



SSV Newsletter, March 2022

Dear fellow virologists,

Thanks to vaccines and other tools originating from research, we are now – in the third year of the pandemic – in a far better position as compared to when the pandemic started. This means that we plan both for a physical meeting in Smögen August 25-27, and for a molecular virology course for PhD students and postdocs. We are happy to inform you that three excellent keynotes: Timo Vesikari, Karen Mossman, and Michael Worobey, will tell us about virus evolution, vaccines, and zoonoses, and all three will also lecture at the course. We are also happy to inform you that we have now launched **Pandemifonden's Society Advisory Board**, with representatives from different sectors of the society, who will share their experiences during the pandemic. Read more at Pandemifonden's <u>Facebook</u> page.

With grief, SSV has received the news of Mia Brytting's passing. Mia has been a leading person in Swedish virology in her role as microbiologist and head of the unit for virus and vaccine monitoring at the Swedish Public Health Agency and its predecessors, the Swedish Bacteriological Laboratory (SBL) and the Swedish Institute for Infectious Disease Control (SMI), where she worked successfully since 1989. In particular, Mia has been an expert and reference point for influenza and other respiratory viruses, as well as for herpes viruses. She defended her PhD thesis on cytomegalovirus in 1994 at Karolinska Institutet. Mia's central role in building up influenza surveillance in Sweden should be emphasized, where her large international network of contacts and broad molecular biological competence have been of key importance. She also played an important role during the Coronavirus pandemic, as a coordinating force in the Swedish surveillance of SARS-CoV-2 variants at the Swedish Public Health Agency. All of us, Swedish virologists, who worked directly with Mia or had contact with her will remember her broad virological competence, professional commitment, and sense of order, which she paired with great enthusiasm and ability to spread joy. Mia is deeply missed by the SSV's board and members.

Niklas Arnberg, Chairman on behalf of the board

Would you like to engage in "Virus- och pandemifonden" as a volunteer, together with us/others who share the vision and ambition of "Virus- och pandemifonden"? Contact niklas.arnberg@pandemifonden.se. Together we can make a difference, and, it will be fun!

2) Upcoming meetings:

• Book the calendar: The 19th **Smögen Summer Symposium** on Virology, will be held **August 25-27**, **2022**, including Keynote talks from **Michael Worobey**,

University of Arizona, on "Virus Evolution", **Timo Vesikari**, University of Tampere, on "Viral Vaccine"s and **Karen Mossman**, McMaster University on "Tackling pandemics: what we can learn from bats" (see updated program attached). **Courses in "Molecular Virology** and **Clinical Virology**, in connection to the Smögen, will soon be announced.

- "Viruses 2022" April 5-8, Online meeting https://viruses2022.sciforum.net
- Infektionsveckan och Mikrobiologiskt vårmöte, Stockholm, May 10-13 https://www.infektionmikro2022.se
- Nordic HIV & Virology Conference 2022, Stockholm, Sept 28-30, https://hivnordic.se
- 3) Research Services: "New screening services in BSL2 and BSL3: Chemical Biology Consortium Sweden (CBCS) is a national infrastructure with extensive resources for small-molecule high-throughput screening, assay development and medicinal chemistry. CBCS services now cover applications with risk group 3 pathogens thanks to new collaborations with Swedish BSL-3 facilities. The next application deadline for subsidised services will be in September 2022. Please feel free to contact us before submitting an application! For more information, visit CBCS.se or contact marianna.tampere@scilifelab.se

4) Open positions:

- Postdoctoral Researcher in Virology and Cell Biology, Karolinska Institutet (deadline March 21, see link)
- Researcher in Virology, Karolinska Institutet, (deadline March 23, see <u>link</u>)
- Postdoc in structural virology; Umeå University (deadline March 27, see link)
- Postdocs in immunometabolism in RNA virus pathogenesis, Karolinska Institutet (deadline March 31/April 30, see <u>link</u> and <u>link</u>)
- 5) Travel grants: PhD students and postdocs are welcome to apply for the SSV travel grants. See guidelines and how to apply on our website, or if you have questions contact Ali.Mirazimi@ki.se
- Anyone that has suggestions on **virology publications** that should be **highlighted**, and are of interest for Swedish virologist, please send this information to Tomas.Bergstrom@microbio.gu.se
- 7) Virology News: This time we would like to highlight publications from Bjornevik et al. on "Longitudinal analysis reveals high prevalence of Epstein-Barr virus associated with multiple sclerosis" and Lanz et al. on "Clonally expanded B cells in multiple sclerosis bind EBV EBNA1 and GlialCAM" For links and perspectives, see below under "Virology News"
- **8)** Reminder! We kindly ask you to post, in your neighborhood, the attached "Virus-och pandemifonden" poster, with information on how to donate money.

Best wishes to all members from SSV

Virology News:

A very long research tradition has attempted to link the pathogenesis of multiple sclerosis (MS) to several different persistent viral infections. Recently, two papers in Science and Nature has provided new data on antibody responses to EBV, that may play a role in the immunopathogenesis of MS.

In the Science paper, pre-MS diagnostic serum samples (n=3) were retrieved from 955 men in US military service that later developed MS from a cohort of 10 million individuals. Seroconversion to EBV (but not to CMV) were more common in those subjects who later developed MS (97%) than in controls (57%).

In the Nature paper, the clonality of the IgG response in the cerebrospinal fluid (a diagnostic hallmark of this disease) of MS patients was studied. Among antiviral monoclonal antibodies identified by peptide screening, several were directed against the EBV transcription factor EBNA-1 with a reactivity to a motif (PRRPP) that showed molecular mimicry to the myelin protein GlialCAM.

https://www.science.org/doi/epdf/10.1126/science.abj8222 https://www.nature.com/articles/s41586-022-04432-7