

## *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: 4.4417; h-index:36; h-index since 2017: 24 (Google Scholar Sept 26<sup>th</sup>, 2022)*

## Top-10 selected Publications

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

Yue X, **Petersen F**, Shu Y, Kasper B, Magatsin JD, Ahmadi M, Yin J, Wax J, Wang X, Heidecke H, Lamprecht P, Müller A, Yu X, Riemekasten G. Transfer of PBMC From SSC Patients Induces Autoantibodies and Systemic Inflammation in Rag2<sup>-/-</sup>/IL2rg<sup>-/-</sup> Mice. **Front Immunol**. 2021 Jun 23;12:677970. doi: 10.3389/fimmu.2021.677970

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, Engellener 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.