

Curriculum Vitae

Frank Petersen Professor, Dr. rer. nat.
d.o.b. June 26, 1962, in Rendsburg, Germany



University Education

2000 Habilitation Immunology and Cell Biology, University of Lübeck
1992 Doctorate Biology, CAU Kiel
1972–1979 Studies of Biology, Christian Albrechts University (CAU) Kiel

Scientific Career

Since 2021 Member and Principal Investigator of the DFG graduate program (RTG) 2633
Since 2020 Co-head of the University-Liaison Group “Pulmonary Immune Diseases” at the Research Center Borstel and the Department of Rheumatology, University of Lübeck, Germany
Since 2018 Member and Principal investigator of the Schleswig-Holstein Excellence Cluster Precision medicine in chronic inflammation (PMI)
Since 2016 Member of the executive group at the Research Center Borstel, Germany.
2013-2016 Deputy Head Priority Area Asthma & Allergy at the Research Center Borstel, Germany
2011-2020 Member of the executive board and Principal investigator of the DFG graduate program (RTG) 1727
Since 2011 Member and Principal investigator of the German Center for Lung Research (DZL)
Since 2011 Member and Principal investigator of the DFG international graduate program (IRTG) 1911
Since 2010 Professor of Immunology and Cell Biology, University of Lübeck, Germany
2008-2017 Member and Principal investigator of the Schleswig-Holstein Excellence Cluster (EXC) 306/1 Inflammation at interfaces
Since 2001 Head of the Division “Biochemical Immunology” at the Research Center Borstel
1998-2000 Docent and head of a junior group at the Research Center Borstel
1997-1998 Post-doctoral fellow at the Department of Medical Biochemistry and Microbiology, University of Uppsala, Sweden
1992–1997 Post-doctoral fellow at the Research Center Borstel

Awards and Honors

2007 Research award of the Signal Transduction Society (STS)
1992 Award of the Faculty of Science for the best doctoral thesis, CAU Kiel

Citation Record

Total citations: 6059; h-index:44; h-index since 2021: 27 (Google Scholar March 11, 2026)

Top-10 selected Publications

Yu X, Wax J, Riemekasten G, **Petersen F**. *Autoimmun Rev*. 2023 May;22(5):103310. doi: 10.1016/j.autrev.2023.103310.

Yue X, Yin J, Wang X, Heidecke H, Hackel AM, Dong X, Kasper B, Wen L, Zhang L, Schulze-Forster K, Junker J, Grasshoff H, Müller A, Wallukat G, Schimke I, Zeiner J, Deckstein LM, Mertens N, Kerstein-Staehle A, Hundt JE, Kostenis E, Yu X, Riemekasten G, **Petersen F**. *Ann Rheum Dis*. 2022 May 20;81(9):1281-9. doi: 10.1136/annrheumdis-2021-222088

Hiroyasu S, Zeglinski MR, Zhao H, Pawluk MA, Turner CT, Kasprick A, Tateishi C, Nishie W, Burleigh A, Lennox PA, Van Laeken N, Carr NJ, **Petersen F**, Crawford RI, Shimizu H, Tsuruta D, Ludwig RJ, Granville DJ. *Nat Commun*. 2021 Jan 12;12(1):302. doi: 10.1038/s41467-020-20604-3. Hiroyasu S, Zeglinski MR, Zhao H, Pawluk MA, Turner CT, Kasprick A, Tateishi C, Nishie W, Burleigh A, Lennox PA, Van Laeken N, Carr NJ, Petersen F, Crawford RI, Shimizu H, Tsuruta D, Ludwig RJ, Granville DJ. Granzyme B inhibition reduces disease severity in autoimmune blistering diseases. *Nat Commun*. 2021 Jan 12;12(1):302. doi: 10.1038/s41467-020-20604-3.

Chen Y, Li S, Huang R, Zhang Z, **Petersen F**, Zheng J, Yu X. Comprehensive meta-analysis reveals an association of the HLA-DRB1*1602 allele with autoimmune diseases mediated predominantly by autoantibodies. *Autoimmun Rev*. 2020 Jun;19(6):102532. doi: 10.1016/j.autrev.2020.102532.

Shu Y, Qiu W, Zheng J, Sun X, Yin J, Yang X, Yue X, Chen C, Deng Z, Li S, Yang Y, Peng F, Lu Z, Hu X, **Petersen F**, Yu X. HLA class II allele DRB1*16:02 is associated with anti-NMDAR encephalitis. *J Neurol Neurosurg Psychiatry*. 2019 Jun;90(6):652-8. doi: 10.1136/jnnp-2018-319714.

Yu X, Akbarzadeh R, Pieper M, Scholzen T, Gehrig S, Schultz C, Zillikens D, König P, **Petersen F**. Neutrophil adhesion is a prerequisite for antibody-mediated proteolytic tissue damage in experimental models of epidermolysis bullosa acquisita. *J Invest Dermatol* (2018) 138:1990-8. doi: 10.1016/j.jid.2018.03.1499.

Epp A, Hobusch J, Bartsch YC, Petry J, Lilienthal GM, Koeleman CAM, Eschweiler S, Mobs C, Hall A, Morris SC, Braumann D, Engellenner C, Bitterling J, Rahmoller J, Leliavski A, Thurmann R, Collin M, Moremen KW, Strait RT, Blanchard V, Petersen A, Gemoll T, Habermann JK, **Petersen F**, Nandy A, Kahlert H, Hertl M, Wuhler M, Pflutzner W, Jappe U, Finkelman FD, Ehlers M. Sialylation of IgG antibodies inhibits IgG-mediated allergic reactions. *J Allergy Clin Immunol* (2018) 141:399-402 doi: 10.1016/j.jaci.2017.06.021.

Petersen F, Yue X, Riemekasten G, Yu X. Dysregulated homeostasis of target tissues or autoantigens - a novel principle in autoimmunity. *Autoimmun Rev* (2017) 16:602-11 doi: 10.1016/j.autrev.2017.04.006

Kasper B, Brandt E, Ernst M, **Petersen F**. Neutrophil adhesion to endothelial cells induced by platelet factor 4 requires sequential activation of Ras, Syk, and JNK MAP kinases. *Blood*. 2006 Mar 1;107(5):1768-75. doi: 10.1182/blood-2005-06-2501

Kasper B, Brandt E, Bulfone-Paus S, **Petersen F**. Platelet factor 4 (PF-4)-induced neutrophil adhesion is controlled by src-kinases, whereas PF-4-mediated exocytosis requires the additional activation of p38 MAP kinase and phosphatidylinositol 3-kinase. *Blood*. 2004 Mar 1;103(5):1602-10. doi: 10.1182/blood-2003-08-2802.