14th Smögen Summer Symposium on Virology

August 24-26, 2017

Program

Venue: Smögens Havsbad

Arranged by Swedish Society for Virology

http://www.swedishvirology.se
Welcome to the 14th Smögen Symposium on Virology!

It is a pleasure for the Organizing Committee to announce that the 14th symposium will be held at Smögens Havsbad, Smögen, Thursday August 24 to Saturday August 26, 2017.

The scientific as well as the social agenda will be very much alike previous Smögen meetings. One aim is to bring together Scandinavian virologists, representing clinical, preclinical and environmental Virology. 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 a 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 Havsbadet we have reserved one excellent alternative: “Makrillviken”, a high standard youth hostel, situated less than 200 m from Havsbadet.

We wish you all very welcome to Smögen!

Sigvard Olofsson, Tomas Bergström, Magnus Lindh, Kristina Eriksson, Lennart Svensson, Kristina Nyström
Thursday, August 24

All events are at Smögens Havsbad unless otherwise stated.
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.

<table>
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<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>12.00</td>
<td>Lunch + Registration (collect information and nametag outside conference hall)</td>
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<tr>
<td>13.30</td>
<td>Welcome and Practical Information: Sigvard Olofsson</td>
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</table>
| 13.45-14.20 | **Keynote 1**  
Introduction: Michael Lindberg, Kalmar                            |
| 14.25-15.15 | **Session 1: Virus-Cell Interactions**  
Chair: Susann Teneberg, Gothenburg                                 |
| Per Eriksson | Uppsala  
The pig as a "mixing vessel" for IAVs revisited; new data from virus attachment studies |
| Annasara Lenman | Umeå  
Polysialic acid is a cellular receptor for human adenovirus 52 |
| Anandi Rajan | Umeå  
Role of Capsid Proteins of Enteric Human Adenoviruses               |
| Marta Bally | Gothenburg  
Cell-surface mimics to probe interactions between herpes simplex viruses and cell-surface carbohydrates |
| Ola Blixt | Copenhagen  
Synthesis of Cholesterol-Substituted Glycopeptides for Tailor-Made Glycocalyxification of Artificial Membrane Systems |
| 15.15  | Coffee Break                                                          |
| 15.45-17.05 | **Virus-Cell Interactions, part 2**  
Chair: Marta Bally, Gothenburg                                      |
| Ali Mirazimi | Stockholm  
The molecular pathogenesis of Zika Virus                        |
| Kwon Yongdae | Umeå  
Localization of Zika virus capsid protein expression in HEK 293 cells |
| Göran Bucht | Umeå  
Quantification and kinetics of individual RNA segments in Hantavirus infected cells |
<table>
<thead>
<tr>
<th>Name</th>
<th>Location</th>
<th>Topic</th>
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<tbody>
<tr>
<td>Cristiano Salata</td>
<td>Stockholm</td>
<td>Genome-wide screening of haploid stem cells for the discovery of essential genes for marburg virus infection</td>
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<tr>
<td>Michael Kann</td>
<td>Bordeaux, France</td>
<td>Retrograde transport of hepatitis B virus capsids</td>
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<tr>
<td>Kariem Ezzat Ahmed</td>
<td>Stockholm</td>
<td>Viral Protein Corona and Viral-Induced Amyloidogenesis</td>
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<tr>
<td>Niklas Arnberg</td>
<td>Umeå</td>
<td>Nucleolin is a cellular receptor for lactoferrin-dependent HAdV infection of human airways</td>
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18.30 Welcome reception, *Smögen Fishing Harbour*

20.00 Dinner
### Friday, August 25

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<tr>
<th>Time</th>
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<tbody>
<tr>
<td>07.30</td>
<td>Breakfast</td>
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| 09.00-09.35 | **Keynote 2**  
  **Introduction:** Kristina Eriksson, Gothenburg                     |
|          | Dr. Didier Raoult  
  Marseille, France  
  The world of giant viruses                                         |
| 09.40-10.00 | **Session 2: Pathogenesis**  
  Chair: Malgorzata Krzyzowska, Wroclaw, Poland                      |
| Vanessa Monteil | Stockholm  
  An in vitro assay to study the molecular pathogenesis of Crimean-Congo Hemorrhagic Fever Virus |
| Marie Hagbom | Linköping  
  Enteric glia cells control intestinal permeability during rotavirus infection |
| 10.00    | **Poster Session** including Coffee (the floor below the main venue)  
  Chair: Marianne Jansson, Lund                                       |
| 10.50-11.30 | **Session 3: Antivirals and Chemotherapy**  
  Chair: Jan Albert, Stockholm                                         |
| Kristina Nyström | Gothenburg  
  Inosine triphosphate pyrophosphatase enhances the effect of ribavirin on hepatitis C virus cell culture infection |
| Mårten Strand | Umeå  
  Discovery and development of benzavir-2, a novel broad-acting antiviral compound |
| Dario Akaber | Uppsala  
  In-silico identification of potential Zika Virus NS2B-NS3 protease inhibitors |
| Britta Wahren | Stockholm  
  Neutralizing antibody and antiviral effects to HIV are induced by transmembrane DNA/proteins |
| 11.30-12.40 | **Session 4: Clinical Virology and Diagnostics**  
  Chair: Tina Falkeborn, Linköping                                    |
| Peter Norberg | Gothenburg  
  Asymptomatic shedding of human herpesviruses in saliva               |
| Mahesh Anagandula | Uppsala  
  Characterization of BK polyomavirus associated pathology in kidney transplant recipients |
| Ebba Samuelsson | Gothenburg  
  Hepatitis E virus-infection in allogenic hematopoetic stem cell transplant recipients |
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<th>Name</th>
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<tr>
<td>Simon Larsson</td>
<td>Gothenburg</td>
<td>Comparison of real-time PCR with droplet digital PCR for quantification of hepatits D virus</td>
</tr>
<tr>
<td>Helena Vandesande</td>
<td>Kalmar</td>
<td>Screening and analysis of saffold virus in sweden</td>
</tr>
<tr>
<td>Mia Brytting</td>
<td>Stockholm</td>
<td>National reference laboratory network launched and the viral microbial surveillance performed at the public health agency of Sweden</td>
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**12.40**  Lunch & Free Activities

**15.00-15.35**  Keynote 3

**Introduction:** Tomas Bergström, Gothenburg

**Dr. Marilyn Roossinck**  University Park, Pennsylvania

Ecology of Plant and Fungal Viruses

**15.40-16.10**  Session 5: Environmental and Emerging Viruses and Epidemiology

Chair: Ali Mirazimi, Stockholm

**Hao Wang**  Gothenburg

Identification of Viruses in Sewage Water Using NGS Technology

**Maria Hellmér**  Kongens Lyngby, Denmark

Viral indicators for fecal contamination - a one year metagenomic study of treatment efficiency in danish waste water treatment

**16.00**  Coffee Break

**16.30-17.20**  Environmental and Emerging Viruses and Epidemiology, part 2

Chair: Ali Mirazimi, Stockholm

**Sofia Persson**  Uppsala

Quantification of norovirus RNA in oysters using reverse transcription droplet digital PCR

**Soizick Le Guyader**  Nantes, France

Norovirus detection in sewage and oyster samples by next generation sequencing methods

**Marianela Patzi Churqui**  Gothenburg

Prevalence of Sexually Transmitted Viral Infections among women in the Bolivian Amazonas

**Matti Sällberg**  Stockholm

New concept for therapeutic vaccination in chronic hepatitis B and D

**18.45**  Archipelago Cruise & Seafood buffet (see page 11)
Saturday, August 26

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<td><strong>Special Subject Address</strong>  \n<strong>Introduction:</strong> Niklas Arnberg, Umeå</td>
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<tr>
<td>09.20-09.30</td>
<td><strong>Session 6: Tumor virology</strong>  \nChair: Matti Sällberg, Stockholm</td>
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<td>09.30-09.40</td>
<td><strong>Session 7: Molecular and Structural Virology</strong>  \nChair: Matti Sällberg, Stockholm</td>
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<td>09.40</td>
<td>Coffee Break</td>
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<td>10.10-11.10</td>
<td><strong>Session 8: Viral Immunology and Vaccines</strong>  \nChair: Mia Brytting, Stockholm</td>
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### Special Subject Address
**Introduction:** Niklas Arnberg, Umeå

**Dr. Lars-Anders Carlson:** Umeå

**In vitro reconstitution of selective HIV-1 genome packaging**

**Session 6: Tumor virology**

**Chair:** Matti Sällberg, Stockholm

**Haoran Yu:** Lund

**The nucleosides adenosine and guanosine activate HPV16 late gene expression in a synergistic manner**

**Session 7: Molecular and Structural Virology**

**Chair:** Matti Sällberg, Stockholm

**Anna Munke:** Uppsala

**Coherent diffraction of single rice dwarf virus particles**

**Session 8: Viral Immunology and Vaccines**

**Chair:** Mia Brytting, Stockholm

**Gulsen Özkaya Sahin:** Lund

**Broad and Potent plasma neutralizing antibody response develops already during the first year of an HIV-2 infection**

**Charlotte Nilsson:** Stockholm

**Three-year durability of immune responses induced by HIV-DNA and HIV-modified vaccinia virus Ankara (MVA) and effect of a late HIV-MVA boost in Tanzanian volunteers**

**Marianne Jansson:** Lund

**HIV-1 and HIV-2 cross-reactive antibody effector functions**

**Clas Ahlm:** Umeå

**Therapeutic monoclonals - a potential approach for treatment of hantavirus infection**

**Eric Seruyange:** Gothenburg

**Seroepidemiology of Chikungunya virus, West Nile virus and Zika viruses among blood donors in Rwanda**
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<td>11.10</td>
<td>Annual Meeting Swedish Society for Virology</td>
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<tr>
<td>12.00</td>
<td>Lunch</td>
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<tr>
<td>13.00</td>
<td>Bus 1 leaves for Gothenburg</td>
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<tr>
<td>13.30</td>
<td>Bus 2 leaves for Gothenburg</td>
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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 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 of which from 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 will be at Havsbadet. Delegates registering for “Bed in shared” will be checked in at Makrillviken in the first place.

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 (outside Clarion Post Hotel, Drottningtorget) at about 10.30 on August 24 and from Smögen after lunch on August 26. All transfer is complimentary. The bus ride takes 1 hour 50 minutes. For questions contact bus captain Maria Johansson (maria.johansson@microbio.gu.se, 0736-841807).

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. Most of them will be opened by a short introduction lecture. One of the intentions is to give a background for the “preclinical” audience for more “clinically” oriented sessions and vice versa. In addition, 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.

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