



KNVM Virology News

Dear fellow virologist,

The KNAW has [announced](#) that the 2021 Beijerinck Prize goes to Ralf Bartenschlager (Ruprecht-Karls-Universität Heidelberg) for his efforts to combat hepatitis C. The 2021 Beijerinck Premium goes to Sebastian Lequime (Groningen University) for his research on virus evolution and outreach activities. Both will receive their awards during the Dutch Annual Virology Symposium (DAVS) which will take place online on Friday March 5th.

We look forward to this year's program and hope to meet you all virtually!

The board of the Virology division of the KNVM

(Emmanuel Wiertz, Jolanda Smit, Jeroen Kortekaas, Ronald van Rij, Bart Haagmans, Katja Wolthers, Martijn Langereis, and Puck van Kasteren)

Virology events

February 10, 2021

PhD defense: Judith Oymans, WUR ([info](#))

March 5, 2021

[DAVS](#) - Online

March 11, 2021

PhD defense: Hella Pasmans, RIVM/LUMC ([info](#))

June 7-8, 2021

[Nidomeeting](#) - Online



Virology Double-Interview

Ronald van Rij

Prof. Experimental Virology
Dept. Medical Microbiology
Radboud UMC

What is your main research focus?

Arbovirus-host interactions, antiviral immunity in insects, small RNA biology. We are interested in the interactions between arboviruses and their mosquito and mammalian hosts. We study antiviral immunity in insects, specifically mosquitoes and the genetic model organism *Drosophila melanogaster* (fruit flies). Small RNAs are studied for their crucial role in antiviral defense and for their intriguing biology in gene regulation and immunity.

What is your favourite virus?

The lab has been rather promiscuous with regard to the viruses studied. We are interested in mosquito-borne human pathogenic viruses such as dengue, Zika and chikungunya virus, but we have also worked on a large number of more obscure, insect-specific RNA and DNA viruses. They all have a story to tell about host responses to viral infection.

Who inspires you in your scientific career?

There are many inspirational scientists out there. For now, I will mention my postdoctoral mentor Raul Andino, a highly creative thinker and recipient of the Beijerinck premium in 2017. From my peers, I'd like to mention Marco Vignuzzi and Carla Saleh, friends and colleagues from Raul's lab who are now at Pasteur Institute. Remarkable personalities and excellent scientists with a unique and bold approach to virology.



Martijn Langereis

Assoc. princ. scientist
D&T Department
MSD Animal Health

What is your main research focus?

As a project leader at the Discovery & Technology (D&T) department within MSD Animal Health I'm involved in the early stage (feasibility) vaccine research. With my background in molecular virology, structural biology and innate immunity, my research focuses mostly on the use of molecular virology technologies to develop new (viral) vector vaccines and improved antigen design.

What is your favorite virus?

In my time as researcher I have worked with numerous viruses like papillomavirus, coronavirus, torovirus, HIV, parvovirus, influenza virus, picornavirus, alphaviruses, calicivirus and herpesvirus. Among these viruses the herpesvirus of turkeys (HVT) is not really my favorite virus, but this is definitely one of the most intriguing ones. It is a large virus (if you are used to RNA viruses) and the virus retains intracellular. This brings some nice challenges but also opportunities.

Why is your research important?

In face of this SARS-CoV-2 pandemic I think it is clear that vaccine research is very important. Within the field of Animal Health, we have always been frontrunner in the use of new vaccine technologies. Many of the SARS-CoV-2 vaccines are based on these "new" vaccine technologies, and this pandemic has accelerated the development of these technologies for human use. I hope that my research will contribute in the development of better vaccines to increase general health of animals as well as humans.

Recent publications

Brouwer, PJM, Brinkkemper, M, ... van Gils, MJ, Le Grand, R, Sanders, RW. (2021) Two-component spike nanoparticle vaccine protects macaques from SARS-CoV-2 infection. *Cell*. doi: <https://doi.org/10.1016/j.cell.2021.01.035>.

Wichgers Schreur PJ, Vloet RPM, Kant J, van Keulen L, Gonzales JL, Visser TM, Koenraad CJM, Vogels CBF, Kortekaas J. (2021) Reproducing the Rift Valley fever virus mosquito-lamb-mosquito transmission cycle. *Sci Rep*. doi: [10.1038/s41598-020-79267-1](https://doi.org/10.1038/s41598-020-79267-1).

Larsen MD, de Graaf EL, ... Wuhrer M, Ellen van der Schoot C, Vidarsson G. (2020) Afucosylated IgG characterizes enveloped viral responses and correlates with COVID-19 severity. *Science*. doi: [10.1126/science.abc8378](https://doi.org/10.1126/science.abc8378).

