

## Curriculum Vitae

**Wolfgang Kummer** Professor, Dr. med.  
d.o.b. August 25th, 1958, in Frankfurt/Main, Germany

### University Education

1990 Habilitation Anatomy and Cell Biology, Ruprecht-Karls-University, Heidelberg  
1985 Promotion Dr. med. ("summa cum laude"), University of Cologne  
1977–1983 Study of Medicine, University of Cologne, Cologne

### Scientific Career

Since 2016 Member of the senate and vice speaker (2016-2020) and speaker (2020- ) of section 11 of the National Academy of Sciences *Leopoldina*  
Since 2014 PI in SFB-TR84 "Innate Immunity of the Lung"  
2014 - 2018 President (2014-2015) and Executive Board Member (2014-2018) of the *Anatomische Gesellschaft*  
2012 - 2014 Speaker of the LOEWE Research Focus *Non-neuronal Cholinergic Systems*  
Since 2012 Faculty Member of the *German Center for Lung Research*  
2011 - 2014 Member Expert Panel *Skolkovo Foundation*, Russia  
2006 - 2018 Faculty Member of the *Excellence Cluster CardioPulmonary System/Cardiopulmonary Institute (ECCPS/CPI)*  
2000 - 2013 Secretary (2007-2011), European Representative (2000-2007) and Executive Board Member (2011-2013) of the *International Society for Autonomic Neuroscience*  
1999 - 2021 Chair of the Selection Committee of the *Chihiro and Kiyoko Yokochi Fund* of the *Ichiro Kanehara Foundation*, Japan  
1995 - 2015 President (1995-1997), Board Member (1994-1998), and Chair of the Feulgen Prize Jury (2001-2015) of the *Society for Histochemistry*  
Since 1994 Professor of Anatomy and Cell Biology, Institute of Anatomy and Cell Biology, Justus-Liebig-University, Giessen, Germany (declined offers to University of Hamburg in 2000 and to Ludwig Maximilians University Munich in 2008)  
1992 - 1994 Professor of Anatomy and Cell Biology, Institute of Anatomy and Cell Biology, Philipps-University, Marburg, Germany  
1993 Guest Professor at the Asthma and Allergy Center of the Johns Hopkins University, Baltimore, MD, USA, Section Dr. B. Udem & Dr. A. Myers, NIH-BMBF Exchange  
1985 - 1992 Postdoctoral Fellow and Lecturer, Institute of Anatomy and Cell Biology, Ruprecht-Karls-University, Heidelberg, Germany  
1988 Guest scientist at the Centre for Neurosciences, Flinders University of South Australia, (Lab. Prof. J.B. Furness), fellow of the Boehringer Mannheim Foundation  
Ongoing Editorial Board Member: *Cell Tissue Research, Histochemistry, Anatomical Science International*

### Awards and Honors

2011 Pfizer Visiting Professor in Pneumology at the Johns Hopkins Univ., Baltimore, USA  
2006 Eugen-Rehfishch-Award, Forum Urodynamicum  
2002 Friedrich-Dost-Prize, Medical Society, Giessen  
2001 Election to the German Academy of Natural Sciences Leopoldina  
1993 Wolfgang-Bargmann-Prize, Anatomische Gesellschaft  
1990 Julius-Redel-Prize, Medical Faculty, Ruprecht-Karls-University Heidelberg  
1989 Heymans-De Castro-Neil-Award, International Society for Arterial Chemoreception

### Citation Record

Total citations: 15,976; h-index: 68; h-index since 2017: 33 (Google Scholar July 27<sup>th</sup>, 2022)

## Top-10 selected Publications

Keshavarz M, Faraj Tabrizi S, Ruppert AL, Pfeil U, Schreiber Y, Klein J, Brandenburger I, Lochnit G, Bhushan S, Perniss A, Deckmann K, Hartmann P, Meiners M, Mermer P, Rafiq A, Winterberg S, Papadakis T, Thomas D, Angioni C, Oberwinkler J, Chubanov V, Gudermann T, Gärtner U, Offermanns S, Schütz B, **Kummer W**. Cysteinyl leukotrienes and acetylcholine are biliary tuft cell cotransmitters. **Sci Immunol** 2022; 7(69):eabf6734. doi:[10.1126/sciimmunol.abf6734](https://doi.org/10.1126/sciimmunol.abf6734)

Perniss A, Liu S, Boonen B, Keshavarz M, Ruppert AL, Timm T, Pfeil U, Soultanov A, Kusumakshi S, Delventhal L, Aydin Ö, Pyrsi M, Deckmann K, Hain T, Schmidt N, Ewers C, Günther A, Lochnit G, Chubanov V, Gudermann T, Oberwinkler J, Klein J, Mikoshiba K, Leinders-Zufall T, Offermanns S, Schütz B, Boehm U, Zufall F, Bufe B, **Kummer W**. Chemosensory cell-derived acetylcholine drives tracheal mucociliary clearance in response to virulence-associated formyl peptides. **Immunity** 2020; 52(4):683-699. doi: [10.1016/j.immuni.2020.03.005](https://doi.org/10.1016/j.immuni.2020.03.005).

Broichhagen J, Jurastow I, Iwan K, **Kummer W**, Trauner D. Optical control of acetylcholinesterase with a tacrine switch. **Angew Chem Int Ed Engl** 2014; Jul 14;53(29):7657-60. doi: [10.1002/anie.201403666](https://doi.org/10.1002/anie.201403666). Epub 2014 Jun 4.

Deckmann K, Filipski K, Krasteva-Christ G, Fronius M, Althaus M, Rafiq A, Papadakis T, Renno L, Jurastow I, Wessels L, Wolff M, Schütz B, Weihe E, Chubanov V, Gudermann T, Klein J, Bschleipfer T, **Kummer W**. Bitter triggers acetylcholine release from polymodal urethral chemosensory cells and bladder reflexes. **Proc Natl Acad Sci U S A** 2014 Jun 3;111(22):8287-92. doi: [10.1073/pnas.1402436111](https://doi.org/10.1073/pnas.1402436111)

Krasteva G, Canning BJ, Hartmann P, Veres TZ, Papadakis T, Mühlfeld C, Schliecker K, Tallini YN, Braun A, Hackstein H, Baal N, Weihe E, Schütz B, Kotlikoff M, Ibanez-Tallon I, **Kummer W**. Cholinergic chemosensory cells in the trachea regulate breathing. **Proc Natl Acad Sci U S A** 2011 Jun 7;108(23):9478-83. doi: [10.1073/pnas.1019418108](https://doi.org/10.1073/pnas.1019418108).

Klein MK, Haberberger RV, Hartmann P, Faulhammer P, Lips KS, Krain B, Wess J, **Kummer W**, König P. Muscarinic receptor subtypes in cilia-driven transport and airway epithelial development. **Eur Respir J** 2009 May;33(5):1113-21. doi: [10.1183/09031936.00015108](https://doi.org/10.1183/09031936.00015108).

Lips KS, Wunsch J, Zarghooni S, Bschleipfer T, Schukowski K, Weidner W, Wessler I, Schwantes U, Koepsell H, **Kummer W**. Acetylcholine and molecular components of its synthesis and release machinery in the urothelium. **Eur Urol** 2007 Apr;51(4):1042-53. doi: [10.1016/j.eururo.2006](https://doi.org/10.1016/j.eururo.2006).

König P, Dedio J, Müller-Esterl W, **Kummer W**. Distribution of the novel eNOS-interacting protein **NOSIP** in the liver, pancreas, and gastrointestinal tract of the rat. **Gastroenterology** 2002 Jul;123(1):314-24. doi: [10.1053/gast.2002.34212](https://doi.org/10.1053/gast.2002.34212)

Fink L, Seeger W, Ermert L, Hänze J, Stahl U, Grimminger F, **Kummer W**, Bohle RM. Real-time quantitative RT-PCR after laser-assisted cell picking. **Nat Med** 1998 Nov;4(11):1329-33. doi: [10.1038/3327](https://doi.org/10.1038/3327)

Fischer A, McGregor GP, Saria A, Philippin B, **Kummer W**. Induction of tachykinin gene and peptide expression in guinea pig nodose primary afferent neurons by allergic airway inflammation. **J Clin Invest** 1996 Nov 15;98(10):2284-91. doi: [10.1172/JCI119039](https://doi.org/10.1172/JCI119039).