Prof. Dr. STEFAN LECHNER

1) General information

Date of birth: 17 May, 1974
Gender: Male
Address: University Medical Center Hamburg-Eppendorf
Department of Anaesthesiology
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Position: Professor for Experimental Anaesthesiology (W2)
Children: Two (* 2001, * 2004)
Parental leave, if applicable: None

2) University training and degree

1992 - 2000 Studies in Chemistry and Biochemistry, Technical University Vienna, Austria

3) Advanced academic qualifications

2004 Doctoral dissertation in Pharmacology, Mentor: Prof. Dr. Stefan Böhm, Institute of Pharmacology, Medical University Vienna, Austria

4) Postgraduate professional career

2013 - 2021 Group leader, Institute of Pharmacology, Medical Faculty of Heidelberg, Heidelberg University, Germany
2006 - 2013 Postdoctoral fellow with Prof. Dr. Gary R. Lewin, Max-Delbrück-Centre for Molecular Medicine, Berlin, Germany
2005 Scientist, Eccocell Biotechnology GmbH, Graz Austria
2004 Postdoctoral fellow with Prof. Dr. Stefan Böhm, Institute of Pharmacology, Medical University Vienna, Austria

5) Other

Awards and honours:

2018 Chica-Heinz Schaller Long term fellowship
2013 Heisenberg Fellowship of the German Research Foundation

Panels and coordinating functions:

2015 - 2012 Steering Committee member for the DFG Collaborative Research Center 1158 'Structure-function properties of neural pathways underlying acute and chronic pain and their reorganization'
2008 - 2013 Elected member of the Scientific Council of the Max-Delbrück-Centre for Molecular Medicine Berlin

Editorial boards:

Since 2016 Associate Editor at PAIN

6) Publications

A)

Verkest C., Schaefer I., Nees T.A., Na W., Jegelka J.M., Taberner F.J. and Lechner S.G. An intrinsically disordered intracellular domain of PIEZO2 is required for force-from-filament activation of the channel. **Nature Communications**; 13(1) 1365, 2022.

Taberner F.J., Prato, V., Schaefer, I., Schrenk-Siemens, K., Heppenstall P.A. and Lechner, S.G. Structure-guided examination of the mechanogating mechanisms of PIEZO2. **PNAS**; 116, 14260–14269, 2019.

Schäfer I., Prato V., Arcourt A., Taberner F.J. and Lechner S.G. Differential modulation of voltage-gated sodium channels by nerve growth factor in three major subsets of TrkA-expressing nociceptors. **Molecular Pain**; 1744806918814640, 2018.

Dhandapani R, Arokiaraj CM, Taberner FJ, Pacifico P, Raja S, Nocchi L, Portulano C, Franciosa F, Maffei M, Hussain AF, de Castro Reis F, Reymond L, Perlas E, Garcovich S, Barth S, Johnsson K, Lechner SG, Heppenstall PA. Control of mechanical pain hypersensitivity in mice through ligand-targeted photoablation of TrkB-positive sensory neurons. **Nature Communications**; 9(1):1640, 2018.

Prato V, Taberner FJ, Hockley JRF, Callejo G, Arcourt A, Tazir B, Hammer L, Schad P, Heppenstall PA, Smith ES, Lechner SG. Functional and Molecular Characterization of Mechanoinsensitive "Silent" Nociceptors. **Cell Reports**; 21(11):3102-3115, 2017.

Arcourt A, Gorham L, Dhandapani R, Prato V, Taberner FJ, Wende H, Gangadharan V, Birchmeier C, Heppenstall PA, Lechner SG. Touch Receptor-Derived Sensory Information Alleviates Acute Pain Signaling and Fine-Tunes Nociceptive Reflex Coordination. **Neuron**; 93(1):179-193, 2017.

Schrenk-Siemens K, Wende H, Prato V, Song K, Rostock C, Loewer A, Utikal J, Lewin GR, Lechner SG, Siemens J. PIEZO2 is required for mechanotransduction in human stem cell-derived touch receptors. **Nature Neuroscience**; 18(1):10-16, 2015.

Wende H, Lechner SG, Cheret C, Bourane S, Kolanczyk ME, Pattyn A, Reuter K, Munier FL, Carroll P, Lewin GR, Birchmeier C. The transcription factor c-Maf controls touch receptor development and function. **Science**; 335(6074):1373-1376, 2012.

Lechner SG, Markworth S, Poole K, Smith ES, Lapatsina L, Frahm S, May M, Pischke S, Suzuki M, Ibanez-Tallon I, Luft FC, Jordan J, Lewin GR. The molecular and cellular identity of peripheral osmoreceptors. **Neuron**; 69(2):332-344, 2011.

Heidenreich M*, Lechner SG*, Vardanyan V, Wetzel C, Cremers CW, De Leenheer EM, Aranguez G, Moreno-Pelayo MA, Jentsch TJ, Lewin GR. KCNQ4 K(+) channels tune mechanoreceptors for normal touch sensation in mouse and man. **Nature Neuroscience**; 15(1):138-145, 2011.

* Equally contributing authors

B) other publications: -

C) Patents: -