

KNVM Virology News

Dear fellow virologist,

Last month it was <u>announced</u> that the 2023 Beijerinck Prize will be awarded to Ron Fouchier (ErasmusMC) and the Beijerinck Premium goes to Daniel Hurdiss (Utrecht University, virology <u>newsletter #14</u>). The award ceremony will be held during the DAVS on Friday March 10 at the OBA in Amsterdam.

On Thurday March 9 the COGEM will organize a symposium on Viruses, replicons, and vaccines - Opportunities, risks, and regulation. The symposium will be held in Amsterdam, for more information visit the <u>website</u>.

The board of the Virology division of the KNVM (Emmanuel Wiertz, Jolanda Smit, Ronald van Rij, Bart Haagmans, Katja Wolthers, Martijn Langereis, and Puck van Kasteren)

Virology events

ECV, Poland

Feb 16, 2023 Stephanie Gumbs
Utrecht | Wiertz/Wensing
March 10, 2023
DAVS, OBA Amsterdam
March 16, 2023 Laurine Rijsbergen
Rotterdam | de Swart
March, 2023 Kevin Groen
Rotterdam | van den Hoogen
April 13, 2023 Joanna Kaczorowska
Amsterdam | vd Hoek/Berkhout
May 4-7, 2023



Virology Double-Interview

Corine GeurtsvanKessel Clinical Virologist Viroscience department ErasmusMC Rotterdam

Matthijs Welkers

Clinical Virologist
AmsterdamUMC and
Public Health Sonices

Public Health Services A'dam

What is your main research focus?

My research focusses on epidemic and pandemic preparedness against emerging viruses, with a focus on viral immunity. During the last years I worked a lot on immunity against SARS CoV-2 infection and vaccination, but also Mpox and rabies virus have had my specific attention.

What is your favourite virus?

As a clinical virologist I work in the breadth of the field, so it is hard to choose my favorite virus. Nevertheless, from a combined scientific and clinical point of view, I opt for rabies virus. This virus keeps intriguing me as the disease is dreadful, and there is still a lot to be discovered about the immune response against rabies virus infection.

Why is your research important?

In my research I use (basic) laboratory techniques to address urgent clinical questions; therefor collaboration with different partners is key in my work. Where possible I aim to translate my research findings back to patient care, diagnostics or policy makers which for me is an important aspect of doing research.

What is your main research focus?

My main focus of research is investigating viral evolution of clinically relevant viruses using sequencing. In the last few years, our team at AmsterdamUMC has mainly focused on SARS-CoV-2 evolution in the community as well as in immunocompromised and/or hospitalized patients. We continually apply the acquired technical expertise and analysis methods to other viruses of clinical importance.

Why is your research important?

For many infections we can accurately observe the clinical picture, but we often do not understand the underlying pathogenesis. By observing how a virus adapts in patients, or evolves in response to specific treatments, it will increase our understanding of potential vulnerabilities. This information can potentially provide targets for novel diagnostic and treatment approaches.

Of which accomplishment are you most proud?

For me, it is the successful collaboration between the public health services of Amsterdam and our team at AmsterdamUMC for early detection of emerging novel SARS-CoV-2 variants in the community. Continuous optimization of sample logistics, technical improvements in the lab combined with clinical interpretation was really awarding and inspiring teamwork.

Recent publications

Brouwer PJM, Antanasijevic A, Ronk AJ, Müller-Kräuter H, Watanabe Y, Claireaux M, Perrett HR, Bijl TPL, Grobben M, Umotoy JC, Schriek Al, Burger JA, Tejjani K, Lloyd NM, Steijaert TH, van Haaren MM, Sliepen K, de Taeye SW, van Gils MJ, Crispin M, Strecker T, Bukreyev A, Ward AB, Sanders RW. 2022. Lassa virus glycoprotein nanoparticles elicit neutralizing antibody responses and protection. Cell Host Microbe. doi: 10.1016/j.

Groen K, van Nieuwkoop S, Meijer A, van der Veer B, van Kampen JJA, Fraaij PL, Fouchier RAM, van den Hoogen BG. 2022. Emergence and Potential Extinction of Genetic Lineages of Human Metapneumovirus between 2005 and 2021. mBio. doi: 10.1128/mbio.02280-22.

Kaczorowska J, Timmerman AL, Deijs M, Kinsella CM, Bakker M, van der Hoek L. 2023. Anellovirus evolution during long-term chronic infection. Virus Evol. doi: 10.1093/ve/vead001.







