

## Lampert, Angelika, Univ-Prof. Dr. med.

Lab interest: **Voltage-gated sodium channels in physiology and disease, pain research**

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### PROFESSIONAL CAREER

- since 2013 Full professor, Institute of Physiology, RWTH Aachen University
- since 2009 Independent group leader (third party funded), Institute of Physiology and Pathophysiology, University of Erlangen-Nuremberg
- 09/08-07/09 Visiting Scientist, Institute of Physiology, University of Kiel
- 2008-2009 Research Scientist, Institute of Physiology and Pathophysiology, University of Erlangen-Nuremberg
- 2007-2008 Akademische Rätin (Research Scientist), Department of Physiological Genomics, LMU Munich (M. Götz/B. Sutor)
- 2004-2007 Postdoctoral Fellow, Department of Neurology, The Center for Neuroscience and Regeneration Research, Yale University, New Haven, USA (S. G. Waxman)
- 2003-2004 Research Fellow, Institute of Physiology I, University of Tübingen, Germany

### UNIVERSITY EDUCATION AND ACADEMIC DEGREES

- 2013 Specialist, Physiology (Fachärztin für Physiologie)
- 2011 Habilitation, University of Erlangen-Nürnberg
- 2002-2003 Residency Physiology I and Internal Medicine III, University of Tübingen
- 07.01.2003 Doctor of medicine, University of Jena (supervisor: S.H. Heinemann)
- 1995-2001 MD program, Universities of Jena and Strasbourg, France

### AWARDS

- 2012 1st price, Award for Pain Research 2012 in the category „basic science“ of the German Society for the Study of Pain (DGSS)
- 2007-2009 Career Development Award “Fast Track” of the Robert Bosch Foundation
- 2007 57th meeting of the Nobel Laureates, Lindau (Physiology or Medicine)

### SELECTED RESEARCH FUNDING (PAST 5 YEARS)

- 2020 host, Humboldt Research Fellowship for Experienced Researchers to Prof. Alexander Binshtok
- 2019-2023 DFG Research Training Group 2415 “ME3T - Mechanobiology in Epithelial 3D Tissue Constructs”, PI
- 2019-2022 BMBF consortium, co-coordinator
- 2018-2019 Seed fund of the Exploratory Research Space @ RWTH Aachen
- 2018-2022 DFG Research Training Group 2416 “MultiSenses – MultiScales: Novel approaches to decipher neural processing in multisensory integration”, PI
- 2018-2022 School for Simulation and Data Sciences (SSD) at FZ Jülich and RWTH Aachen University, with J.-P. Machtens.
- 2018-2021 German Research Council (DFG Einzelantrag LA2740/3-1)
- 2017-2018 Seed fund of the Exploratory Research Space @ RWTH Aachen (ERS, OPSF432), with M. Rothermel.

## MOST IMPORTANT PUBLICATIONS

1. Meents, J.E.\* , E. Bressan\* , S. Sontag\* , A. Foerster\* , P. Hautvast, C. Rösseler, M. Hampl, H. Schüler, R. Goetzke, T. K. Chi Le, I. P. Kleggetveit, K.Le Cann, C. Kerth, A. M. Rush, M. Rogers, Z. Kohl, M. Schmelz, W. Wagner, E. Jørum, B. Namer, B. Winner, M. Zenke, **A. Lampert**. “The role of Nav1.7 in human nociceptors: insights from human iPSC cell-derived sensory neurons of erythromelalgia patients.” *Pain*, 2019 March 22.
2. Namer B.# , D. Schmidt# , E. Eberhardt, M. Maroni, E. Dorfmeister, I. P. Kleggetveit, L. Kaluza, J. Meents, A. Gerlach, Z. Lin, A. Winterpacht, E. Dragicevic, Z. Kohl, J. Schüttler, I. Kurth, T. Warncke, E. Jorum, B. Winner\* , **A. Lampert\***. “Pain relief in a neuropathy patient by lacosamide: proof of principle of clinical translation from patient-specific iPSC cell-derived nociceptors.” *EbioMedicine*, 2019, 39: 401-408.
3. Kaluza L., J.E. Meents, M. Hampl, C. Rösseler, P.A.I. Hautvast, S. Detro-Dassen, R. Hausmann, G. Schmalzing, **A. Lampert**. “Loss-of-function of Nav1.8/D1639N linked to human pain can be rescued by lidocaine.” *European Journal of Physiology*, 2018 Aug 11.
4. Meents, J.E., K. Juhasz, S. Stölzle-Feix, V. Peuckmann-Post, R. Rolke, **A. Lampert**. “The opioid oxycodone use-dependently inhibits the cardiac sodium channel Nav1.5”. *British Journal of Pharmacology*, 2018 Jul;175(14):3007-3020.
5. Körner, J., J.E. Meents, J. P. Machtens, **A. Lampert**. “ $\beta$ 1 subunit stabilises sodium channel Nav1.7 against mechanical stress”. *J. Physiol. (London, U.K.)*, 2018 June 596(12):2433-2445.
6. Hampl, M., E. Eberhardt, A. O. O'Reilly, **A. Lampert**. “Sodium channel slow inactivation interferes with open channel block”. *Scientific Reports* 2016 May 13;6:25974.
7. Mishra HK, Prots I, Havlicek S, Kohl Z, Perez-Branguli F, Boerstler T, Anneser L, Minakaki G, Wend H, Hampl M, Leone M, Brückner M, Klucken J, Reis A, Boyer L, Schuierer G, Behrens J, **Lampert A**, Engel FB, Gage FH, Winkler J, Winner B. “GSK3 $\beta$ -dependent dysregulation of neurodevelopment in SPG11-patient iPSC model.” *Ann Neurol*. 2016 Mar 11;79:826–840
8. Eberhardt\* , E., S. Havlicek\* , D. Schmidt\* , A. S. Link, C. Neacsu, Z. Kohl, M. Hampl, A. M. Kist, A. Klinger, C. Nau, J. Schüttler, C. Alzheimer, J. Winkler, B. Namer, B. Winner#, **A. Lampert#**. “Pattern of functional TTX-resistant sodium channels reveals developmental stage of human iPSC- and ES cell-derived nociceptors.” *Stem Cell Reports*, 2015 Sep 8;5(3):305-13.
9. Vetter, I., F. Touska, A. Hess, R. Hinsbey, S. Sattler, **A. Lampert**, M. Sergejeva, B. Namer, A. Sharov, L. S. Collins, M. Eberhardt, M. Engel, P. J. Cabot, J. N. Wood, V. Vlachová, P. W. Reeh, R. J. Lewis and K. Zimmermann. “Ciguatoxins activate specific cold pain pathways to elicit burning pain from cooling”. *The EMBO Journal*, 2012 Oct 3;31(19):3795-808.
10. Sittl\* , R., **A. Lampert\***, T. Huth, E. T. Schuy, A. S. Link, J. Fleckenstein, C. Alzheimer, P. Grafe and R. W. Carr. “Anti-cancer drug oxaliplatin induces acute cooling-aggravated neuropathy via Nav1.6-mediated resurgent and persistent current”. *Proceedings of the National Academy of Sciences (PNAS)* 2012, 109 (17): 6704-6709. (\*shared first authorship)