

A scenic sunset over a body of water, likely the Baltic Sea. The sky is a gradient of orange and yellow, transitioning to a pale blue at the horizon. The water is calm, reflecting the light. In the foreground, dark silhouettes of rocky terrain and a small boat are visible. A few people can be seen standing on the rocks in the distance. The overall mood is serene and peaceful.

19th Smögen Summer Symposium on Virology

August 25-27, 2022

Program

Arranged by Virus- och Pandemifonden –

Swedish Society for Virology

<http://www.swedishvirology.se>

Welcome to the 19th Smögen Symposium on Virology!

It is a pleasure for the Organizing Committee to announce that the 19th symposium will be held at Smögens Hafvsbad, Smögen, Thursday August 25 to Saturday August 27, 2022 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 Michael Worobey, Dr Timo Vesikari, and Dr. Karen Mossman on the subjects of virus origins, vaccines, and viruses in bats.

Smögens Hafvsbad or “Hafvsbadet” is a famous spa establishment with traditions from 1903, and with a splendid view of the beautiful archipelago north-west of Smögen. Hafvsbadet is a fully modern hotel with high-class cuisine, and an excellent conference facility, including an indoor swimming pool. As the number of expected delegates exceeds the number of beds at Hafvsbadet we have reserved excellent alternatives: Wallentinska Huset and Pensionat Bryggan, bed and breakfasts at the Smögen Harbour. We wish you all very welcome in Smögen!

Kristina Nyström, Niklas Arnberg och Johan Nordgren



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Thursday, August 25

All events are at Smögens 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

13.45-14.30 **Keynote 1**
Introduction: Jan Albert

Dr. Michael Worobey	Tucson, AZ	The origins of the SARS-CoV-2 pandemic
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14.30-14.50 **Session 1: Epidemiology**
Chair: Magnus Evander

Joel Gustafsson	Gothenburg	Genomic signatures in viruses and their hosts
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Julia Widström	Gothenburg	Complex norovirus transmission dynamics at hospital wards revealed by deep sequencing
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14.50-15.20 Coffee Break

15.20-16.00 **Session 2: SARS Coronavirus-2**
Chair: Tomas Bergström

Ria Lassauniere	Copenhagen	Antigenic characterization of SARS-CoV-2
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Jonas Klingström	Stockholm	SARS-CoV-2 and cell death
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Francis Hopkins	Linköping	Sustained T cell perturbations after COVID-19
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Melissa Govender	Linköping	Long-term alterations in monocyte and DC subtypes revealed in hospitalized COVID-19 patients
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16.00-16.20	Session 3: Emerging viruses Chair: Anna Överby	
Ainhoa Moliner-Morro	Stockholm	Averting chikungunya virus infection: nanobodies
Anisha Wasberg	Uppsala	Assessing the reassortment compatibility of short and intact wild-bird Neuraminidase (N1-N9) with poultry-adapted H9N2 subtype
16.20-16.50	Session 4: Viral Immunology and Vaccines I Chair: Anders Widell	
Linn Persson Berg	Gothenburg	Serum IgG levels to Epstein-Barr and measles viruses in patients with multiple sclerosis during natalizumab and interferon beta
Anders Fomsgaard	Copenhagen	SARS-CoV-2-Beta DNA vaccine candidate for clinical trial
Anna Olofsson	Stockholm	Cross-reactive SARS-CoV-2 CD4 T cell immunity in children
16.50-17.10	Memorial Session 2022	
17.10-17.30	Technical News Flash	
18.30	Welcome Reception, <i>Smögen Fishing Harbour</i>	
20.00	Dinner	

Friday, August 26

07.30 Breakfast

09.00-09.45 **Keynote 2**
Introduction: Lennart Svensson

Dr. Timo Vesikari	Tampere, Finland	Rotavirus vaccine: past, present and future
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09.45-10.25 **Session 5: Viral Immunology and Vaccines II**
Chair: Kristina Eriksson

Magnus Johansson	Örebro	How can vaccination directly applied on mucosal membranes of the body be optimized for diffe
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Nikolai Scherbak	Örebro	Production and delivery of anti-viral vaccines using probiotic bacteria
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Matti Sällberg	Stockholm	Generation of new vaccines using DNA and mRNA: In-house production for research and phase 1 clinical trials
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Yaoska Reyes	Linköping	Host genetic factors and rotavirus infections in a vaccinated birth cohort of Nicaragua
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10.25-10.55 Coffee Break

10.55-11.15 **Session 6: Viral Immunology and Vaccines III**
Chair: Kristina Eriksson

Emil Johansson	Lund	Hierarchical clustering and trajectory analyses reveal B-cell perturbations in HIV-2 infection independent of viremia
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Davide Angeletti	Gothenburg	Computationally designed stem-epitope mimetics elicit influenza cross-group protective responses
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11.15-11.35 **Session 7: Antivirals and Clinical Virology and Diagnostics**
Chair: Johan Westin

Justina Zigmantaviciute	Uppsala	Association with rs12979860 SNP and characterization of BK polyomavirus-specific antibodies in Swedish kidney transplant recipients with different viral kinetics
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Josef Järhult	Uppsala	Resistance development to influenza antivirals in the environment - a threat to humans?
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11.35-12.35	Session 8: Tumor Virology and Molecular and Structural Virology Chair: Gustaf Rydell	
Chengyu Hao	Lund	Control of human papilloma virus (HPV) 16 gene expression by hnRNP G/RBMX
Johanna Jönsson	Uppsala	Identification of cis-regulatory RNA elements and cellular trans-factors that control production of the spliced HPV16 E7 mRNA
Filipe Diogo	Uppsala	Uncovering functions of unique structures in a mosquito totivirus-like virus
Joshua Fingal	Gothenburg	ADAR-deamination signatures are associated with lower viral loads in influenza-infected patients
Fredy Saguti	Gothenburg	UV Inactivation of enteric viruses in drinking water
Luisa Fernanda Bustamante Jaramillo	Gothenburg	Detection of AAV2 genomes in living cells

12.35 Lunch

15.00-16.00	Session 11: Pathogenesis Chair: Johan Nordgren	
Azadeh Reyahi	Gothenburg	A heterozygous IKBKE variant with dominant negative activity predispose to recurrent HSV2 meningitis
Arash Hellysaz	Linköping	Investigation of gut-brain cross-talk during viral gastroenteritis – Part 1: The effects on the CNS
Marie Hagbom	Linköping	Investigation of gut-brain cross-talk during viral gastroenteritis – Part 2: Nerve regulation of intestinal motility
Magdalena Neijd	Linköping	Gastrointestinal organoid model to study viral host response in immunocompromised individuals
Stefanie Willekens	Umeå	Short-term systemic and CNS effects after subcutaneous tick-borne flavivirus infection in mice
Priya Devi	Uppsala	Modulation of host cell signaling pathway by hepatitis C virus core protein in human T cell

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 28

07.30 Breakfast

09.00-09.45 **Keynote 3**
Introduction: Marianne Jansson

Dr. Karen Mossman Hamilton, Canada Tackling pandemics: what we can learn from bats

09.45-10.45 **Session 12: Virus-cell Interactions**
Chair: Marianne Jansson

Marie Peters Umeå Investigating the role of NUP153 in TBEV infection

Vanessa Monteil Stockholm A diabetic milieu increases ACE2 expression and cellular susceptibility to SARS-CoV-2 infections in human kidney organoids and patient cells

Wanda Christ Stockholm SARS-CoV-2 and the integrated stress response

Stephanie Devignot Stockholm Low Density Lipoprotein Receptor-Related Protein 1 (LRP1) is a host factor for RNA viruses including SARS-CoV-2

Patrik Ellström Uppsala Expression of glycan receptors for influenza A viruses in mallards, chickens, and tufted ducks

Steinar Mannsverk Uppsala The late endosome-resident lipid Bis(monoacylglycero)phosphate enhances influenza virus membrane fusion

10.45-11.05 Coffee Break

11.05-11.35 **Session 13: Mixed Virology**
Chair: Michael Kann

Anders Bergqvist Uppsala Rapid typing of emergent coronavirus variants in a clinical setting

Anna Martner Gothenburg Transient and durable T cell reactivity after COVID-19

Ola Forslund Lund Self-sampling within routine cervical cancer screening in Region of Skåne, Sweden

11.35-12.15 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: Smögens 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 Smögens 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 (Nils Ericson-platsen) at about 10.20 on August 25 and from Smögen after lunch on August 27. 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 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.

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 “Byfjorden” during an evening cruise in the Smögen Archipelago



Welcome onboard the “Byfjorden” to a traditional Smögen Seafood Buffet including, shrimps, crayfish and a lot of other sea food specialities.

“Byfjorden” was built in 1968 at Skaalurens Skibsbyggeri, Rosendal, Norway. The ship was lengthened in 1989

by 5 meters and she is now 31 m long with a cruising speed of 11 knots. She recently became thoroughly restored and modernized and takes up to 120 dining guests. Her large upper deck offers great possibilities for wonderful views of the scenery.

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

C: Pensionat Bryggan

D: Wallentinska Huset