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Date of birth: October 25, 1948

Gender: male

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Current position: Professor of Physiology, Vice Director

CURRICULUM VITAE

University Education

1968 Preclinical medical studies, University of Hamburg

1971 Clinical medical studies, University of Erlangen

Scientific degrees

1975 MD, University of Erlangen

1981 PhD in Physiology, "summa cum laude", University of Erlangen

1986 Habilitation (2nd doctorate) in Physiology, University of Heidelberg

Professional experience

1975 Graduate fellow (for PhD), Inst. Physiology and Biocybernetics, University of Erlangen

1978 Internships, Internal Medicine and Neurosurgery, University of Erlangen

1979 Postdoc, Institute of Physiology, University of Munich

1982 Research associate, Human Pharmacodynamic Research (HPR-CRO.com), Munich

1982 Assistant Professor, Institute of Physiology, University of Heidelberg

1987 Professor of Physiology, Institute of Physiology and Pathophysiology, University of Erlangen

1992 Vice director, Institute of Physiology and Pathophysiology, University of Erlangen

2007-2009 Acting Director, Institute of Physiology and Pathophysiology, University of Erlangen

Awards and honors

1992 1st Prize in Pain Research, German Chapter of IASP

2003 Milos Jancso Medal, University of Szeged (Hungary)

2007 Contributed to works awarded 1st and 2nd Prize in Pain Research, German Chapter of IASP

- 2013 Contributed to work awarded Du Bois-Reymond Prize of the German Physiol. Soc.
- 2015 Sertürner Price for Pain Therapy Research (contributed)

Memberships, panels and coordinating functions:

- Memberships: Society for Neuroscience (USA), International Association for the Study of Pain (IASP), Deutsche Physiologische Gesellschaft, Neurowissenschaftliche Gesellschaft (Germany), European Neuropeptide Club
- 1986-1992 PI in DFG-Research Consortium Nociception and Pain
- 1988-1990 NATO Twinning Grant with Dept. Physiology, Univ. of Bristol (UK)
- 1992-1996 Board member in DFG Program Grant (SFB 353)
- 1992-2003 PI in DFG Program Grant (SFB 353)
- 1993-1997 Ethical Review Board member, University of Erlangen
- 1994-1998 Coordinator in European Network Grant "Cellular Model of Nociception"
- 2001-2007 PI in German-Israeli (GIF) Twinning Grants with Dept. Cell Biology, Hebrew University of Jerusalem
- 2002-2010 Member of Scientific Research Council of IASP (Intl. Assoc. for the Study of Pain)
- 2004-2007 PI in European PAINGENES Consortium (fp6)
- 2009 Guest Professorship at la Sapienza-University, Rome, Italy

Peer Reviewing

- Journals Nature, Science, Cell, Neuron, PNAS, J. Clin. Investigation, PLoS Biology, PLoS One, J. Neuroscience, J. Neurophysiology, Pain, Anesthesiology, Neurosci. Letters, J. of Pain, Gastroenterology etc.
- Grants DFG, BMBF, Sander-Stiftung, MRC & BBSRC (UK), NIH (USA), Austria Science Fund, Swiss National Fund etc.

Funding

Sander-Stiftung 2014.068.1, Altria CS Inc. (USA), NIH RO1 (2016-2019)

Max. 10 most important publications

1. Babes A, Sauer SK, Moparathi L, Kichko TI, Neacsu C, Namer B, Filipovic M, Zygmunt PM, **Reeh PW**, Fischer MJ. Photosensitization in Porphyrias and Photodynamic Therapy Involves TRPA1 and TRPV1. *J Neurosci.* 36 (2016) 5264-5278.
2. Eberhardt M, Dux M, Namer B, Miljkovic J, Cordasic N, Will C, Kichko TI, de la Roche J, Fischer M, Suárez SA, Bikiel D, Dorsch K, Leffler A, Babes A, Lampert A, Lennerz JK, Jacobi J, Martí MA, Doctorovich F, Högestätt ED, Zygmunt PM, Ivanovic-Burmazovic I, Messlinger K, **Reeh P***, Filipovic MR*. H2S and NO cooperatively regulate vascular tone by activating a neuroendocrine HNO-TRPA1-CGRP signalling pathway. *Nature Communications* 5 (2014) 4381.
3. Meseguer V, Alpizar YA, Luis E, Tajada S, Denlinger B, Fajardo O, Manenschijn JA, Fernández-Peña C, Talavera A, Kichko T, Navia B, Sánchez A, Señaris R, Reeh P, Pérez-García MT, López-López JR, Voets T, Belmonte C, Talavera K, Viana F. TRPA1 channels mediate acute neurogenic inflammation and pain produced by bacterial endotoxins. *Nature Communications* 5 (2014) 3125
4. Vetter I, Touska F, Hess A, Hinsbey R, Sattler S, Lampert A, Sergejeva M, Sharov A, Collins LS, Eberhardt M, Engel M, Cabot PJ, Wood JN, Vlachová V, **Reeh PW***, Lewis RJ, Zimmermann K*. Ciguatoxins activate specific cold pain pathways to elicit burning pain from cooling. *EMBO Journal* 31 (2012) 3795-3808.

5. Bierhaus A, Fleming T, Stoyanov S, Leffler A, Babes A, Neacsu C, Sauer SK, Eberhardt M, Schnölzer M, Lasischka F, Neuhuber WL, Kichko TI, Konrade I, Elvert R, Mier W, Pirags V, Lukic IK, Morcos M, Dehmer T, Rabbani N, Thornalley P, Edelstein D, Nau C, Forbes J, Humpert PM, Schwaninger M, Ziegler D, Stern DM, Cooper M, Haberkorn U, Brownlee M, **Reeh P***, Nawroth PP*. Methylglyoxal Modification of Nav1.8 Facilitates Nociceptive Neuron Firing and Causes Hyperalgesia in Diabetic Neuropathy. *Nature Medicine* 18 (2012) 926-933.
6. Engel MA, Leffler A, Niedermirtl F, Babes A, Zimmermann K, Filipovic MR, Izydorczyk I, Eberhardt M, Kichko T, Mueller-Tribbensee SM, Khalil M, Siklosi N, Nau C, Ivanovic-Burmazovic I, Neuhuber W, Becker C, Neurath MF, **Reeh PW**. TRPA1 and substance P mediate colitis in mice. *Gastroenterology* 141 (2011) 1346-1358.
7. Zimmermann K, Hein A, Hager U, Kaczmarek JS, Turnquist BP, Clapham DE, **Reeh PW**. Phenotyping sensory nerve endings *in vitro* in the mouse. *Nature Protocols* 4 (2009) 174-196.
8. Leffler A., Rehner D., Wellhöfer S., Fischer M.J., Kistner K., Sauer S.K., Gavva N.R., **Reeh P.W.***, Nau C.*: The vanilloid receptor TRPV1 is activated and sensitized by local anaesthetics causing a release of calcitonin gene-related peptide. *Journal of Clinical Investigation* 118 (2008) 763-776
9. Zimmermann K., Leffler A., Babes A., Cendan C.M, Carr R.W., Kobayashi J., Nau C., Wood J.N., **Reeh P.W.:** Sensory neuron sodium channel Na_v1.8 is essential for pain at cold temperatures. *Nature* 447 (2007) 855-858.
10. Mogil J.S., Miermeister F., Seifert F., Strasburg K., Zimmermann K., Reinold H., Austin J.S., Bernardini N., Chesler E.J., Hofmann H.A., Hordo C., Messlinger K, Nemmani K.V.S., Rankin A.J., Ritchie J., Siegling A., Smith S.B., Sotocinal S., Vater A., Wilson S.G., Klusmann S., Quirion R. Michaelis M., Devor M., **Reeh P.W.:** Variable sensitivity to noxious heat is mediated by differential expression of the CGRP gene. *Proceedings of the National Academy of Sciences* 102 (2005) 12938-12943.