

# 20<sup>th</sup> Smögen Summer Symposium on Virology

August 24-26, 2023

## Program

Arranged by Virus- och Pandemifonden –

Swedish Society for Virology

<http://www.swedishvirology.se>

# Welcome to the 20<sup>th</sup> Smögen Symposium on Virology!

It is a pleasure for the Organizing Committee to announce that the 20th symposium will be held at Smögens Havsbad, Smögen, Thursday August 24 to Saturday August 26, 2023 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 Emma Thomson, Dr Hugo Zeberg, Dr. Gunilla Karlsson-Hedestam, and Dr. Ralf Bartenschlager on the subjects of Adenovirus in children with hepatitis, Neandertal genetics and virology, viral immunology and Hepatitis C.

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. We wish you all very welcome in Smögen!

*Kristina Nyström, Ali Mirazimi och Johan Nordgren*



**MABTECH**



## Thursday, August 24

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: Anders Sönnnerborg

**Dr. Emma Thomson** Glasgow, UK Acute hepatitis in children

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**14.30-15.00** **Session 1: Emerging viruses I**  
Chair: Anders Widell

**Janina Krambrich** Uppsala Vector competence of Swedish *Culex pipiens molestus* for Usutu virus

**Peter Norberg** Gothenburg The Emergence of Tick-Borne Encephalitis Virus in Sweden

**Magnus Simonsson** Uppsala Surveillance of Emerging Pathogens and Antibiotic Resistances in Aquatic Ecosystems, JPI-SARA

**15.00-15.30** Coffee Break

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**15.30-16.00** **Session 2: Emerging viruses II**  
Chair: Anders Widell

**Anne-Lie Blomström** Uppsala Detection and characterization of zoonotic viruses in Swedish bats

**Neogi Ujjwal** Stockholm Genome-scale metabolic atlas for emerging and re-emerging viruses

**Charlotta Polacek** Copenhagen The current state of Tick-borne encephalitis virus (TBEV) in Denmark

<b>16.00-16.20</b>	<b>Session 3: Clinical virology, Diagnostics and Epidemiology</b> Chair: Peter Norberg	
<b>Justina Zigmantaviciute</b>	Uppsala	Donor relevance in BK polyomavirus infection after kidney transplantation
<b>Naima Ali</b>	Uppsala	BK polyomavirus variants in Kidney Transplant Recipients
<b>16.20-16.30</b>	<b>Session 4: Pathogenesis</b> Chair: Emmi Andersson	
<b>Vikas Sood</b>	Stockholm	Epithelial Stromal Interaction 1 regulates RNA virus replication via modulating type I IFN signalling
<b>16.30-17.10</b>	<b>Pandemifonden and Sigvard Olofsson Award prize recipients</b> Chair: Ali Mirazimi	
<b>Leo Hanke</b>	Stockholm	How to prevent the next pandemic
<b>Ka-Wei Tang</b>	Gothenburg	Function of Epstein-Barr virus non-coding RNA
<b>Annasara Lenman</b>	Umeå	Hyaluronan in COVID-19 morbidity, a bedside-to-bench approach to understand mechanisms and long-term consequences of hyaluronan
<b>Mahmoud Maguib</b>	Uppsala	Avian influenza virus: evolutionary trajectories and host response at single-cell level
<b>17.10-17.20</b>	<b>Technical News Flash</b>	
<b>18.30</b>	Welcome Reception, <i>Smögen Fishing Harbour</i>	
<b>20.00</b>	Dinner	

## Friday, August 25

07.30 Breakfast

09.00-09.45 **Keynote 2**  
Introduction: Jan Albert

<b>Dr. Gunilla Karlsson-Hedestam</b>	Stockholm	Acquisition of SARS-CoV-2 neutralization breadth through B cell somatic hypermutation
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09.45-10.35 **Session 5: Viral Immunology and Vaccines I**  
Chair: Marianne Jansson

<b>Ebba Samuelsson</b>	Gothenburg	Importance of glycosylation for the protective and immunostimulatory capacities of a recombinant vaccine candidate against HSV-2
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<b>Anna Offersgaard</b>	Copenhagen	An inactivated SARS-CoV-2 vaccine based on a Vero cell culture-adapted high-titer variant is immunogenic in small animals
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<b>Ria Lassouniere</b>	Copenhagen	Pinning down the elusive protective influenza M2e antibodies
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<b>Laura Reusch</b>	Gothenburg	Effect of pre-existing memory B cells and antibodies on memory responses and reshaping immunodominance patterns to influenza A virus
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<b>Danica Fae Besavilla</b>	Gothenburg	Monoclonal antibodies to Influenza A Neuraminidase affect its enzymatic properties
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10.35-11.05 Coffee Break

11.05-11.45 **Session 6: Viral Immunology and Vaccines II**  
Chair: Magnus Johansson

<b>Nimitha Rose Mathew</b>	Gothenburg	CD4 tissue resident memory T cells: Understanding the role of the gate keepers
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<b>Rita Jaafar</b>	Örebro	Development of Live attenuated Langkat virus infectious clone as potential new TBEV vaccine candidate: Study of cellular and humoral immune response in mice
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<b>Md Abdul Alim</b>	Örebro	Tick-borne encephalitis virus protein expression to develop novel subunit vaccines and diagnostic tools
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<b>Britta Wahren</b>	Stockholm	Therapeutic HIV-1 vaccines for HIV-1 infected children, update from the RV534 study
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<b>Janarthan Rama Murti</b>	Gothenburg	Rapid Prototyping of Influenza A Epitope Mutants: A Synthetic Virology Approach
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**11.45-12.35**      **Session 7: Molecular Virology and Tumor Virology**  
Chair: Ka-Wei Tang

<b>Tina Dalianis</b>	Stockholm	Studies on single and combined targeted therapies with/without radiotherapy or chemotherapy on human papillomavirus positive and negative tonsillar and base of tongue squamous cell lines with/without PIK3CA and FGFR mutations
<b>Christina Holmboe Olesen</b>	Copenhagen	Insertions in hepatitis C virus hypervariable region 1 as a novel antibody evasion mechanism
<b>Lars-Anders Carlson</b>	Umeå	Architecture of the chikungunya virus replication organelle
<b>Troels Scheel</b>	Copenhagen	Hepatitis C virus RNA is 5' capped with flavin adenine dinucleotide (FAD)
<b>Kasturika Shankar</b>	Umeå	Reconstitution of the membrane binding and RNA recruitment of the Enteroviral helicase 2C

**12.35**                      Lunch

**14.00-14.45**      **Keynote 3**  
Introduction: Matti Sällberg

<b>Dr. Ralf Bartenschlager</b>	Heidelberg, Germany	New insights into flavivirus – host cell interactions: a tale of proteins and lipids
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**14.45-16.00**      **Session 8: Virus-Cell Interactions**  
Chair: Anna Överby

<b>Marie Berit Akpiroro Peters</b>	Umeå	Investigating the role of nucleoporins (NUPs) in flavivirus infection
<b>Kerstin Seier</b>	Umeå	Characterization of the Physicochemical Properties of Fluorescent Filovirus Pseudotypes

<b>Lifeng Liu</b>	Umeå	Recruitment of apolipoprotein E facilitates Herpes simplex virus 1 attachment, entry, and release
<b>Jan Schlegel</b>	Stockholm	A Multiparametric and High-Throughput Platform for Host-Virus Binding Screens
<b>Anoop Ambikan</b>	Stockholm	scRNA-seq analysis identifies immuno-metabolic impairment of monocytes in people living with HIV on long term treatment
<b>Malgorzata Graul</b>	Umeå	Comparison of entry efficiency of different species of Filoviridae-derived VLP
<b>Vanessa Monteill</b>	Stockholm	Identification of an essential endosomal trafficking regulator in Marburg and Ebola virus infections

- 16.00**      **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 11)

## Saturday, August 26

07.30 Breakfast

09.00-09.45 **Keynote 4**  
Introduction: Lennart Svensson

**Dr. Hugo Zeberg** Stockholm Ancient DNA, Neandertals, and how modern humans entered viral times

09.45-10.25 **Session 9: SARS-CoV-2 and Influenza**  
Chair: Magnus Evander

**Matti Sällberg** Stockholm Phase I clinical trial of a COVID-19 DNA vaccine

**Clas Ahlm** Umeå Intravenous immunoglobulin against COVID-19 in immunosuppressed patients - a new option for treatment

**Charlotta Nilsson** Stockholm SARS-CoV-2 seroprevalence in Sweden 2020 to 2023

**Marie Hagbom** Linköping Human Nose Organoids (HNOs): A novel model to study human influenza virus infection and zoonotic risk of avian flu

10.25-10.55 Coffee Break

10.55-11.15 **Session 10: Antivirals**  
Chair: Martin Lagging

**Karen Anbro Gammeltoft** Copenhagen Determinants of HCV resistance to clinically relevant NS5A inhibitors

**Adelinn Kalman** Stockholm Multi-layered phenotypic screening to identify antivirals and host protein targets

11.15-11.25 **Session 11: BSL3 Network**  
Chair: Niklas Arnberg

**Marianna Tampere** Stockholm The Swedish BSL3 Network - enabling cutting-edge virology research on risk-group 3 viruses

11.25-12.15 ca Annual Meeting Swedish Society for Virology



<b>12.15</b>	Lunch
<b>13.00</b>	Bus 1 leaves for Gothenburg
<b>13.30</b>	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: SYEN 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 Makrillviken. All meals and service 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 24 and from Smögen after lunch on August 26. All transfer is complimentary. The bus ride takes 1 hour 50 minutes. We will schedule the bus to wait for trains from Stockholm and Malmö arriving between 10-10.40. However, should extreme train delays occur, the delegates concerned will be instructed by mobile telephone how to act. To sign up for bus transport please email your (a) e-mail address and (b) mobile phone number to Bus Captain Maria Johansson (maria.johansson@microbio.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

C: Extra location for Welcome Reception Thursday - Spelmanskär