



Dear fellow members of the Swedish Society for Virology (SSV),

- 1) This years **Smögen Symposium on Virology**, held August 24-26, 2017, at Smögens Havsbad, is now fully booked. However, the registration website is still open, but late registration will be placed in line for openings due to cancellations.
- 2) The **National Course in Molecular and Marine Virology** taking place in Smögen August 21-23, 2017, has now 25 registered participants.
- 3) Please find announcements of **new Virology jobs**, Group Leader at MIMS, Umeå University, and Professor/Associate Professor in Medical Microbiology at University of Oslo (UiO), on our SSV website under "Jobs" <http://www.swedishvirology.se/jobs.html>
- 4) This month we highlight recent **Virology News** on "**Single-virus genomics revealing cosmopolitan and abundant viruses**" and "**Reovirus infection triggering development of celiac disease**", see our website http://www.swedishvirology.se/virology_news.html, or below. Anyone that has suggestions on publications that should be highlighted, and are of interest for Swedish virologist, please send this information to Tomas.Bergstrom@microbio.gu.se.
- 5) If you are interested to post information on meetings, courses, jobs or other relevant information about Virology at the website, do not hesitate to contact, Marianne.Jansson@med.lu.se, SSVs webmaster.

All the best from SSV

Virology News

"Single-virus genomics reveals cosmopolitan and abundant viruses."

The authors apply single-virus genomics by fluorescence-activated sorting of single virus particles followed by whole-genome amplification to assess whether portions of marine viral communities are missed by current techniques including viral cultures. The results suggest that naked dsDNA

viruses, in particular vSAG 37-F6, are putatively the most widely distributed, abundant, and likely active virus at the genus- and species-level taxa identified so far in the marine virosphere.

Single-virus genomics reveals hidden cosmopolitan and abundant viruses.

Martinez-Hernandez F, Fornas O, Lluesma Gomez M, Bolduc B, de la Cruz Peña MJ, Martínez JM, Anton J, Gasol JM, Rosselli R, Rodriguez-Valera F, Sullivan MB, Acinas SG, Martinez-Garcia M.

Nat Commun. 2017 Jun 23;8:15892. doi: 10.1038/ncomms15892.

<https://www.ncbi.nlm.nih.gov/pubmed/28643787>

"Reovirus infection trigger development of celiac disease"

Reoviruses commonly infect humans and mice asymptotically. Bouziat *et al.* (<http://science.sciencemag.org/content/356/6333/44>) found that immune responses to two gut-infecting reoviruses take different paths in mice. Both reoviruses invoked protective immune responses, but for one reovirus, when infection happened in the presence of a dietary antigen (such as gluten or ovalbumin), tolerance to the dietary antigen was lost. This was because this strain prevented the formation of tolerogenic T cells. Instead, it promoted T helper 1 immunity to the dietary antigen through interferon regulatory factor 1 signaling. In a preliminary study, Celiac disease patients showed a tendency towards elevated levels of antibodies against reovirus.

Reovirus infection triggers inflammatory responses to dietary antigens and development of celiac disease.

Bouziat R, Hinterleitner R, Brown JJ, Stencel-Baerenwald JE, Ikizler M, Mayassi T, Meisel M, Kim SM, Discepolo V, Puijssers AJ, Ernest JD, Iskarpatyoti JA, Costes LM, Lawrence I, Palanski BA, Varma M, Zurenski MA, Khomandiak S, McAllister N, Aravamudhan P, Boehme KW, Hu F, Samsom JN, Reinecker HC, Kupfer SS, Guandalini S, Semrad CE, Abadie V, Khosla C, Barreiro LB, Xavier RJ, Ng A, Dermody TS, Jabri B. Science. 2017 Apr 7;356(6333):44-50. doi: 10.1126/science.aah5298.

<https://www.ncbi.nlm.nih.gov/pubmed/28386004>