

Curriculum Vitae and Publication Record

Name Prof. Dr. rer. nat. **Silke Meiners**
Contact Research Center Borstel/Leibniz Lung Center
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Professional Experience

2024 - 2025 Visiting professor at Trinity College Dublin, Ireland
Since 2021 W3-Leibniz Professorship for Immunoproteasome Research at the Christian-Albrechts-University Kiel (CAU) and research group leader at the Research Center Borstel/Leibniz Lung Center
2017 - 2021 Associate professor (extracurricular, Prof. apl.) at the Medical faculty of the Ludwig-Maximilians-Universität München (LMU)
2017 - 2018 Visiting professor at the University of Pittsburgh Medical Center (UPMC), Pittsburgh, USA
2010 - 2021 Head of the research group „Proteasome Function in Lung Disease“ at the Comprehensive Pneumology Center (CPC), Helmholtz Center Munich
2008 Habilitation in Biochemistry at the Charité, Berlin
2000 - 2008 Assistant professor at the Cardiology Research Lab at the Charité, Berlin
1997 - 1999 Postdoc in the Institute of Biochemistry at the Charité, Berlin
1994 - 1997 Dissertation at the Max Delbrück Center for Molecular Medicine (MDC), Berlin
1992 - 1993 Diploma at the Institute of Genetics of the Rheinische Friedrich Wilhelms-University Bonn
1990 - 1991 Erasmus fellowship at the University of East Anglia in Norwich/UK

Selected Professional Activities and Memberships

2021 - 2025 Conference and Seminars Director of the European Respiratory Society (ERS), organizer of the Lung Science Conference (LSC)
Since 2024 Associate editor of the *European Respiratory Review*
Since 2022 Principal Investigator of the CAU Cluster of Excellence *Precision Medicine in Inflammation (PMI)*
Since 2020 Associate editor of the *European Respiratory Journal*
Since 2021 Associate editor of the *American Journal of Physiology Lung Physiology*
2018 - 2021 Associate editor of the *ERS Monograph Book Publications*
Since 2017 Co-chair of the Academy of the Deutsches Zentrum für Lungenforschung (DZL)
2013 - 2016 Member of the program committee of the Respiratory Cell and Molecular Biology assembly of the American Thoracic Society (ATS)
2012 - 2021 Ombudsperson for the PhD Program of the Helmholtz Center Munich
since 2012 Peer reviewer for International Science Foundations such as Israeli Science Foundation (ISF), Deutsche Forschungsgemeinschaft (DFG), Deutsche Krebshilfe, L'Agence national de la recherche (ANR), Asthma UK Research
Since 2011 Principal Investigator of the Deutsches Zentrum für Lungenforschung (DZL)

since 2008 Peer reviewer for international journals including Nature Communication, Lancet Respiratory Medicine, Journal of Clinical Investigation, Nature Metabolism, European Respiratory Journal, American Journal of Critical Care Medicine

Honors and Recognitions

2023 *Dorothea-Erxleben Prize* of the excellence cluster *Precision Medicine in Inflammation* (PMI), Kiel
 2021 Leibniz-Professorship *Best minds*
 2012 1st prize of the science slam at Helmholtz Center Munich
 2005 - 2008 Fellowship for habilitation of the Charité Berlin
 1996 PhD prize of the Max-Delbrück Center for Molecular Medicine, Berlin

Teaching and mentoring

PhD Dissertations at the CAU, Kiel Ongoing: 5
 PhD Dissertations at the University Munich Completed: 16
 MD dissertations at the Medical Faculty of the University Munich Completed: 5
 Ongoing: 2
 Master (MSc)-theses Completed: 5
 Bachelor (BSc) Thesis Completed: 1

Selected 3rd party funding

Funding	Role	Topic	Time
285 800,-	PI	DFG-CRC1713: Immunoproteasomes in foeto-maternal immune responses and immune priming	2025-2029
213 550,-	Co-PI	DFG-SPP2453: Regulation of the proteasome by mitochondrial import stress	2024-2026
999 361,-	PI	Leibniz-Alliance: PRO-Lung-ImmunoPROteasomes in LUNG health and disease“	2021-2025
269 925,-	Co-PI	DFG-ANR: PA200 in myofibroblast differentiation and fibrosis of the lung	2021-2024
999 753,-	PI, Coordinator	BMBF: Alternative Proteasome Complexes as Target for Lung Cancer Therapy	2020-2023
228 800,-	PI, Coordinator	Deutsches Zentrum für Lungenforschung (DZL) clinical study: Proteasome activity profiling in blood	2018-2021
107 140,-	Co-PI	Else-Kröner-Fresenius Stiftung: Validating proteasome activity as a potential biomarker for smoke-related chronic lung and cardiovascular diseases	2016-2018
264 000,-	PI, Coordinator	Helmholtz Association: Proteasome in lung aging	2012-2015

10 Selected publications

1. Chen J, Wang X, Schmalen A, Haines S, Wolff M, Ma H, Zhang H, Stoleriu MG, Nowak J, Nakayama M, Bueno M, Brands J, Mora AL, Lee JS, Krauss-Etschmann S, Dmitrieva A, Frankenberger M, Hofer TP, Noessner E, Moosmann A, Behr J, Milger K, Deeg CA, Staab-Weijnitz CA, Hauck SM, Adler H, Goldmann T, Gaede KI, Behrends J, Kammerl IE, **Meiners S**. Antiviral CD8⁺ T cell immune responses are impaired by cigarette smoke and in COPD. *Eur Respir J*. 2023 Jun 29:2201374.
2. Javitt A, Shmueli MD, Kramer MP, Kolodziejczyk AA, Cohen IJ, Radomir L, Sheban D, Kamerl I, Litchfield K, Bab-Dinitz E, Zadok O, Neiens V, Ulman A, Wolf-Levy H, Eisenberg-Lerner A, Kacen A, Alon M, Rêgo AT, Stacher-Priehse E, Lindner M, Koch I, Bar J, Swanton C, Samuels Y, Levin Y, da Fonseca PCA, Elinav E, Friedman N, **Meiners S**, Merbl Y. The proteasome regulator PSME4 modulates proteasome activity and antigen diversity to abrogate antitumor immunity in NSCLC. *Nat Cancer*. 2023 May;4(5):629-647.
3. Wang X, Zhang H, Wang Y, Bramasole L, Guo K, Mourtada F, Meul T, Hu Q, Viteri V, Kammerl I, Königshoff M, Lehmann M, Magg T, Hauck F, Fernandez IE, **Meiners S**. DNA sensing via the cGAS/STING pathway activates the immunoproteasome and adaptive T-cell immunity. *EMBO J*. (2023) e110597.
4. Kammerl IE, Hardy S, Flexeder C, Urmann A, Peierl J, Wang Y, Vosyka O, Frankenberger M, Milger K, Behr J, Koch A, Merl-Pham J, Hauck SM, Pilette C, Schulz H, **Meiners S**. Activation of immune cell proteasomes in peripheral blood of smokers and COPD patients - implications for therapy. *Eur Respir J*. 2022 Mar 3;59(3):2101798.
5. Meul T, Berschneider K, Schmitt S, Mayr CH, Mattner LF, Schiller H, Yazgili A, Wang W, Lukas C, Prehn C, Adamski J, Graf E, Schwarzmayr T, Perocchi F, Kukut A, Trifunovic A, Kremer L, Prokisch H, Popper B; von Toerne C, Hauck SM, Zischka H, **Meiners S**. Mitochondrial regulation of the 26S proteasome. *Cell Rep*. 2020 Aug 25;32(8):108059.
6. Welk V, Coux O, Kleene V, Abeza C, Truembach D, Eickelberg O, **Meiners S**. Inhibition of Proteasome Activity Induces Formation of Alternative Proteasome Complexes. *J Biol Chem*. 2016 Jun 17;291(25):13147-59.
7. Kammerl IE, Dann A, Mossina A, Brech D, Lukas C, Vosyka O, Nathan P, Conlon TM, Wagner DE, Overkleeft HS, Prasse A, Rosas IO, Straub T, Krauss-Etschmann S, Königshoff M, Preissler G, Winter H, Lindner M, Hatz R, Behr J, Heinzelmann K, Yildirim AO, Noessner E, Eickelberg O, **Meiners S**. Impairment of Immunoproteasome Function by Cigarette Smoke and in COPD. *Am J Respir Crit Care Med*. 2016 Jun 1;193(11):1230-41.
8. Semren N, Welk V, Korfei M, Keller IE, Fernandez IE, Adler H, Günther A, Eickelberg O, **Meiners S**. Regulation of 26S Proteasome Activity in Pulmonary Fibrosis. *Am J Respir Crit Care Med*. 2015 Nov 1;192(9):1089-101.
9. van Rijt SH, Bölükbas DA, Argyo C, Datz S, Lindner M, Eickelberg O, Königshoff M, Bein T, **Meiners S**. Protease-Mediated Release of Chemotherapeutics from Mesoporous Silica Nanoparticles to ex Vivo Human and Mouse Lung Tumors. *ACS Nano*. 2015 Mar 24;9(3):2377-89.
10. **Meiners S**, Heyken D, Weller A, Ludwig A, Stangl K, Kloetzel PM, Krüger E. Inhibition of Proteasome Activity Induces Concerted Expression of Proteasome Genes and de novo Formation of Mammalian Proteasomes. *J Biol Chem*. 2003 Jun 13;278(24):21517-25.