

Jürgen Sandkühler

Personal Data

Date of Birth: July 12th, 1957
Place of Birth: Recklinghausen, Germany
Nationality: German

Education

1977 – 1983 Medical School, Univ. Heidelberg, Germany
1983 – 1984 Medical School, Univ. Freiburg, Germany
1984 Graduation: M.D.
1987 Graduation: Ph.D. (Physiology)

Career History

1985 – 1995 Post-doctoral fellow (1985-1988), lecturer (1988-1989), assistant professor (1989-1995), Univ. of Heidelberg, Inst. of Physiology, Germany
1995 – 2000 Heisenberg-Award of the German Research Foundation, professorship
1995 Visiting Professor, Iowa-State Univ., Dept. of Physiology and Pharmacology, Ames, IA, USA
1996 – 1997 Visiting Professor, Univ. of Freiburg, Inst. of Physiology, Germany
1997 – 2001 Assistant Professor, Univ. of Heidelberg, Inst. of Physiology, Germany
1999 – 2001 Speaker of the Multidisciplinary Research Program "PAIN", Univ. of Heidelberg, Medical Faculty
Since 2001 Full Professor, Medical Univ. of Vienna, Center for Brain Research, Dept. of Neurophysiology
2004 – 2007 Deputy Director, Center for Brain Research, Medical of Univ. of Vienna
Since 2007 Director, Center for Brain Research, Medical Univ. of Vienna

Awards (5 most important)

1995 Heisenberg-Award, German Research Foundation (DFG)
2005 German Honorary Pain Prize, German Pain Society
2006 1st prize winner, Research Prize, German Chapter of the IASP
2009 1st prize winner, Research Prize, Austrian Chapter of the IASP
2012 1st prize winner, Sertürner Prize, Sertürner Society, Germany

Invitations to present at conferences (5 most important)

I have been invited to lecture for a large number of conferences and societies including plenary lectures at the 12th World Congress of Pain of the IASP, 2008 in Glasgow, U.K., and the IASP Neuropathic Pain Congress, 2010 in Athens, Greece, and for workshops at the

IASP World Congresses on Pain 2014 in Buenos Aires, Argentina, 1012 in Milan, Italy, and 2010 in Montreal, Canada.

Peer review activities, editorships, and/or memberships in academic organizations (5 most important)

Editorial boards: Science, Pain, The Journal of Neuroscience, Molecular Pain

Peer reviews: Science, Nature, Cell, Brain, Nature Neuroscience, PLoS Biology, The Journal of Neuroscience and many more

Academic organizations : International Association for the Study of Pain (IASP), Society for Neuroscience (SfN), Austrian and German Chapters of the IASP

Peer-reviewed and funded research projects (5 most important as responsible PI)

WWTF, 2008, Erasure of a spinal memory trace for pain by opioids, € 791,000

FWF, 2010, Synaptic long-term potentiation after opioid withdrawal, € 313,000

FWF, 2006, Impaired GABAergic inhibition in neuropathic pain, € 305,000

FWF, 2005, Synaptic mechanisms of inflammatory pain, € 353,000

FWF, 2002, Cellular Mechanisms of hyperalgesia, € 260,000

Key international cooperation partners (last 5 years)

Marzia Malcangio, King's College London, Guys' Campus, London, UK

Rebecca Seal, Department of Neurobiology, Pittsburgh, PA, USA

Claudia Sommer, Department of Neurology, University of Würzburg, Germany

10 most important scientific publications

Xanthos D, **Sandkühler J** (2014) Neurogenic neuroinflammation: inflammatory CNS reactions in response to neuronal activity, Nat Rev Neurosci, 15: 43-53

Sandkühler, J (2013) Spinal Cord Plasticity and Pain. In: McMahon, S.B.; Koltzenburg, M.; Tracey, I.; Turk, D.C., Wall and Melzack's Textbook of Pain Elsevier Saunders, Philadelphia, PA, USA: 94-110

Drdla R, Benrath J, Wunderbaldinger G, **Sandkühler J** (2012) Erasure of a spinal memory trace of pain by a brief, high-dose opioid administration, Science, 335: 235-238

Drdla R., Gassner M., Gingl E., **Sandkühler J.** (2009) Induction of synaptic long-term potentiation after opioid withdrawal, Science, 325: 207-210

Sandkühler, J. (2009) Models and mechanisms of hyperalgesia and allodynia, Physiol Rev, 89: 707-758

Ikeda H., Stark J., Fischer H., Wagner M., Drdla R., Jäger T., **Sandkühler J.** (2006) Synaptic amplifier of inflammatory pain in the spinal dorsal horn. Science, 312: 1659-1662

Ikeda H., Heinke B., Ruscheweyh R., **Sandkühler J.** (2003) Synaptic plasticity in spinal lamina I projection neurons that mediate hyperalgesia Science, 299: 1237-1240

Jonas P., Bischofberger J., **Sandkühler J.** (1998) Corelease of two fast neurotransmitters at a central synapse *Science*, 281: 419-424