



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

- 1) In order to assure that that the **review panels of the Swedish Research Council** includes members that have expertise in the Virology field we urge you to **nominate yourself or a colleague**. According to the instructions of the Scientific Council for Medicine and Health
... The nominated candidate should be an established scientist within the research community, professor or associate professor, and previous evaluation experience is a merit. He or she does not need to be based in Sweden. Review panel members are appointed for three years, and can be reelected for three more years.
The nomination survey is open **until January 7, 2019** and you can find it at the link below
<https://www.vr.se/english/just-now/news/news-archive/news/2018-12-04-nominate-members-of-review-panels-in-medicine-and-health-2019.html>
- 2) We congratulate two virology research teams, headed by **Anna Överby Wernstedt** and **Ali Mirazimi**, for being awarded **Research Environment Grants - Infections and Antibiotics**", on 25 million SEK respectively, from the Swedish Research Council. The two projects are on "*Multimodal visualization and proteomics for studies of flavivirus replication and molecular disease mechanisms*" and "*Development of an high-throughput platform for identification and characterization of important host cell factors for viral replication*".
- 3) The **2019 Smögen Summer Symposium on Virology** will take place **August 22-24**. Remember to book the dates in your calendar! More information on the meeting program will soon be available.
- 4) On our website you can also find information on other upcoming Virology meetings, include the **European Congress of Virology**, Rotterdam, April 28-May 1, 2019 and the **ScanVir2019 meeting**, Turku, June 3-5, 2019
<http://www.swedishvirology.se/meetings.html>
- 5) Please remember that you as a PhD student or Postdoc have the possibility to apply for **Travel grants from SSV**. See our website for instructions and the application link http://www.swedishvirology.se/travel_grants.html
- 6) In this newsletter we highlight recent **Virology News** on "**Acquired neurovirulence of enterovirus**" and "**Protocadherin-1 identified as key receptor for hantavirus**" see below or our website
http://www.swedishvirology.se/virology_news.html
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.

- 7) 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.



Virology News

Acquired neurovirulence of enterovirus.

Brown et al demonstrate that unlike older isolates of EV-D68, newer isolates are neurovirulent *in vitro* and *in vivo* and cause polio-like illness in animals. It is suggested that the enhanced neurotropism is at least partly caused by improved attachment to and entry into neural cells. This relates to recent outbreaks of acute flaccid paralysis in USA, Canada, Europe and Asia.

Contemporary Circulating Enterovirus D68 Strains Have Acquired the Capacity for Viral Entry and Replication in Human Neuronal Cells. Brown DM, Hixon AM, Oldfield LM, Zhang Y, Novotny M, Wang W, Das SR, Shabman RS, Tyler KL, Scheuermann RH. *MBio*. 2018 Oct 16;9(5). pii: e01954-18. doi: 10.1128/mBio.01954-18. PMID: 30327438
<https://mbio.asm.org/content/9/5/e01954-18.long>

Protocadherin-1 identified as key receptor for hantavirus

An international team headed by Kartik Chandran, one of the keynote speakers at this year Smögen Summer Symposium on Virology, recently reported on the identification of Protocadherin-1 as an essential receptor for viruses causing the highly fatal hantavirus pulmonary syndrome. By the use of genetic screens, *in vitro* and *in vivo* models, the entry and infection of pulmonary epithelial cells by new world hantaviruses, Sin Nombre virus and Andes virus, was shown to depend on the expression of Protocadherin-1. Accordingly, this finding may spur the development of prophylactic and therapeutic strategies against disease caused by these hantaviruses.

Protocadherin-1 is essential for cell entry by New World hantaviruses. Jangra RK, Herbert AS, Li R, Jae LT, Kleinfelter LM, Slough MM, Barker SL, Guardado-Calvo P, Román-Sosa G, Dieterle ME, Kuehne AI, Muena NA, Wirchnianski AS, Nyakatura EK, Fels JM, Ng M, Mittler E, Pan J, Bharrhan S, Wec AZ, Lai JR, Sidhu SS, Tischler ND, Rey FA, Moffat J, Brummelkamp TR, Wang Z, Dye JM, Chandran K. *Nature*. 2018 Nov;563(7732):559-563. doi: 10.1038/s41586-018-0702-1. PMID: 30464266
<https://www.nature.com/articles/s41586-018-0702-1>