



Ronald Dijkman

Contact

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Units

Institute of Immunobiology

Publications (23)

Kahlert C, Nigg S, Onder L, Dijkman R, Diener L, Vidal A, Rodriguez R, Vernazza P, Thiel V, Vidal J, Albrich W. The quorum sensing com system regulates pneumococcal colonisation and invasive disease in a pseudo-stratified airway tissue model. *Microbiol Res* 2022; 268:127297.

Hamming O, Thiel V, Pietschmann T, Siupka P, Akhtar H, Jørgensen S, Dijkman R, Vieyres G, Terczyńska-Dyla E, Hartmann R. Interferon lambda 4 signals via the IFN λ receptor to regulate antiviral activity against HCV and coronaviruses. *EMBO J* 2013; 32:3055–65.

Lohrmann F, Dijkman R, Stertz S, Thiel V, Haller O, Staeheli P, Kochs G. Emergence of a C-terminal seven-amino-acid elongation of NS1 in around 1950 conferred a minor growth advantage to former seasonal influenza A viruses. *J Virol* 2013; 87:11300–3.

Bertram S, Thiel V, Hofmann-Winkler H, Schneider H, Winkler M, Welsch K, Glowacka I, Gierer S, Heurich A, Habjan M, Dijkman R, Pöhlmann S. TMPRSS2 Activates the Human Coronavirus 229E for Cathepsin-Independent Host Cell Entry and Is Expressed in Viral Target Cells in the Respiratory Epithelium. *J Virol* 2013; 87:6150–60.

Raj V, Bosch B, Osterhaus A, Rottier P, Drosten C, Thiel V, Fouchier R, Zaki A, Demmers J, Muth D, Dijkman R, Müller M, Dekkers D, Smits S, Mou H, Haagmans B. Dipeptidyl peptidase 4 is a functional receptor for the emerging human coronavirus-EMC. *Nature* 2013; 495:251–4.

Dijkman R, Thiel V, Goossens H, Ieven M, Molenkamp R, Jonsdottir H, Deijs M, Koekkoek S, Jebbink M, van der Hoek L. Isolation and characterization of current human coronavirus strains in primary human epithelial cell cultures reveal differences in target cell tropism. *J Virol* 2013; 87:6081–90.

Kindler E, Dijkman R, Müller M, Drosten C, Fouchier R, Geffers R, Rodriguez R, Hartmann R, Hamming O, Muth D, Jonsdottir H, Thiel V. Efficient replication of the novel human betacoronavirus EMC on primary human epithelium highlights its zoonotic potential. *MBio* 2013; 4:e00611–12.

Farsani S, Dijkman R, Jebbink M, Goossens H, Ieven M, Deijs M, Molenkamp R, van der Hoek L. The first complete genome sequences of clinical isolates of human coronavirus 229E. *Virus Genes* 2012

Dijkman R, Jebbink M, Deijs M, Milewska A, Pyrc K, Buelow E, van der Bijl A, van der Hoek L. Replication-dependent downregulation of cellular angiotensin-converting enzyme 2 protein expression by human coronavirus NL63. *J Gen Virol* 2012; 93:1924–9.

van den Worm S, Thiel V, Snijder E, Siddell S, Chang G, Dijkman R, Kuri T, Züst R, Weber F, Zevenhoven J, Eriksson K, Davidson A. Reverse genetics of SARS-related coronavirus using vaccinia virus-based recombination. *PloS one* 2012; 7:e32857.

Dijkman R, Jebbink M, Gaunt E, Rossen J, Templeton K, Kuijpers T, van der Hoek L. The dominance of human coronavirus OC43 and NL63 infections in infants. *J Clin Virol* 2011; 53:135–9.

Sastre P, Dijkman R, Camuñas A, Ruiz T, Jebbink M, van der Hoek L, Vela C, Rueda P. Differentiation between human coronaviruses NL63 and 229E using a novel double-antibody sandwich enzyme-linked immunosorbent assay based on specific monoclonal antibodies. *Clin Vaccine Immunol* 2010; 18:113–8.

Pyrk K, van der Hoek L, Baric R, Vabret A, Donaldson E, Deming D, Long C, Jebbink M, Dijkman R, Sims A, Pickles R. Culturing the unculturable: human coronavirus HKU1 infects, replicates, and produces progeny virions in human ciliated airway epithelial cell cultures. *J Virol* 2010; 84:11255–63.

van der Hoek L, Ihorst G, Sure K, Vabret A, Dijkman R, de Vries M, Forster J, Berkhout B, Uberla K. Burden of disease due to human coronavirus NL63 infections and periodicity of infection. *J Clin Virol* 2010; 48:104–8.

Dijkman R, Mulder H, Rumping L, Kraaijvanger I, Deijs M, Jebbink M, Verschoor E, van der Hoek L. Seroconversion to HCoV-NL63 in Rhesus Macaques. *Viruses* 2009; 1:647–56.

Dijkman R, Koekkoek S, Molenkamp R, Schildgen O, van der Hoek L. Human bocavirus can be cultured in differentiated human airway epithelial cells. *J Virol* 2009; 83:7739–48.

Dijkman R, van der Hoek L. Human coronaviruses 229E and NL63: close yet still so far. *J Formos Med Assoc* 2009; 108:270–9.

Dijkman R, Jebbink M, El Idrissi N, Pyrc K, Müller M, Kuijpers T, Zaaijer H, van der Hoek L. Human coronavirus NL63 and 229E seroconversion in children. *J Clin Microbiol* 2008; 46:2368–73.

de Vries M, Pyrc K, Berkhout R, Vermeulen-Oost W, Dijkman R, Jebbink M, Bruisten S, Berkhout B, van der Hoek L. Human parechovirus type 1, 3, 4, 5, and 6 detection in picornavirus cultures. *J Clin Microbiol* 2007; 46:759–62.

Dijkman R, Thiel V, Berkhout B, Franklin S, Minor P, Zaaijer H, Pyrc K, Wilbrink B, Jebbink M, van der Hoek L. Human coronavirus 229E encodes a single ORF4 protein between the spike and the envelope genes. *Virology* 2006; 3:106.

Pyrk K, Dijkman R, Deng L, Jebbink M, Ross H, Berkhout B, van der Hoek L. Mosaic structure of human coronavirus NL63, one thousand years of evolution. *J Mol Biol* 2006; 364:964–73.

Schildgen O, Jebbink M, de Vries M, Pyrc K, Dijkman R, Simon A, Müller A, Kupfer B, van der Hoek L. Identification of cell lines permissive for human coronavirus NL63. *J Virol Methods* 2006; 138:207–10.

Pyrk K, Bosch B, Berkhout B, Jebbink M, Dijkman R, Rottier P, van der Hoek L. Inhibition of human coronavirus NL63 infection at early stages of the replication cycle. *Antimicrob Agents Chemother* 2006; 50:2000–8.

Projects (4)

Secretome analysis of the human airway epithelium following human respiratory virus infection

Fundamental Research - Jan 1, 2013 - Dec 31, 2013

Completed

Genetic modification of the human airway epithelium - a paradigmatic system to study host responses to human respiratory viruses

Fundamental Research - Jul 1, 2012 - Dec 31, 2013

Completed

Genetic modification of the human airway epithelium - a paradigmatic system to study host responses to human respiratory viruses

Fundamental Research - Jan 1, 2012 - Dec 31, 2012

Completed

Impact of RNA modification on coronavirus-induced innate immune responses

Fundamental Research - Oct 1, 2010 - Sep 30, 2013

Completed