

Löffler M, Schneider P, Schuh-Hofer S, Kamping S, Usai K, Treede RD, Nees F*, Flor H*. (2022) Stress-induced hyperalgesia instead of analgesia in patients with chronic musculoskeletal pain. *Neurobiology of Pain*. 2022 Dec 6;13:100110. doi: [10.1016/j.ynpai.2022.100110](https://doi.org/10.1016/j.ynpai.2022.100110). eCollection 2023 Jan-Jul.

Gan Z, Gangadharan V, Tan LL, Körber C, Li H, Oswald MJ, Kang J, Martin-Cortecero JM, Männich D, Groh A, Kuner T, Wieland S, Kuner R. (2022) Layer-specific pain relief pathways originating from motor cortex. *Science*. 2022 Dec 23;378(6626):1336-1343. doi: [10.1126/science.add4391](https://doi.org/10.1126/science.add4391). Epub 2022 Dec 22.

Gangadharan V, Zheng H, Taberner FJ, Landry J, Nees TA, Pistolic J, Agarwal N, Männich D, Benes V, Helmstaedter M, Ommer B, Lechner SG, Kuner T, Kuner R. (2022) Neuropathic pain caused by miswiring and abnormal end organ targeting. *Nature*. 2022 Jun;606(7912):137-145. doi: [10.1038/s41586-022-04777-z](https://doi.org/10.1038/s41586-022-04777-z). Epub 2022 May 25.

Litke C, Hagenston AM, Kenkel AK, Paldy E, Lu J, Kuner R, Mauceri D. (2022) Organic anion transporter 1 is an HDAC4-regulated mediator of nociceptive hypersensitivity in mice. *Nature Commun*. 2022 Feb 15;13(1):875. doi: [10.1038/s41467-022-28357-x](https://doi.org/10.1038/s41467-022-28357-x).

Marty-Lombardi S, Lu S, Ambroziak W, Wende H, Schrenk-Siemens K, DePaoli-Roach AA, Hagenston AM, Tappe-Theodor A, Simonetti M, Kuner R, Fleming T, Siemens J. (2022) Neuron-astrocyte metabolic coupling facilitates spinal plasticity and maintenance of persistent pain. *bioRxiv*.2022.2012.2003.518519, 2022, DOI: <https://doi.org/10.1101/2022.12.03.518519>.

Nees F, Ditzen B, Flor H. (2022) When shared pain is not half the pain: enhanced central nervous system processing and verbal reports of pain in the presence of a solicitous spouse. *Pain*. 2022 Sep 1;163(9):e1006-e1012. doi: [10.1097/j.pain.0000000000002559](https://doi.org/10.1097/j.pain.0000000000002559). Epub 2021 Dec 15.

Spitzel M, Wagner E, Breyer M, Henniger D, Bayin M, Hofmann L, Mauceri D, Sommer C, Üçeyler N. (2022) Dysregulation of immune response mediators and pain-related ion channels is associated with pain-like behavior in the GLA KO mouse model of Fabry disease. *Cells*. 2022 May 24;11(11):1730. doi: [10.3390/cells11111730](https://doi.org/10.3390/cells11111730).

Deshpande D, Agarwal N, Fleming T, Gaveriaux-Ruff C, Klose CSN, Tappe-Theodor A, Kuner R, Nawroth P. (2021) Loss of POMC-mediated antinociception contributes to painful diabetic neuropathy. *Nature Commun*. 2021 Jan 18;12(1):426. doi: [10.1038/s41467-020-20677-0](https://doi.org/10.1038/s41467-020-20677-0).
Asan, L., Falfán-Melgoza, C., Beretta, C.A., Sack, M., Zheng, L., **Weber-Fahr, W., Kuner, T.**, and Knabbe, J. (2021).

Cellular correlates of gray matter volume changes in magnetic resonance morphometry identified by two-photon microscopy. *Scientific Rep*. 2021 Feb 19;11(1):4234. doi: [10.1038/s41598-021-83491-8](https://doi.org/10.1038/s41598-021-83491-8).

Kandic M, Moliadze V, Andoh J, **Flor H**, **Nees F**.
Brain Circuits Involved in The Development of Chronic Musculoskeletal Pain: Evidence from Non-Invasive Brain Stimulation. *Front. Neurol*. 2021 Aug 31;12:732034. doi: [10.3389/fneur.2021.732034](https://doi.org/10.3389/fneur.2021.732034). eCollection 2021.

Simonetti M, Paldy E, Njoo C, Bali KK, Worzfeld T, **Pitzer C**, **Kuner T**, Offermanns S, **Mauceri D**, **Kuner R**.

The impact of Semaphorin 4C/Plexin-B2 signaling on fear memory via remodeling of neuronal and synaptic morphology.

Mol Psychiatry. 2021 Apr;26(4):1376-1398. doi: [10.1038/s41380-019-0491-4](https://doi.org/10.1038/s41380-019-0491-4). Epub 2019 Aug 23.

Schnakenberg M, Thomas C, **Schmelz M**, Rukwied R.

Nerve growth factor sensitizes nociceptors to C-fibre selective supra-threshold electrical stimuli in human skin.

Eur J Pain. 2021;25(2):385-97.

Bekrater-Bodman, R., Reinhardt, I., Diers, M., Fuchs, X., & **Flor, H.** (2021).

Relationship of prosthesis ownership and phantom limb pain: results of a survey in 2.383 limb amputees. *Pain*, 162, 630-640.

Schmelz M.

What can we learn from the failure of quantitative sensory testing?

Pain. 2021;162(3):663-4.

Tan LL, Oswald MJ, **Kuner R.**

Neurobiology of brain oscillations in acute and chronic pain.

Trends Neurosci. 2021 Jun 16:S0166-2236(21)00097-7. doi: 10.1016/j.tins.2021.05.003. Epub ahead of print. PMID: 34176645.

Tan LL, **Kuner R.**

Neocortical circuits in pain and pain relief.

Nat Rev Neurosci. 2021 Aug;22(8):458-471. doi: 10.1038/s41583-021-00468-2. Epub 2021 Jun 14. PMID: 34127843.

Gan Z, Li H, Naser PV, Oswald MJ, **Kuner R.**

Suppression of neuropathic pain and comorbidities by recurrent cycles of repetitive transcranial direct current motor cortex stimulation in mice.

Sci Rep. 2021 May 6;11(1):9735. doi: 10.1038/s41598-021-89122-6. PMID: 33958647; PMCID: PMC8102487.

Bali KK, Gandla J, Rangel DR, Castaldi L, Mouritzen P, Agarwal N, **Schmelz M**, Heppenstall P, **Kuner R.**

A genome-wide screen reveals microRNAs in peripheral sensory neurons driving painful diabetic neuropathy. *Pain*. 2021;162(5):1334-51.

Bonalume V, Caffino L, Castelnovo LF, Faroni A, Liu S, Hu J, Milanese M, Bonanno G, Sohns K, Hoffmann T, De Col R, **Schmelz M**, Fumagalli F, Magnaghi V, **Carr RW.**

Axonal GABAA stabilises excitability in unmyelinated sensory axons secondary to NKCC1 activity. *J Physiol*. 2021 (in press).

Bonalume V, Caffino L, Castelnovo LF, Faroni A, Liu S, **Hu J**, Milanese M, Bonanno G, Sohns K, Hoffmann T, De Col R, **Schmelz M**, Fumagalli F, Magnaghi V, **Carr R.**

Axonal GABAA stabilises excitability in unmyelinated sensory axons secondary to NKCC1 activity. *J Physiol*. 2021 Jun 26. doi: 10.1113/JP279664. Online ahead of print. PMID: 34174096

Deshpande D, Agarwal N, Fleming T, Gaveriaux-Ruff C, Klose CSN, **Tappe-Theodor A**, **Kuner R**, **Nawroth P.**

Loss of POMC-mediated antinociception contributes to painful diabetic neuropathy.
Nat Commun. 2021 Jan 18;12(1):426. doi: 10.1038/s41467-020-20677-0. Erratum in: Nat Commun. 2021 Feb 8;12(1):989. PMID: 33462216; PMCID: PMC7814083.

Kampanis V, **Tolou-Dabbaghian B**, Zhou L, Roth W, **Puttagunta R**. (2021)
"Cyclic Stretch of Either PNS or CNS Located Nerves Can Stimulate Neurite Outgrowth"
Cells 10, no. 1: 32.

Simonetti M, Kuner R.

Locus revealed: Painlessness via loss of Nav1.7 at central terminals of sensory neurons.
Neuron 2021 May 5;109(9):1413-1416. doi:10.1016/j.neuron.2021.04.011. PMID: 33957067.

Streich L., Boffi J., Wang L., Alhalaseh K., Barbieri M., Rehm R., Deivasigamani S., Gross C., **Agarwal A.**, Prevedel R. (2021)

High-resolution structural and functional deep brain imaging using adaptive optics three-photon microscopy
bioRxiv 2021.01.12.426323 (Nature Methods, in Press).

Karl F, Bischler T, Egenolf N, Evdokimov D, Heckel T, **Üçeyler N.**

Fibromyalgia versus small fiber neuropathy: diverse keratinocyte transcriptome signature.
Pain. 2021 Mar 1. doi: 10.1097/j.pain.0000000000002249.

Kreß L, Hofmann L, Klein T, Klug K, Saffer N, Spitzel M, Bär F, **Sommer C**, Karl F, **Üçeyler N.**
Differential impact of keratinocytes and fibroblasts on nociceptor degeneration and sensitization in small fiber neuropathy.

Pain. 2021 Apr 1;162(4):1262-1272. doi: 10.1097/j.pain.0000000000002122.

Wahis, J., Kerspern, D., Althammer, F., Baudon, A., Goyon, S., Hagiwara, D., Lefèvre, A., Boury-Jamot, B., Bellanger, B., Abatis, M., Silva da Gouveia, M., Benusiglio, D., Marina Eliava, Rozov, A., Weinsanto, I., Knobloch-Bollmann, H.S., Wang, H., Pertin, M., Inquimbert, P., Pitzer, C., Siemens, J., Goumon, Y., Boutrel, B., Darbon, P., Lamy, C.M., Stern, J.E., Décosterd, I., Chatton, J-Y., Young, W.S., Stoop, R., Poisbeau, P., **Grinevich, V.***, Charlet, A. (2021)

Astrocytes mediate the effect of oxytocin in the central amygdala on neuronal activity and affective states in rodents.

Nature Neurosci., doi: 1038/s41593-021-00800-0.

García-González D, Dumitru I, Zuccotti A, Yen TY, Herranz-Pérez V, Tan LL, Neitz A, García-Verdugo JM, **Kuner R**, Alfonso J, **Monyer H.**

Correction: Neurogenesis of medium spiny neurons in the nucleus accumbens continues into adulthood and is enhanced by pathological pain. Mol Psychiatry. 2021 Jun 7. doi: 10.1038/s41380-021-01177-z. Epub ahead of print.

Erratum for: Mol Psychiatry. 2020 Jul 1;: PMID: 34099875.

de Kock, C.P.J., Pie, J., Pieneman, A.W. *et al.*

High-frequency burst spiking in layer 5 thick-tufted pyramids of rat primary somatosensory cortex encodes exploratory touch.

Commun Biol 4, 709 (2021). <https://doi.org/10.1038/s42003-021-02241-8>

Kuner, R. & Kuner, T. (2020).

Cellular circuits in the brain and their modulation in acute and chronic pain.
Physiol Rev. DOI 10.1152/physrev.00040.2019.

Klevanski, M., Herrmannsdörfer, F., Sass, S., Venkataramani, V., Heilemann, M. **Kuner, T.** (2020).
Automated highly multiplexed super-resolution imaging of protein nano-architecture in cells and tissues.
Nature Communications 11:1552 | <https://doi.org/10.1038/s41467-020-15362>.

Tang, Y., Benusiglio, D., Lefevre, A., Hilfiger, L., Althammer, F., Bludau, A., Hagiwara, D., Baudon, A., Darbon, P., Schimmer, J., Kirchner, M.K., Roy, R.K., Wang, S., Eliava, M., Wagner, S., Oberhuber, M., Conzelmann, K.K., Schwarz, M., Stern, J.E., Leng, G., Neumann, I.D., Charlet, A., **Grinevich, V.** (2020).

Social touch promotes inter-female communication via activation of parvocellular oxytocin neurons. *Nature Neurosci.* doi: 10.1038/s41593-020-0674.

Nees F, Ruttorf M, Fuchs X, Rance M, Beyer N. (2020).

Brain-behaviour correlates of habitual motivation in chronic back pain. *Scientific Reports*, 10(1), 11090. doi: 10.1038/s41598-020-67386-8.

Boll, S., Ueltzhoeffer, K., Roth, C., Betsch, K., Desch, S., **Nees, F., Grinevich, V., Herpertz, S.C.** (2020).

Pain-modulating effects of oxytocin in patients with chronic low back pain. *Neuropharmacology*, 171:108105. doi: 10.1016/j.neuropharm.2020.108105.

Finnerup NB, **Kuner R**, Jensen TS.

Neuropathic Pain: From Mechanisms to Treatment.

Physiol Rev. 2021 Jan 1;101(1):259-301. doi: 10.1152/physrev.00045.2019. Epub 2020 Jun 25. PMID: 32584191.

Andoh, J., Milde, C., Diers, M., Bekrater-Bodmann, R., Trojan, J., Fuchs, X., Becker, S., Desch, S. and **Flor, H.**, 2020.

Assessment of cortical reorganization and preserved function in phantom limb pain: a methodological perspective.

Scientific Reports, 10(1), pp.1-15.

Kuner R, Kuner T.

Cellular circuits in the brain and their modulation in acute and chronic pain.

Physiol Rev. 2020 Jun 11. doi: 10.1152/physrev.00040.2019.

Makin, T.R. and **Flor, H.**, 2020.

Brain (re) organisation following amputation: Implications for phantom limb pain.

NeuroImage, 218, p.116943.

Netser, S., Meyer, A., Magalnik, H., Zylbertal, A., de la Zerda, S.H., Briller, M., Bizer, A., **Grinevich, V.***, Wagner, S. (2020).

Distinct dynamics of social motivation drive different patterns of social behavior in Sprague Dawley rats and C57BL/6J mice.

Nature Commun. doi: <https://doi.org/10.1038/s41467-020-19569-0>

Boll S, Ueltzhoeffer K, Roth C, Bertsch K, Desch S, Nees F, **Grinevich V, Herpertz SC.** (2020)

Pain-modulating effects of oxytocin in patients with chronic low back pain.

Neuropharmacology Jul;171:108105.

Simonetti M , Kuner R.

Spinal Wnt5a plays a key role in spinal dendritic spine remodeling in neuropathic and inflammatory pain models and in the pro-algesic effects of peripheral Wnt3a.

J Neurosci. 2020 Aug 26;40(35):6664-6677. doi: [10.1523/JNEUROSCI.2942-19.2020](https://doi.org/10.1523/JNEUROSCI.2942-19.2020).

Hirth M, Gandla J, Höper C, Gaida MM, Agarwal N, **Simonetti M**, Demir A, Xie Y, Weiss C, Michalski CW, Hackert T, Ebert MP, **Kuner R**.
CXCL10 and CCL21 Promote Migration of Pancreatic Cancer Cells Toward Sensory Neurons and Neural Remodeling in Tumors in Mice, Associated With Pain in Patients.
Gastroenterology. 2020 Aug;159(2):665-681.e13. doi: 10.1053/j.gastro.2020.04.037. Epub 2020 Apr 21. PMID: 32330476.

Semyanov A., Henneberger C., and **Agarwal A.** (2020)
Making sense of astrocytic calcium signals — from acquisition to interpretation.
Nature Reviews Neuroscience Oct;21(10):551-564.

Yan, J., Bengtson, C.P., Buchthal, B., Hagenston, A.M., **Bading, H.** (2020).
Coupling of NMDA receptors and TRPM4 guides discovery of unconventional neuroprotectants.
Science 370: eaay3302.

Kong G, Zhou L, Serger E, Palmisano I, De Virgiliis F, Hutson TH, Mclachlan E, Freiwald A, La Montanara P, Shkura K, **Puttagunta R**, Di Giovanni S. (2020)
AMPK controls the axonal regenerative ability of dorsal root ganglia sensory neurons after spinal cord injury.
Nat Metab. Sep;2(9):918-933.

Agarwal, N., Taberner, F.J., Rangel Rojas, D., Moroni, M., Omberbasic, D., Njoo, C., Andrieux, A., Gupta, P., Bali, K.K., Herpel, E., Faghihi, F., Fleming, T., Dejean, A., **Lechner, S.G., Nawroth, P.P., Lewin, G.R., Kuner, R.**, 2020.
SUMOylation of Enzymes and Ion Channels in Sensory Neurons Protects against Metabolic Dysfunction, Neuropathy, and Sensory Loss in Diabetes.
Neuron 107, 1141-1159.e7. <https://doi.org/10.1016/j.neuron.2020.06.037>

Jonas, R., Prato, V., **Lechner, S.G.**, Groen, G., Obreja, O., Werland, F., Rukwied, R., Klusch, A., Petersen, M., **Carr, R.W., Schmelz, M.**, 2020.
TTX-Resistant Sodium Channels Functionally Separate Silent From Polymodal C-nociceptors.
Front Cell Neurosci. 2020 Feb 7;14:13. doi: 10.3389/fncel.2020.00013. eCollection 2020. PMID: 32116559 <https://doi.org/10.3389/fncel.2020.00013>

Jonas R, Prato V, **Lechner SG**, Groen G, Obreja O, Werland F, Rukwied R, Klusch A, Petersen M, **Carr RW, Schmelz M**.
TTX-Resistant Sodium Channels Functionally Separate Silent From Polymodal C-nociceptors.
Front Cell Neurosci. 2020;14(13):13.

Rukwied R, Thomas C, Obreja O, Werland F, Kleggetveit IP, Jorum E, **Carr RW**, Namer B, **Schmelz M**.
Slow depolarizing stimuli differentially activate mechanosensitive and silent C nociceptors in human and pig skin.
Pain. 2020;161(9):2119-28.

Johann ME Jende, Jan B Groener, Zoltan Kender, Artur Hahn, Jakob Morgenstern, Sabine Heiland, Peter P **Nawroth**, Martin **Bendszus**, Stefan Kopf, Felix T Kurz
Troponin T Parallels Structural Nerve Damage in Type 2 Diabetes: A Cross-sectional Study Using Magnetic Resonance Neurography.
Diabetes 2020 Apr;69(4):713-723.

Jan B Groener, Johann M E Jende, Felix T Kurz, Zoltan Kender, Rolf-Detlef **Treede**, Sigrid **Schuh-Hofer**, Peter P **Nawroth**, Martin **Bendszus**, Stefan Kopf
Understanding Diabetic Neuropathy-From Subclinical Nerve Lesions to Severe Nerve Fiber Deficits: A Cross-Sectional Study in Patients With Type 2 Diabetes and Healthy Control Subjects

Diabetes 2020 Mar;69(3):436-447.

Paredes I, Vieira JR, Shah B, Ramunno CF, Dyckow J, Adler H, Richter M, Schermann G, Giannakouri E, Schirmer L, Augustin HG, **Ruiz de Almodovar C.**

A bi-directional neural progenitor – endothelial cell crosstalk regulates oligodendrocyte precursor cell specification.

Nat Neurosci. 2020, accepted.

Pfeifer, A. C., Schroeder-Pfeifer, P., Schneider, E., Schick, M., Heinrichs, M., Bodenmann, G., Ehlert, U., Herpertz, S. C., ... & **Ditzen, B.** (2020).

Oxytocin and positive couple interaction affect the perception of wound pain in everyday life.

Molecular Pain, 16, 1744806920918692.

Reichert M, Braun U, Gan G, Reinhard I, Giurgiu M, Ma R, Zang Z, Hennig O, Koch ED, Wieland L, Schweiger J, Inta D, Hoell A, Akdeniz C, Zipf A, Ebner-Priemer UW, **Tost H***, & Meyer-Lindenberg A*. *Shared last author (2020).

A neural mechanism for affective well-being: Subgenual cingulate cortex mediates real-life effects of nonexercise activity on energy.

Sci Adv, 6(45). doi:10.1126/sciadv.aaz8934

La Porta C, **Tappe-Theodor A.**

Differential impact of psychological and psychophysical stress on low back pain in mice.

Pain. 2020; 161(7):1442-1458.

Pfeifer AC, Schroeder-Pfeifer P, Schneider E, Schick M, Heinrichs M, Bodenmann G, Ehlert U, Herpertz SC, Lauchli S, Eckstein M, Ditzen B

[Oxytocin and positive couple interaction affect the perception of wound pain in everyday life.](#)

Mol Pain. 2020; 16: 1744806920918692.

Tesarz J, Eich W, Baumeister D, Kohlmann T, D'Agostino R, Schuster AK.

Widespread pain is a risk factor for cardiovascular mortality: Results from the Framingham Heart Study.

Eur Heart J. 2019 ;21;40(20):1609-1617.

Simonetti, M., Paldy, E., Njoo, C., Bali, K.K., Worzfeld, T., Pitzer, C., **Kuner, T.**, Offermanns, S., Mauceri, D., and **Kuner, R.** (2019).

The impact of Semaphorin 4C/Plexin-B2 signaling on fear memory via remodeling of neuronal and synaptic morphology.

Mol Psychiatr 1–23.

Nees F, Usai K, Löffler M, **Flor H.**

The evaluation and brain representation of pleasant touch in chronic and subacute back pain.

Neurobiology of Pain 2019; 5:100025.(**B03 project-specific**)

Katrin Schrenk-Siemens, Jörg Pohle, Charlotte Rostock, Muad Abd El Hay, Ruby M. Lam, Marcin Szczot, Shiyong Lu, Alexander T. Chesler, **Jan Siemens;**

HESC-derived sensory neurons reveal an unexpected role for PIEZO2 in nociceptor mechanotransduction.

bioRxiv, August 2019, doi: <https://doi.org/10.1101/741660>.

Tappe-Theodor A, Kuner R.

A common ground for pain and depression.

Nat Neurosci. 2019; 22(10):1612-1614.

Bilbao A, Cantacorps L, Leixner S, Wei S, Valverde O, **Spanagel R**.

Reduced sensitivity to ethanol and excessive drinking in a mouse model of neuropathic pain.

Addict Biol. 2019 Sep;24(5):1008-1018. doi: 10.1111/adb.12784.

Treede RD, Rief W, Barke A, Aziz Q, Bennett MI, Benoliel R, Cohen M, Evers S, Finnerup NB, First MB, Giamberardino MA, Kaasa S, Korwisi B, Kosek E, Lavand'homme P, Nicholas M, Perrot S, Scholz J, Schug S, Smith BH, Svensson P, Vlaeyen JWS, Wang SJ.

Chronic pain as a symptom or a disease: the IASP Classification of Chronic Pain for the International Classification of Diseases (ICD-11).

Pain. 2019 Jan;160(1):19-27. doi: 10.1097/j.pain.0000000000001384. PMID:30586067

Jende JME, Groener JB, Rother C, Kender Z, Hahn A, Hilgenfeld T, Juerchott A, Preisner F, Heiland S, Kopf S, **Pham M**, **Nawroth P**, **Bendszus M**, Kurz FT.

Association of Serum Cholesterol Levels With Peripheral Nerve Damage in Patients With Type 2 Diabetes.

JAMA Netw Open. 2019 May 3;2(5):e194798. doi: 10.1001/jamanetworkopen.2019.4798.

Taberner, F.J., Prato, V., Schaefer, I., **Schrenk-Siemens, K.**, **Heppenstall, P.A.**, **Lechner, S.G.**, 2019. Structure-guided examination of the mechanogating mechanism of PIEZO2.

Proc. Natl. Acad. Sci. U.S.A. 116, 14260–14269. <https://doi.org/10.1073/pnas.1905985116>

Hilton BJ, Blanquie O, Tedeschi A, **Bradke F.** (2019)

High-resolution 3D imaging and analysis of axon regeneration in unsectioned spinal cord with or without tissue clearing.

Nat Protoc. Apr 19; 14:1235-1260.

Franz S, Schulz B, Wang H, Gottschalk S, Grüter F, Friedrich J, Glaesener JJ, Bock F, Schott C, Müller R, Schultes K, Landmann G, Gerner HJ, Dietz V, **Treede RD** and **Weidner N.** (2019)

Management of pain in individuals with spinal cord injury: Guideline of the German-Speaking Medical Society for Spinal Cord Injury.

GMS German Medical Science. Vol. 17, ISSN 1612-3174.

Nugraha B, Gutenbrunner C, Barke A, Karst M, Schiller J, Schäfer P, Falter S, Korwisi B, Rief W, **Treede RD**;

IASP Taskforce for the Classification of Chronic Pain. [The IASP classification of chronic pain for ICD-11: functioning properties of chronic pain.](#)

Pain. 2019 Jan;160(1):88-94. doi: 10.1097/j.pain.0000000000001433. PMID: 30586076

Bilek E, Zang Z, Wolf I, Henrich F, Moessnang C, Braun U, Treede RD, Magerl W, Meyer-Lindenberg A, & **Tost H.** (2019).

Neural network-based alterations during repetitive heat pain stimulation in major depression.

Eur Neuropsychopharmacol, 29(9), 1033-1040. doi:10.1016/j.euroneuro.2019.06.011

Oliveira AM, Litke C, Paldy E, Hagenston AM, Lu J, **Kuner R**, **Bading H**, **Mauceri D.**

Epigenetic control of hypersensitivity in chronic inflammatory pain by the de novo DNA methyltransferase Dnmt3a2.

Mol Pain. 2019 Jan-Dec;15. doi: 10.1177/1744806919827469.

Evdokimov D, Frank J, Klitsch A, Unterecker S, Warrings B, Serra J, Papagianni A, Saffer N, Meyer Zu Altenschildesche C, Kampik D, Malik RA, **Sommer C**, **Üçeyler N.**

Reduction of skin innervation is associated with a severe fibromyalgia phenotype.

Ann Neurol. 2019 Oct;86(4):504-516. doi: 10.1002/ana.25565.

Held M, Karl F, Vlckova E, Rajdova A, Escolano-Lozano F, Stetter C, Bharti R, Förstner KU, Leinders M, Dušek L, Birklein F, Bednarik J, Sommer C, **Üçeyler N.**

Sensory profiles and immune related expression patterns of patients with and without neuropathic pain after peripheral nerve lesion.

Pain. 2019 May 22. doi: 10.1097/j.pain.0000000000001623.

Hasan, M.T., Althammer, F., da Silva Gouveia, M., Goyon, S., Eliava, M., Lefevre, A., Kerspern, D., Schimmer, J., Raftogianni, A., Wahis, J., Knobloch-Bollmann, H.S., Tang, Y., Liu, X., Jain, A., Chavant, V., Goumon, Y., Weislogel, J.-M., Hurlemann, R., **Herpertz, S.C.**, Pitzer, C., Darbon, P., Dogbevia, G.K., Bertocchi, I., Larkum, M.E., Sprengel, R., Bading, H., Charlet, A. and **Grinevich, V.** (2019).

A fear memory engram and its plasticity in the hypothalamic oxytocin system.

Neuron, 103, 133-146. <https://doi.org/10.1016/j.neuron.2019.04.029>.

Tan LL, Oswald MO, Heintl C, Retana OR, Kaushalya S, Monyer H and Kuner R

[Gamma oscillations in somatosensory cortex recruit prefrontal and descending serotonergic pathways in aversion and nociception.](#)

Nature Communications 2019 Feb 28;10(1):983. doi: 10.1038/s41467-019-08873-z.

Bilbao A, Leixner S, Wei S, Cantacorps L, Valverde O, Spanagel R

[Reduced sensitivity to ethanol and excessive drinking in a mouse model of neuropathic pain](#)

Addiction Biology 2019 Sep;24(5):1008-1018. doi: 10.1111/adb.12784. Epub 2019 Jun 25

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.

Nat Commun 2018;9:1640.

Schuh-Hofer S, Fischer J, Unterberg A, **Treede RD**, Ahmadi R.

[Spinal cord stimulation modulates descending pain inhibition and temporal summation of pricking pain in patients with neuropathic pain.](#)

Acta Neurochir 2018; doi: 10.1007/s00701-018-3669-7. [Epub ahead of print]

Nees F, Usai K, Löffler M, Flor H

[The evaluation and brain representation of pleasant touch in chronic and subacute back pain](#)

Neurobiology of Pain 2018 Oct 29;5:100025. doi: 10.1016/j.ynpai.2018.10.002. eCollection Jan-Jul 2019.

Nees F, Löffler M, Usai K, Flor H.

[Hypothalamic-pituitary-adrenal axis feedback sensitivity in different states of back pain.](#)

Psychoneuroendocrinology 2019 Mar;101:60-66. doi: 10.1016/j.psyneuen.2018.10.026. Epub 2018 Oct 26.

Oliveira AMM, Litke C, Paldy E, Hagenston AM, Lu J, Kuner R, Bading H and Mauceri D

[Epigenetic control of hypersensitivity in chronic inflammatory pain by the de novo DNA methyltransferase Dnmt3a2.](#)

Molecular Pain 2019 Jan-Dec;15:1744806919827469. doi: 10.1177/1744806919827469.

Frank TB, Kuner R and Nawroth PP

[Structure-function Relationships in Peripheral Nerve Contributions to Diabetic Peripheral Neuropathy](#)

Pain 2019 May;160 Suppl 1:S29-S36. doi: 10.1097/j.pain.0000000000001530.

Pitzer C, La Porta C, Treede RD, Tappe-Theodor A.

[Inflammatory and neuropathic pain conditions do not primarily evoke anxiety-like behaviours in C57BL/6 mice.](#)

Eur J Pain. 2019 Feb;23(2):285-306. doi: 10.1002/ejp.1303. Epub 2018 Sep 3.

Sachau J, Bruckmueller H, Gierthmühlen J, Magerl W, Kaehler M, Haenisch S, Binder A, Caliebe A, Maier C, Treede RD, Tölle T, Cascorbi I, Baron R.

[SIGMA-1 Receptor Gene Variants Affect the Somatosensory Phenotype in Neuropathic Pain Patients.](#)

J Pain 2019 Feb;20(2):201-214. doi: 10.1016/j.jpain.2018.08.011. Epub 2018 Sep 25.

Carr R, Frings S.

[Neuropeptides in sensory signal processing.](#)

Cell Tissue Res. 2019 Jan;375(1):217-225. doi: 10.1007/s00441-018-2946-3. Epub 2018 Oct 30.

Review.

Treede RD, Rief W, Barke A, Aziz Q, Bennett MI, Benoliel R, Cohen M, Evers S, Finnerup NB, First MB, Giamberardino MA, Kaasa S, Korwisi B, Kosek E, Lavand'homme P, Nicholas M, Perrot S, Scholz J, Schug S, Smith BH, Svensson P, Vlaeyen JW, Wang SJ

[Chronic pain as a symptom or a disease: the IASP classification of chronic pain for the international classification of diseases ICD-11.](#)

Pain 2019; 160 (1)

Obreja O, Rukwied R, Nagler L, Schmidt M, Schmelz M, Namer B.

[Nerve growth factor locally sensitises nociceptors in human skin.](#)

PAIN 2018;159(3):416-426.

Sauerstein K, Liebelt J, Namer B, Schmidt R, Rukwied R, Schmelz M.

[Low-Frequency Stimulation of Silent Nociceptors Induces Secondary Mechanical Hyperalgesia in Human Skin.](#)

NEUROSCIENCE 2018; 387:4-12.

Bilbao A, Falfan-Melgoza C, Leixner S, Becker R, Singaravelu SK, Sack M, Sartorius A, Spanagel R, Weber-Fahr W.

[Longitudinal Structural and Functional Brain Network Alterations in a Mouse Model of Neuropathic Pain](#)

Neuroscience 2018;S0306-4522(18):30271-9.

Groh A, Krieger P, Mease RA, Henderson L.

[Acute and Chronic Pain Processing in the Thalamocortical System of Humans and Animal Models.](#)

Neuroscience 2018;387:58-71.

Nawroth PP, Bendszus M, Pham M, Jende J, Heiland S, Ries S, Schumann C, Schmelz M, Schuh-Hofer S, Treede RD, Kuner R, Oikonomou D, Groener JB, Kopf S.

[The Quest for more Research on Painful Diabetic Neuropathy.](#)

Neuroscience 2018;387:28-37.

Rostock C, Schrenk-Siemens K, Pohle J, Siemens J.

[Human vs. Mouse Nociceptors - Similarities and Differences.](#)

Neuroscience 2018;387:13-27.

Boll S, Almeida de Minas AC, Raftogianni A, Herpertz SC, Grinevich V.

[Oxytocin and Pain Perception: From Animal Models to Human Research.](#)

Neuroscience 2018; 387: p. 149-161.

Kuner R, Flor H.

[Neural circuits of chronic pain](#)

Neuroscience 2018;387:1-3.

Cao H, Harneit A, Walter H, Erk S, Braun U, Moessnang C, Geiger LS, Zang Z, Mohnke S, Heinz A, Romanczuk-Seiferth N, M \ddot{u} hleisen T, Mattheisen M, Witt SH, Cichon S, N \ddot{u} then MM, Rietschel M, Meyer-Lindenberg A, Tost H.

[The 5-HTTLPR Polymorphism Affects Network-Based Functional Connectivity in the Visual-Limbic System in Healthy Adults.](#)

Neuropsychopharmacology 2018;43(2):406-14.

Schweiger JI, Bilek E, Sch \ddot{u} fer A, Braun U, Moessnang C, Harneit A, Post P, Otto K, Romanczuk-Seiferth N, Erk S, Wackerhagen C, Mattheisen M, M \ddot{u} hleisen TW, Cichon S, N \ddot{u} then MM, Frank J, Witt SH, Rietschel M, Heinz A, Walter H, Meyer-Lindenberg A, Tost H

[Effects of BDNF Val66Met genotype and schizophrenia familial risk on a neural functional network for cognitive control in humans.](#)

Neuropsychopharmacology 2018 Oct 25. doi:10.1038/s41386-018-0248-9.

Naser PV and Kuner R.

[Peripheral Kappa Opioid Receptor Signaling Takes on a Central Role.](#)

Neuron 99(6):1102-1104, 2018

Grinevich V, Stoop R

[Interplay between oxytocin and sensory systems in the orchestration of socioemotional behaviour](#)

Neuron2018; 99:887-904

Braun U, Schaefer A, Betzel RF, Tost H, Meyer-Lindenberg A, Bassett DS.

[From Maps to Multi-dimensional Network Mechanisms of Mental Disorders.](#)

Neuron 2018;97(1):14-31.

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 Commun2018;9:1640.

Agarwal N, Helmstaedter JP, Rangel Roja D, Kumar Bali K, Gangadharan V, Kuner R.

[\[EXPRESS\] Evoked hypoalgesia is accompanied by tonic pain and immune cell infiltration in the dorsal root ganglia at late stages of diabetic neuropathy in mice](#)

Molecular Pain 2018:1744806918817975

Sch \ddot{u} fer I, Prato V, Arcourt A, Taberner FJ, Lechner SG.

[Differential modulation of voltage-gated sodium channels by nerve growth factor in three major subsets of TrkA-expressing nociceptors.](#)

Mol Pain2018

Knabbe J, Nassal JP, Verhage M, Kuner T

[Secretory vesicle trafficking in awake and anaesthetized mice: differential speeds in axons versus synapses](#)

J Physiol. 2018; doi: 10.1113/JP276022.

Sliwinski C, Nees TA, Puttagunta R, Weidner N, Blesch A
[Sensorimotor Activity Partially Ameliorates Pain and Reduces Nociceptive Fiber Density in the Chronically Injured Spinal Cord.](#)
J Neurotrauma 2018;35(18):2222-2238.

Litke C, Bading H, Mauceri D.
[Histone deacetylase 4 shapes neuronal morphology via a mechanism involving regulation of expression of vascular endothelial growth factor D.](#)
J Biol Chem 2018;293(21):8196-8207.

Koch ED, Tost H, Braun U, Gan G, Giurgiu M, Reinhard I, Zipf A, Meyer-Lindenberg A, Ebner-Priemer UW, Reichert M.
[Mood Dimensions Show Distinct Within-Subject Associations With Non-exercise Activity in Adolescents: An Ambulatory Assessment Study.](#)
Frontiers in Psychology 2018;9:268.

Boffi JC, Knabbe J, Kaiser M, Kuner T
[KCC2-dependent Steady-state Intracellular Chloride Concentration and pH in Cortical Layer 2/3 Neurons of Anesthetized and Awake Mice.](#)
Front Cell Neurosci. 2018; 12:7. doi: 10.3389/fncel.2018.00007.

Schuh-Hofer S, Eichhorn N, Grinevich V, Treede R-D
[Sleep deprivation related changes of plasma oxytocin in males and female contraceptive users depend on sex and correlate differentially with anxiety and pain hypersensitivity.](#)
Front Behav Neuroscience2018; 12: 161

Sandner B, Puttagunta R, Motsch M, Bradke F, Ruschel J, Blesch A and Weidner N.
[Systemic epothilone D improves hindlimb function after spinal cord contusion injury in rats.](#)
Exp Neuro 2018; 306:250-259.

Pitzer C, La Porta C, Treede RD, Tappe-Theodor A.
[Inflammatory and neuropathic pain conditions do not primarily evoke anxiety-like behaviours in C57BL/6 mice.](#)
Eur J Pain 2018; doi: 10.1002/ejp.1303.

Kopf S, Groener JB, Kender Z, Fleming T, Bischoff S, Jende J, Schumann C, Ries S, ??ends??us ??, Schuh-Hofer S, Treede RD, Nawroth PP.
[Deep phenotyping neuropathy: An underestimated complication in patients with pre-diabetes and type 2 diabetes associated with albuminuria.](#)
Diabetes Res Clin Pract2018; doi: 10.1016/j.diabres.2018.10.020.

Andersen ST, Witte DR, Dalsgaard EM, Andersen H, Nawroth P, Fleming T, Jensen TM, Finnerup NB, Jensen TS, Lauritzen T, Feldman EL, Callaghan BC, Charles M.
[Risk Factors for Incident Diabetic Polyneuropathy in a Cohort With Screen-Detected Type 2 Diabetes Followed for 13 Years: ADDITION-Denmark](#)
Diabetes Care 2018;41(5):1068-1075.

Menon R, Grund, T, Zoicas, Althammer F, Fiedler D, Biermeier V, Bosch OJ, Hiraoka Y, Nishimori K, Eliava M, Grinevich V, Neumann ID
[Enhanced oxytocin signaling in the lateral septum prevents social fear expression during lactation.](#)
Cur. Biology2018; 28: 1066-1078

Chandrasekar A, Olde Heuvel F, Tar L, Hagenston AM, Palmer A, Linkus B, Ludolph AC, Huber-Lang M, Boeckers T, Bading H, Roselli F.
[Parvalbumin Interneurons Shape Neuronal Vulnerability in Blunt TBI.](#)

Cereb Cortex 2018.

Heuser K, Nome CG, Pettersen KH, Abjorsbraten KS, Jensen V, Tang W, Sprengel R, Tauboll E, Nagelhus EA, and Enger R

[Ca²⁺ Signals in Astrocytes Facilitate Spread of Epileptiform Activity.](#)

Cereb Cortex 2018

Carr RW, Frings S.

[Neuropeptides in Sensory System Signaling.](#)

Cell Tiss Res 2018; DOI: 10.1007/s00441-018-2946-3.

Jende JME, Groener JB, Oikonomou D, Heiland S, Kopf S, Pham M, Nawroth P, Bendszus M, Kurz FT.
[Diabetic neuropathy differs between type 1 and type 2 diabetes: Insights from magnetic resonance neurography.](#)

Annals of Neurology 2018;83(3):588-598.

Jonas R, Namer B, Stockinger L, Chisholm K, Schnakenberg M, Landmann G, Kucharczyk M, Konrad C, Schmidt R, Carr R, McMahon S, Schmelz M, Rukwied R.

[Tuning in C-nociceptors to reveal mechanisms in chronic neuropathic pain.](#)

Ann Neurol 2018;83:945-957.

Schuh-Hofer S, Fischer J, Unterberg A, Treede RD, Ahmadi R.

[Spinal cord stimulation modulates descending pain inhibition and temporal summation of pricking pain in patients with neuropathic pain.](#)

Acta Neurochir 2018; doi: 10.1007/s00701-018-3669-7.

Cavalli J, Ruttorf M, Rosero Pahi M, Zidda F, Flor H, Nees, F.

[Oxytocin differentially modulates pavlovian cue and context fear acquisition.](#)

Soc Cogn Affect Neurosci. 2017;12:976-983.

Sanderson DJ, Lee A, Sprengel R, Seeburg PH, Harrison PJ, Bannerman DM.

[Altered balance of excitatory and inhibitory learning in a genetically modified mouse model of glutamatergic dysfunction relevant to schizophrenia](#)

Sci Rep 2017;7(1):1765.

Lischke A*, Herpertz SC*, Berger C, Domes G, Gamer M.

[Divergent effects of oxytocin on \(para-\) limbic reactivity to emotional and non-emotional scenes in females with and without borderline personality disorder.](#)

SCAN 2017;12(11):1834,

Sumser A, Mease RA, Sakmann B, Groh A.

[Organization and somatotopy of corticothalamic projections from L5B in mouse barrel cortex.](#)

Proc Natl Acad Sci U S A 2017;114(33):8853-88

Noori HR, Schöttler J, Ercsey-Ravasz M, Cosa-Linan A, Varga M, Toroczkai Z, Spanagel R.

[A multiscale cerebral neurochemical connectome of the rat brain.](#)

PLoS Biol 2017;15(7):e2002612.

Pallegama RW, Ariyasinghe S, Perera E D, Treede RD

[Influence of Catastrophizing and Personality Traits on Recalled Ratings of Acute Pain Experience in Healthy Young Adults.](#)

Pain Medicine 2017; 18: 49?60.

Nees TA, Finnerup NB, Blesch A, Weidner N.

[Neuropathic pain after spinal cord injury: the impact of sensorimotor activity.](#)

Pain 2017;158(3):371-376.

Nees F, Becker S, Millenet S, Banaschewski T, Poustka L, Bokde AU, Bromberg U, Bichel C, Conrod PJ, Desrivieres S, Frouin V, Gallinat J, Garavan H, Heinz A, Ittermann B, Martinot J-L, Papadopoulos-Orfanos D, Paus T, Smolka M, Walter H, Whelan R, Schumann G, Flor H, the IMAGEN consortium.

[Brain substrates of reward processing and the \$\mu\$ -opioid receptor: a pathway into pain?](#)

Pain 2017; 158:212-9.

Flor H.

[Pain has an element of blank-a biobehavioral approach to chronicity.](#)

Pain 2017;158:S92-S96.

Gerhardt A, Eich W, Treede RD, Tesarz J

[Conditioned pain modulation in patients with nonspecific chronic back pain with chronic local pain, chronic widespread pain, and fibromyalgia.](#)

Pain 2017; 158: 430-439.

Vollert J, Maier C, Attal N, Bennett DLH, Bouhassira D, Enax-Krumova EK, Finnerup NB, Freynhagen R, Gierthmühlen J, Haanpää M, Hansson P, Hølleman P, Jensen TS, Magerl W, Ramirez JD, Rice ASC, Schuh-Hofer S, Segerdahl M, Serra J, Shillo PR, Sindrup S, Tesfaye S, Themistocleous AC, Tölle TR, Treede RD, Baron R

[Stratifying patients with peripheral neuropathic pain based on sensory profiles: algorithm and sample size recommendations](#)

Pain 2017;158:1446-1455.

Naser PV, Kuner R.

[Molecular, cellular and circuit basis of cholinergic modulation of pain.](#)

Neuroscience pii: S0306-4522(17)30625-5, 2017

Nees F, Becker S.

[Psychological processes in chronic pain: influences of reward and fear learning as key mechanisms?behavioral evidence, neural circuits, and maladaptive changes](#)

Neuroscience 2017;pii: S0306-4522(17)30627-9.

Andoh J, Milde C, Tsao JW, Flor H.

[Cortical plasticity as a basis of phantom limb pain: Fact or fiction?](#)

Neuroscience 2017; S0306-4522(17)30809-6.

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 2017 Jan 4;93(1):179-193. doi: 10.1016/j.neuron.2016.11.027.

Godel T, Bomer P, Pham M, Kühn A, Muschol N, Kronlage M, Kollmer J, Heiland S, Bendszus M, Mautner VF.

[Human dorsal-root-ganglion in-vivo morphometry and perfusion in Fabry painful neuropathy.](#)

Neurology 2017;89:1274-1282.

Davis KD, Flor H, Greely HT, Iannetti GD, Mackey S, Ploner M, Pustilnik A, Tracey I, Treede RD, Wager TD.

[Brain imaging tests for chronic pain: medical, legal and ethical issues and recommendations.](#)

Nat Rev Neurol 2017;13(10):624-638

Artigas F, Schenker E, Celada P, Spedding M, Llado-Pelfort L, Jurado N, Nunez M, Santana N, Troyano-Rodriguez E, Riga MS, van den Munkhof H, Castane A, Shaban H, Jay TM, Tripathi A, Godsil BP, Sebban C, Mariani J, Faure P, Takkilah S, Hughes ZA, Siok CJ, Hajos M, Wicke K, Gass N, Weber-Fahr W, Sartorius A, Becker R, Didriksen M, Bastlund JF, Tricklebank M, Risterucci C, Meyer-Lindenberg A and Schwarz AJ.

[Defining the brain circuits involved in psychiatric disorders: IMINEWMEDS.](#)

Nat Rev Drug Discov 2017; 16(1): 1-2.

Tan LL, Pelzer P, Heintz C, Tang W, Gangadharan V, Flor H, Sprengel R, Kuner T, Kuner R.

[A pathway from midcingulate cortex to posterior insula gates nociceptive hypersensitivity.](#)

Nat Neurosci 2017;20(11):1591-1601.

Klein AH, Vyshnevskaya A, Hartke TV, De Col R, Mankowski JL, Turnquist B, Bosmans F, Reeh PW, Schmelz M, Carr RW, Ringkamp M.

[Sodium Channel Nav1.8 Underlies TTX-Resistant Axonal Action Potential Conduction in Somatosensory C-Fibers of Distal Cutaneous Nerves.](#)

J NEUROSCI 2017;37(20):5204-5214

Bas-Orth C, Tan YW, Lau D, Bading H.

[Synaptic Activity Drives a Genomic Program That Promotes a Neuronal Warburg Effect.](#)

J Biol Chem 2017;292(13):5183-5194

Guo X, Lin Z, Lyu Y, Bekrater-Bodmann R, Flor H, Tong S.

[The Effect of Prosthesis Use on Hand Mental Rotation After Unilateral Upper-Limb Amputation.](#)

IEEE Trans Neural Syst Rehabil Eng 2017; 25(11):2046-2053.

Franz S, Schuld C, Wilder-Smith EP, Heutheaus L, Lang S, Gantz S, Schuh-Hofer S, Treede RD, Bryce TN, Wang H, Weidner N.

[Spinal Cord Injury Pain Instrument and painDETECT questionnaire: Convergent construct validity in individuals with spinal cord injury](#)

Eur J Pain 2017b.

Kougioumtzidou E, Shimizu T, Hamilton NB, Tohyama K, Sprengel R, Monyer H, Attwell D, Richardson WD.

[Signalling through AMPA receptors on oligodendrocyte precursors promotes myelination by enhancing oligodendrocyte survival.](#)

Elife 2017;6.

Hidmark A, Spanidis I, Fleming TH, Volk N, Eckstein V, Groener JB, Kopf S, Nawroth PP, Oikonomou D.

[Electrical Muscle Stimulation Induces an Increase of VEGFR2 on Circulating Hematopoietic Stem Cells in Patients With Diabetes.](#)

Clinical Therapeutics 2017;39(6):1132-1144.e1132.

Enger R, Dukefoss DB, Tang W, Pettersen KH, Bjornstad DM, Helm PJ, Jensen V, Sprengel R, Vervaeke K, Otter sen OP, and Nagelhus EA

[Deletion of Aquaporin-4 Curtails Extracellular Glutamate Elevation in Cortical Spreading Depression in Awake Mice.](#)

Cereb Cortex Cereb Cortex 27, 24-33.

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 2017;21:3102-3115.

Warner FM, Cragg JJ, Jutzeler CR, Röhricht F, Weidner N, Saur M, Maier DD, Schuld C; EMSCI Sites, Curt A, Kramer JK.

[Early Administration of Gabapentinoids Improves Motor Recovery after Human Spinal Cord Injury.](#)

Cell Reports 2017;18(7):1614-1618.

Melzer S, Gil M, Koser DE, Michael M, Huang KW, Monyer H.

[Distinct corticostriatal GABAergic neurons modulate striatal output neurons and motor activity.](#)

Cell Reports 2017;19(5):1045-1055.

Mease RA, Kuner T, Fairhall AL, Groh A.

[Multiplexed Spike Coding and Adaptation in the Thalamus.](#)

Cell reports 2017;19(6):1130-1140.

Andoh J, Diers M, Milde C, Köppe C, Kleinböhl D, Flor H.

[Neural correlates of evoked phantom limb sensations.](#)

Biological Psychology 2017; 126:89-97.

Reinwald JR, Becker R, Mallien AS, Falfan-Melgoza C, Sack M, Clemm von Hohenberg C, Braun U, Cosa Linan A, Gass N, Vasilescu AN, Tollens F, Lehardt P, Pfeiffer N, Inta D, Meyer-Lindenberg A, Gass P, Sartorius A, Weber-Fahr W.

Biol Psychiatry, 2017; S0006-3223(17)32317-X. doi: 10.1016/j.biopsych.2017.12.010.

Jende JME, Hauck GH, Diem R, Weiler M, Heiland S, Wildemann B, Korporal-Kuhnke M, Wick W, Hayes JM, Pfaff J, Pham M, Bendszus M, Kollmer J.

[Peripheral nerve involvement in multiple sclerosis: Demonstration by magnetic resonance neurography.](#)

Annals of Neurology 2017;82(5):676-685.

Song K, Wang H, Kamm GB, Pohle J, Reis FC, Heppenstall P, Wende H, Siemens J.

[The TRPM2 channel is a hypothalamic heat sensor that limits fever and can drive hypothermia.](#)

Science 2016;353(6306):1393-1398.

Braun U, Schöfer A, Bassett DS, Rausch F, Schweiger J, Bilek E, Erks, Romanczuk-Seiferth N, Grimm O, Geiger L, Haddad L, Otto K, Mohnke S, Heinz A, Zink M, Walter H, Schwarz E, Meyer-Lindenberg A, Tost H.

[Dynamic reconfiguration of brain networks: a potential schizophrenia genetic risk mechanism modulated by NMDA receptor function](#)

Proc Natl Acad Sci USA 2016;113(44):12568-73.

Pitzer C, Kuner R, Tappe-Theodor A.

[Voluntary and evoked behavioural correlates in inflammatory pain conditions under different social housing conditions.](#)

Pain Reports 2016;1:e564.

Nees TA, Tappe-Theodor A, Sliwinski C, Motsch M, Rupp R, Kuner R, Weidner N, Blesch A.

[Early-onset treadmill training reduces mechanical allodynia and modulates calcitonin gene-related peptide fiber density in lamina III/IV in a mouse model of spinal cord contusion injury.](#)

Pain 2016;157(3):687-697.

Tesarz J, Eich W, Treede RD, Gerhardt A.

[Altered pressure pain thresholds and increased wind-up in adult patients with chronic back pain with a history of childhood maltreatment: a quantitative sensory testing study.](#)

Pain 2016;157(8):1799-809.

Mease RA, Sumser A, Sakmann B, Groh A.

[Corticothalamic Spike Transfer via the L5B-POm Pathway in vivo.](#)

Cereb Cortex 2016;26(8):3461-3475.

Mease RA, Sumser A, Sakmann B, Groh A.

[Cortical Dependence of Whisker Responses in Posterior Medial Thalamus In Vivo.](#)

Cereb Cortex 2016;26(8):3534-3543.

Mease RA, Metz M, Groh A.

[Cortical Sensory Responses Are Enhanced by the Higher-Order Thalamus.](#)

Cell reports 2016;14(2):208-215.

Shabes P, Schloss N, Magerl W, Schmahl C, Treede RD, Baumgartner U

[A novel human surrogate model of noninjurious sharp mechanical pain.](#)

Pain 157(1):214-24.

Nees TA, Tappe-Theodor A, Sliwinski C, Motsch M, Rupp R, Kuner R, Weidner N, Blesch A.

[Early-onset treadmill training reduces mechanical allodynia and modulates calcitonin gene-related peptide fiber density in lamina III/IV in a mouse model of spinal cord contusion injury.](#)

Pain 2016;157:687-697.

Cragg JJ, Haefeli J, Jutzeler CR, Rohrich F, Weidner N, Saur M, Maier DD, Kalke YB, Schuld C, Curt A, and Kramer JK.

[Effects of Pain and Pain Management on Motor Recovery of Spinal Cord-Injured Patients: A Longitudinal Study.](#)

Neurorehab and Neural Repair 2016; 30(8):753-61.

Tedeschi A, Dupraz S, Laskowski CJ, Xue J, Ulas T, Beyer M, Schultze JL, Bradke F

[The Calcium Channel Subunit Alpha2delta2 Suppresses Axon Regeneration in the Adult CNS.](#)

Neuron 2016;92(2):419-434.

Eliava M, Melchior M, Knobloch-Bollmann HS, Wahis J, da Silva Gouveia M, Tang Y, Ciobanu AC, Triana del Rio R, Roth LC, Althammer F, Chavant V, Goumon Y, Gruber T, Busnelli M, Chini B, Tan L, Mitre M, Froemke RC, Chao MV, Giese G, Sprengel R, Kuner R, Poisbeau P, Seeburg PH, Stoop R, Charlet A, Grinevich V.

[A New Population of Parvocellular Oxytocin Neurons Controlling Magnocellular Neuron Activity and Inflammatory Pain Processing.](#)

Neuron 2016 89(6): p. 1291-1304

Fuchs EC, Neitz A, Pinna R, Melzer S, Caputi A, Monyer H.

[Local and distant input controlling excitation in layer II of the medial entorhinal cortex.](#)

Neuron 2016;89(1):194-208.

Godel T, Pham M, Heiland S, Bendszus M, Bummer P.

[Human dorsal-root-ganglion perfusion measured in-vivo by MRI.](#)

Neuroimage. 2016;141:81-87.

Kuner R and Flor H,

[Structural plasticity and reorganisation in chronic pain,](#)

Nature Reviews Neuroscience, 18(1):20-30, 2016

- Leitner FC, Melzer S, Lutcke H, Pinna R, Seeburg PH, Helmchen F, Monyer H.
[Spatially segregated feedforward and feedback neurons support differential odor processing in the lateral entorhinal cortex.](#)
Nature Neuroscience 2016;19(7):935-944.
- Kuner R, Flor H.
[Structural plasticity and reorganisation in chronic pain.](#)
Nat Rev Neurosci 2016;18:20-30.
- Pitzer C, Kuner R, Tappe-Theodor A.
[EXPRESS: Voluntary and evoked behavioural correlates in neuropathic pain states under different housing conditions.](#)
Molecular Pain 2016;12.
- Wolter J, Schild L, Bock F, Hellwig A, Gadi I, Al-Dabet MM, Ranjan S, Ronicke R, Nawroth PP, Petersen KU, Mawrin C, Shahzad K, Isermann B.
[Thrombomodulin-dependent protein C activation is required for mitochondrial function and myelination in the central nervous system.](#)
Journal of Thrombosis and Haemostasis 2016;14(11):2212-2226.
- Genovese F, Thews M, Mohrlen F, Frings S.
[Properties of an optogenetic model for olfactory stimulation.](#)
J Physiol 2016;594:3501-3516.
- Uhrig MK, Trautmann N, Baumgrtner U, Treede RD, Henrich F, Hiller W, Marschall S.
[Emotion Elicitation: A Comparison of Pictures and Films.](#)
Front Psychol 2016; 7: 180.
- Dusch M, van der Ham J, Weinkauff B, Benrath J, Rukwied R, Ringkamp M, Schmelz M, Treede RD, Baumgrtner U
[Laser-evoked potentials mediated by mechano-insensitive nociceptors in human skin.](#)
Eur J Pain 2016 20(5):845-54.
- Genovese F, Bauersachs HG, Grasser I, Kupke J, Magin L, Daiber P, Nakajima J, Mohrlen F, Messlinger K, Frings S.
[Possible role of calcitonin gene-related peptide in trigeminal modulation of glomerular microcircuits of the rodent olfactory bulb](#)
Eur J Neurosci 2016;45:587-600.
- Biedermann SV, Fuss J, Steinle J, Auer MK, Dormann C, Falfan-Melgoza C, Ende G, Gass P and Weber-Fahr W.
[The hippocampus and exercise: histological correlates of MR-detected volume changes](#)
Brain Struct Funct 2016; 221(3): 1353-63.
- Lyu Y, Guo X, Bekrater-Bodmann R, Flor H, Tong S.
[Phantom limb perception interferes with motor imagery after unilateral upper-limb amputation.](#)
Sci Rep 2016; 16;6:21100.
- Ruschel J, Hellal F, Flynn KC, Dupraz S, Elliott DA, Tedeschi A, Bates M, Sliwinski C, Brook G, Dobrindt K, Peitz M, Brustle O, Norenberg MD, ??lesch A, Weidner N, Bunge MB, Bixby JL, and Bradke F
[Axonal regeneration. Systemic administration of ephothilone B promotes axon regeneration after spinal cord injury.](#)
Science 2015; 348(6232):347-52.

Jonas R, Klusch A, Schmelz M, Petersen M, Carr RW.

[Assessment of TTX-s and TTX-r Action Potential Conduction along Neurites of NGF and GDNF Cultured Porcine DRG Somata.](#)

PLoS One 2015;10:e0139107.

Njoo C, Agarwal N, Lutz B, Kuner R.

[The cannabinoid receptor CB1 interacts with the WAVE1 complex and plays a role in actin dynamics and structural plasticity in neurons.](#)

PLoS biology 2015;13(10):e1002286.

Namer B, Ørstavik K, Schmidt R, Kleggetveit I-P, Weidner C, Mørk C, Kvernebo MS, Kvernebo K, Salter H, Carr TH, Segerdahl M, Quiding H, Waxman SG, Handwerker HO, Torebjørk HE, Jørum E, Schmelz M.

[Specific changes in conduction velocity recovery cycles of single nociceptors in a patient with erythromelgia with the I848T gain-of-function mutation of Nav1.7.](#)

Pain 2015;156:1637-1646.

Tesarz J, Gerhardt A, Leisner S, Janke S, Treede RD, Eich W.

[Distinct quantitative sensory testing profiles in nonspecific chronic back pain subjects with and without psychological trauma.](#)

Pain 2015;156(4):577-86.

Gangadharan V, Kuner R.

[Unravelling spinal circuits of pain and mechanical allodynia.](#)

Neuron 87:673-5, 2015

Lu J, Luo C, Bali KK, Xie R-G, Mains RE, Eipper BA, Kuner R.

[A role for Kalirin-7 in nociceptive sensitisation via activity-dependent modulation of spinal synapses.](#)

Nature Communications, 6:6820, 2015

Lu J, Luo C, Bali KK, Xie RG, Mains RE, Eipper BA, Kuner R.

[A role for Kalirin-7 in nociceptive sensitization via activity dependent modulation of spinal synapses.](#)

Nature Communications 2015;6: 6820.

Vicuña L, Strohlic DE, Latremoliere A, Bali KK, Simonetti M, Husainie D, Prokosch S, Riva P, Griffin RS, Njoo C, Gehrig S, Mall MA, Arnold B, Devor M, Woolf CJ, Liberles SD, Costigan M, Kuner R.

[The serine protease inhibitor SerpinA3N attenuates neuropathic pain by inhibiting T cell-derived leukocyte elastase.](#)

Nat. Med. 2015;21:518-523.

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.](#)

Nat Neurosci 2015;18:10-16.

Tost H, Champagne FA, Meyer-Lindenberg A.

[Environmental influence in the brain, human welfare and mental health.](#)

Nat Neurosci 2015;18(10):1421-31.

Andoh J, Matsushita R, Zatorre RJ.

[Asymmetric Interhemispheric Transfer in the Auditory Network: Evidence from TMS, Resting-State fMRI and Diffusion Imaging](#)

J Neurosci. 2015;35(43):14602-11

Mauceri D, Hagenston AM, Schramm K, Weiss U, Bading H.
[Nuclear Ca²⁺ Buffering Capacity Shapes Neuronal Architecture.](#)
J Biol Chem 2015;290(38):23039-23049.

Hanack C, Moroni M, Lima WC, Wende H, Kirchner M, Adelfinger L, Schrenk-Siemens K, Tappe-Theodor A, Wetzel C, Kuich PH, Gassmann M, Roggenkamp D, Bettler B, Lewin GR, Selbach M, Siemens J.
[GABA blocks pathological but not acute TRPV1 pain signals.](#)
Cell 2015;160(4):759-770.

Henrich F, Magerl W, Klein T, Greffrath W, Treede RD
[Capsaicin-sensitive C- and A-fibre nociceptors control long-term potentiation-like pain amplification in humans.](#)
Brain 2015;138(Pt 9):2505-2520.

Pham M, Oikonomou D, Hornung B, Weiler M, Heiland S, Baumer P, Kollmer J, Nawroth PP, Bendszus M.
[Magnetic resonance neurography detects diabetic neuropathy early and with Proximal Predominance.](#)
Annals of Neurology 2015;78(6):939-948.

Pham M, Oikonomou D, Hornung B, Weiler M, Heiland S, Baumer P, Kollmer J, Nawroth P, Bendszus M.
[MR neurography detects diabetic neuropathy early and with proximal predominance.](#)
Ann Neurol. 2015;78:939-948.

Buetfering C, Allen K, Monyer H.
[Parvalbumin interneurons provide grid cell-driven recurrent inhibition in the medial entorhinal cortex](#)
Nature Neuroscience 2014;17(5):710-718.

Puttagunta R, Tedeschi A, Soria MG, Hervera A, Lindner R, Rathore KI, Gaub P, Joshi Y, Nguyen T, Schmandke A, Laskowski CJ, Boutillier AL, Bradke F., Di Giovanni S.
[PCAF-dependent epigenetic changes promote axonal regeneration in the central nervous system.](#)
Nature Commun Nat Commun 2014;5:3527

Groh A, de Kock CP, Wimmer VC, Sakmann B, Kuner T.
[Driver or coincidence detector: modal switch of a corticothalamic giant synapse controlled by spontaneous activity and short-term depression.](#)
J Neurosci 2008;28(39):9652-9663.

Pezawas L*, Meyer-Lindenberg A*, Drabant EM, Verchinski BA, Munoz KE, Kolachana BS, Egan MF, Mattay VS, Hariri AR, Weinberger DR.
[5-HTTLPR polymorphism impacts human cingulate-amygdala interactions: a genetic susceptibility mechanism for depression.](#)
Nature Neuroscience 2005;8(6):828-834.

Mease RA, Krieger P, Groh A.
[Cortical control of adaptation and sensory relay mode in the thalamus.](#)
Proc Natl Acad Sci U S A 2014;111(18):6798-6803.