session 9: Emerging Viruses

Chair: Magnus Evander

<b>Maud Mutsaers</b>	Umeå	Possible vertical transmission of the arthritogenic alphavirus o'nyong-nyong virus in the invasive Asian malaria mosquito Anopheles stephensi
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<b>Nicolas Corrales</b>	Berlin	Lassa virus infection fails to induce potent immune responses in bone-marrow derived macrophages and dendritic cells from its natural reservoir, the natal multimammate mouse ( <i>Mastomys natalensis</i> )
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<b>Joakim Esbjörnsson</b>	Lund	Pandemics and Alertness – A thematic translational cooperation initiative on understanding, fighting and preparing for virus pandemics
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10.15-10.45 Coffee Break

### 10.45-11.05 Session 10: Epidemiology

Chair: Kristina Broliden

<b>Jamirah Naziwa</b>	Lund	Associations of HIV-1 disease and transmission route with multiple founder infection, diversity evolution and coreceptor tropism in acute HIV-1 infection
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<b>Sofia Persson</b>	Uppsala	Insights into the regional and seasonal variability of Pepper Mild Mottle Virus in untreated wastewater: A potential human fecal indicator
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### 11.05-11.25 Session 11: Clinical Virology and Antivirals

Chair: Martin Lagging

<b>Magdalena Neijd</b>	Linköping	Determination of norovirus infectivity in clinical samples using a 3D enteroid model
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<b>Julia Widström</b>	Gothenburg	High prevalence of SARS-CoV-2 infection among health care workers in a hospital ward outbreak revealed by deep sequencing
<b>Si Min Zhang</b>	Stockholm	Tailor antimetabolite antivirals by targeting host nucleos(t)ide kinase and phosphohydrolase

**11.25-12.15 ca** Annual Meeting Swedish Society for Virology

**12.15** Lunch

**13.00** Bus 1 leaves for Gothenburg

**13.30** Bus 2 leaves for Gothenburg

## The Venue: Smögen's Havsbad

A fully modern hotel with a capacity of more than 100 guests in comfortable single and double rooms. Indoor swimming-pool and exclusive spa services available. The conference facilities include a fully equipped lecture hall taking 100-200 people, and a lot of smaller meeting rooms. The cuisine is excellent, the



Foto: SVEN LINDWALL

same overwhelming view of the Skagerrak archipelago as experienced by the first summer guests of Smögen's Havsbad in 1903 is still available from the dining room and the western terrace. The hotel is situated close to the heart of Smögen offering excellent sea baths and easy access to the classical wooden quay of the Smögen Sailing Harbour.

## Additional lodgings: Makrillviken



Ideal accommodation for the young virologists accepting shared rooms, all renovated 2015 with private shower and toilet. Modern standard. Full board, incl. bed cloths and bathroom towels also for the delegates staying at Havsbadet. Delegates registering for "Bed in shared room" will primarily be checked in at Makrillviken.

## Useful information:

### **Accommodation**

Registration includes Full Board and all conference activities listed in the program. You **do not** need to bring any bedclothes etc, but please bring your own towel for outdoor swimming activities.

## ***Bus Transfer Göteborg-Smögen***

Buses will leave from Downtown Göteborg at about 10.20 on August 22 and from Smögen after lunch on August 24. All transfer is complimentary. The bus ride takes 1 hour 50 minutes. We will schedule the last bus to leave at 10.50. Should train delays occur, the delegates concerned will be instructed in advance how to get to Smögen. To sign up for bus transport please email your (a) e-mail address and (b) mobile phone number to Bus Captain Simon Larsson (simon.b.larsson@gu.se).

Usually, the Swedish West Coast climate is dry and sunny in late August (19-22°C daytime and the sea temperature about 20°C) but the temperate climate zone means a slight but definite risk for occasional low-pressure weather with wind and showers. Please bring a sweater, rain jacket, and an umbrella just to be sure. The sea is excellent for swimming and diving, flippers and snorkel recommended.

## ***Scientific presentations***

There will be a number of sessions, each addressing a specific topic. Participants are offered to submit an oral presentation (no longer than 7 minutes + time for a few questions) that will be scheduled to appear in a suitable session. There will be a maximal number (7) of slides. The URL to the form for electronic registration is [http://www.swedishvirology.se/smogen\\_meeting\\_registration.html](http://www.swedishvirology.se/smogen_meeting_registration.html) and contains a field for Presentation Title. Instructions for abstract preparation will be sent to the presenters in late June. **Please do not forget** to mark the box “I am not a spam robot” of the electronic form. This is a protection measure against spam attacks interfering with the electronic registration procedure.

## ***Registration information***

Symposium information will be continuously updated at the official homepage of the Swedish Society for Virology: <http://www.swedishvirology.se> where you also will find an electronic form for convenient on-line registration. Those who are not on the mailing list, please notify [kristina.nystrom@gu.se](mailto:kristina.nystrom@gu.se).

## **Registration Fee includes everything!**

As soon as you embark the complimentary bus shuttle to Smögen, the Registration fee will cover everything: Admittance to all sessions, full board, all social activities, bus shuttle from Gothenburg (Round trip), and a three (3) year membership in Swedish Society for Virology.

***Conference dinner on Friday:***

**Seafood Buffet on board of M/S Soten during an evening cruise in the Smögen Archipegalo**



Welcome aboard Soten for a traditional Smögen Seafood Buffet including shrimp, crayfish and a lot of other sea food specialities.

This years cruise will be onboard “Soten”. Soten was built in 1969, where she started trafficking Oslo to Flåm, Norway.

**Alternative Friday Night Activity: Gourmet Three Course Dinner**

The Gourmet Dinner will take place at Smögens Havsbad as an alternative for delegates not interested in Archipelago Cruises and Seafood mainly based on shellfish.

## Map of important places



The positions of the two hotels are indicated. Läsidan is a room annex for Havsbadet

A: Where boarding for the Seafood Cruise on Friday takes place.

B: Place for Welcome Reception Thursday – Samuelsson