

Curriculum Vitae

Stephan Pleschka Professor, Dr. rer. nat.
d.o.b. February 25th, 1962, in Velbert, Germany

University Education

2002 Habilitation in Virology, Justus Liebig University (JLU), Giessen, Germany
1994 Doctorate in Biology, Philipps University Marburg, Germany
1983–1989 Studies of Biology, Philipps University Marburg, Germany

Scientific Career

2013 – 2020 PI, Collaborative Research Center SFB 1021
Since 2012 PI; Faculty member in the German Center for Infection Research (DZIF)
Since 2012 Representative for Radioactivity Safety at the Institute of Medical Virology, JLU
2010 – 2018 PI, Transregional Collaborative Research Center TRR 84, Giessen/Berlin
Since 2010 Faculty member in the “University Giessen/Marburg Lung Center (UGMLC)” and the LOEWE-Center (Hessen) “Inflammatory and Hyperproliferative Diseases of the Lung and the Respiratory Tract”, JLU
Since 2008 Faculty member in the network on zoonosis research „FluResearchNet: Molecular Signatures determining Pathogenicity and Species Transmission of Influenza A Viruses”, Germany
2007 - 2009 Coordinator and PI for the EC funded “Specific Targeted Research Project (STREP) “EuroFlu - Molecular Factors and Mechanisms of Transmission and Pathogenicity of Highly Pathogenic Avian Influenza Virus”, Germany, Greece, Israel, Slovakia, Spain
Since 2006 Faculty member, “Giessen Graduate School of Live Sciences (GGL)”, JLU
2006 - 2013 Faculty member and PI of the Int. Graduate School „Enzymes and multi-enzyme complexes acting on nucleic acids“ (GRK1384), JLU
Since 2006 Adjunct Professor, Institute of Medical Virology, University of Giessen
2005 Advisory board member, commission for pharmaceuticals (Arzneimittelkommission) for recommendations concerning use of anti-viral pharmaceuticals and vaccination in response to the seasonal influenza, bird-flu and potential pandemics, Germany
Since 2004 Faculty, Int. Graduate School “Molecular Biology and Medicine of the Lung (MBML)”, JLU
2003 - 2008 Assistant for the coordination of the Collaborative Research Center SFB 535, JLU
2003 - 2005 PI, Collaborative Research Center SFB 535, Giessen
2003 - 2008 Associated Professor (C2) and group leader, Institute of Medical Virology, JLU
2002 - 2007 Faculty and PI, Int. Graduate School “Biochemistry of Nucleoproteincomplexes”, JLU
Since 1999 Head of the BSL-3 facilities, JLU, certified expertise and personal allowance to work with BSL-3 class viral pathogens and personal allowance to submit BSL-3 applications
2000 - 2002 Postdoctoral Fellow, Institute of Virology (Vet.), JLU, Germany
1997 - 2000 Postdoctoral Fellow, Institute of Microbiology and Molecular Genetics, JLU, Germany
1996 - 1997 Postdoctoral Fellow, Institute of Virology, Philipps University, Marburg, Germany
1994 - 1996 Postdoctoral Fellow, Mount Sinai School of Medicine, New York, NY, USA

Awards and Honors

2013 “Science2start” award (first price) of the “BioRegioStern (Baden-Württemberg)”
2009 Fellowship from the “von Behring/Röntgen-Foundation”
2002 Award for Clinical Research, GlaxoSmithKline Foundation for Clinical Research
1994 Fellowship from the “German Research Foundation” (DFG)

Citation Record

Total citations: 8,592; h-index:43; h-index since 2017: 36 (Google Scholar July 26th, 2022)

Top-10 selected Publications

Itaconate and derivatives reduce interferon responses and inflammation in influenza A virus infection. Sohail A, Iqbal AA, Sahini N, Chen F, Tantawy M, Waqas SFH, Winterhoff M, Ebensen T, Schultz K, Geffers R, Schughart K, Preusse M, Shehata M, Bähre H, Pils MC, Guzman CA, Mostafa A, **Pleschka S**, Falk C, Michelucci A, Pessler F. **PLoS Pathog.** 2022 Jan 13;18(1):e1010219. doi: [10.1371/journal.ppat.1010219](https://doi.org/10.1371/journal.ppat.1010219).

Su W, Harfoot R, Su YCF, DeBeauchamp J, Joseph U, Jayakumar J, Crumpton JC, Jeevan T, Rubrum A, Franks J, Pascua PNQ, Kackos C, Zhang Y, Zhang M, Ji Y, Bui HT, Jones JC, Kercher L, Krauss S, **Pleschka S**, Chan MCW, Webster RG, Wu CY, Van Reeth K, Peiris M, Webby RJ, Smith GJD, Yen HL. Ancestral sequence reconstruction pinpoints adaptations that enable avian influenza virus transmission in pigs. **Nat Microbiol.** 2021 Nov;6(11):1455-1465. doi: [10.1038/s41564-021-00976-y](https://doi.org/10.1038/s41564-021-00976-y).

Peteranderl C, Kuznetsova I, Schulze J, Hardt M, Lecuona E, Sznajder JI, Vadász I, Morty RE, **Pleschka S**, Wolff T, Herold S. Influenza A Virus Infection Induces Apical Redistribution of Na⁺, K⁺-ATPase in Lung Epithelial Cells In Vitro and In Vivo. **Am J Respir Cell Mol Biol.** 2019 Sep;61(3):395-398. doi: [10.1165/rcmb.2019-0096LE](https://doi.org/10.1165/rcmb.2019-0096LE).

Kanrai P, Mostafa A, Madhugiri R, Lechner M, Wilk E, Schughart K, Ylösmäki L, Saksela K, Ziebuhr J, **Pleschka S**. Identification of specific residues in avian influenza A virus NS1 that enhance viral replication and pathogenicity in mammalian systems. **J Gen Virol.** 2016 Sep;97(9):2135-2148. doi: [10.1099/jgv.0.000542](https://doi.org/10.1099/jgv.0.000542).

Mühlbauer D, Dzieciolowski J, Hardt M, Hocke A, Schierhorn KL, Mostafa A, Müller C, Wisskirchen C, Herold S, Wolff T, Ziebuhr J, **Pleschka S**. Influenza virus-induced caspase-dependent enlargement of nuclear pores promotes nuclear export of viral ribonucleoprotein complexes. **J Virol.** 2015 Jun;89(11):6009-21. doi: [10.1128/JVI.03531-14](https://doi.org/10.1128/JVI.03531-14).

Pinto R, Herold S, Cakarova L, Hoegner K, Lohmeyer J, Planz O, **Pleschka S**. Inhibition of influenza virus-induced NF-kappaB and Raf/MEK/ERK activation can reduce both virus titers and cytokine expression simultaneously in vitro and in vivo. **Antiviral Res.** 2011 Oct;92(1):45-56. doi: [10.1016/j.antiviral.2011.05.009](https://doi.org/10.1016/j.antiviral.2011.05.009).

Ma W, Brenner D, Wang Z, Dauber B, Ehrhardt C, Högner K, Herold S, Ludwig S, Wolff T, Yu K, Richt JA, Planz O, **Pleschka S**. The NS segment of an H5N1 highly pathogenic avian influenza virus (HPAIV) is sufficient to alter replication efficiency, cell tropism, and host range of an H7N1 HPAIV. **J Virol.** 2010 Feb;84(4):2122-33. doi: [10.1128/JVI.01668-09](https://doi.org/10.1128/JVI.01668-09).

Marjuki H, Alam MI, Ehrhardt C, Wagner R, Planz O, Klenk HD, Ludwig S, **Pleschka S**. Membrane accumulation of influenza A virus hemagglutinin triggers nuclear export of the viral genome via protein kinase Calpha-mediated activation of ERK signaling. **J Biol Chem.** 2006 Jun 16;281(24):16707-15. doi: [10.1074/jbc.M510233200](https://doi.org/10.1074/jbc.M510233200).

Pleschka S, Wolff T, Ehrhardt C, Hobom G, Planz O, Rapp UR, Ludwig S. Influenza virus propagation is impaired by inhibition of the Raf/MEK/ERK signalling cascade. **Nat Cell Biol.** 2001 Mar;3(3):301-5. doi: [10.1038/35060098](https://doi.org/10.1038/35060098).

Pleschka S, Jaskunas R, Engelhardt OG, Zürcher T, Palese P, García-Sastre A. A plasmid-based reverse genetics system for influenza A virus. **J Virol.** 1996 Jun;70(6):4188-92. doi: [10.1128/JVI.70.6.4188-4192.1996](https://doi.org/10.1128/JVI.70.6.4188-4192.1996).