

Dr. VIJAYAN GANGADHARAN**1) General information**

Date of birth: 20 June, 1981
 Gender: Male
 Address: Institute for Vascular and Islet Cell Biology,
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 Diabetes Research at Heinrich Heine
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 Position: Group Leader, Institute for Vascular and Islet Cell Biology, German Diabetes
 Center, Düsseldorf, Germany
 Children: One (* 2017)
 Parental leave, if applicable: 2017

**2) University training and degree**

2002 - 2005 Master of Science in Medical biochemistry, JIPMER, Pondicherry University
 Pondicherry, India
 1999 - 2002 Bachelor of Science in Biochemistry, University of Madras, Chennai, India

3) Advanced academic qualifications

2013 Doctoral dissertation in Neuroscience (summa cum laude), Mentor: Prof.
 Rohini Kuner, Pharmacology Institute, Heidelberg University, Heidelberg,
 Germany

4) Postgraduate professional career

Since 2022 Research Group Leader, Institute for Vascular and Islet Cell Biology, German
 Diabetes Center, Düsseldorf, Germany
 2018 - 2022 Postdoctoral fellow with Prof. Dr. Moritz Hemlstaedter, Department of
 Connectomics, Max Planck Institute for Brain Research, Frankfurt Am Main,
 Germany
 2013 - 2018 Postdoctoral fellow with Prof. Dr. Rohini Kuner, Pharmacology Institute,
 Department of Molecular Pharmacology, Heidelberg University, Heidelberg,
 Germany

5) OtherAwards and honours:

2022 IZN/Chica and Heinz Schaller Young Investigator Neuroscience Award
 2016 1st Prize for Basic Pain Research, German Society for the Study of Pain
 (DGSS)
 2013 Postdoctoral fellowship, Medical Faculty Heidelberg of Heidelberg University,
 Germany
 2006 Junior Research Fellowship, 2006, Indian Council of Medical Research, India

6) Publications:

A)

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. Neuropathic pain caused by miswiring and abnormal end organ targeting. **Nature**;606(7912):137-145, 2022.

Loomba S*, Straehle J*, Gangadharan V*, Heike N*, Khalifa A*, Motta A*, Ju N, Sievers M, Gempt J, Meyer HS, Helmstaedter M. Connectomic comparison of mouse and human cortex. **Science**;377(6602):eabo0924, 2022.

Gangadharan V, Wang X, Luo C. Cyclic GMP-dependent protein kinase-I localized in nociceptors modulates nociceptive cortical neuronal activity and pain hypersensitivity. **Molecular Pain**; 13:1744806917701743, 2017.

Tan LL, Pelzer P, Heini C, Tang W, Gangadharan V, Flor H, Sprengel R, Kuner T, Kuner R. A pathway from midcingulate cortex to posterior insula gates nociceptive hypersensitivity, **Nature Neuroscience**; 20(11):1591-1601, 2017.

Gangadharan V, Kuner R. Unravelling Spinal Circuits of Pain and Mechanical Allodynia. **Neuron**; 87(4):673-5, 2015.

Selvaraj D, Gangadharan V, Michalski CW, Kurejova M, Stösser S, Srivastava K, Schweizerhof M, Waltenberger J, Ferrara N, Heppenstall P, Shibuya M, Augustin HG, Kuner R. 1. A functional role for VEGFR1 expressed in peripheral sensory neurons in cancer pain. **Cancer Cell**; 27:780-96, 2015.

Gangadharan V, Selvaraj D, Kurejova M, Njoo C, Gritsch S, Škoricová D, Horstmann H, Offermanns S, Brown AJ, Kuner T, Tappe-Theodor A, Kuner R. A novel biological role for the phospholipid lysophosphatidylinositol in nociceptive sensitization via activation of diverse G-protein signalling pathways in sensory nerves in vivo. **Pain**; 154(12):2801-2812, 2013.

Luo C, Gangadharan V, Bali KK, Xie RG, Agarwal N, Kurejova M, Tappe-Theodor A, Tegeder I, Feil S, Lewin G, Polgar E, Todd AJ, Schlossmann J, Hofmann F, Liu DL, Hu SJ, Feil R, Kuner T, Kuner R. Presynaptically localized cyclic GMP-dependent protein kinase 1 is a key determinant of spinal synaptic potentiation and pain hypersensitivity. **PLoS Biology**; 10(3):e1001283, 2012.

Gangadharan V*, Wang R*, Ulzhöfer B, Luo C, Bardoni R, Bali KK, Agarwal N, Tegeder I, Hildebrandt U, Nagy GG, Todd AJ, Ghirri A, Häussler A, Sprengel R, Seeburg PH, MacDermott AB, Lewin GR, Kuner R. Peripheral calcium-permeable AMPA receptors regulate chronic inflammatory pain in mice. **Journal of Clinical Investigation**; 121(4):1608-23, 2011.

Schweizerhof M, Stösser S, Kurejova M, Njoo C, Gangadharan V, Agarwal N, Schmelz M, Bali KK, Michalski CW, Brugger S, Dickenson A, Simone DA, Kuner R. Hematopoietic colony-stimulating factors mediate tumor-nerve interactions and bone cancer pain, **Nature Medicine**; 15(7):802-807, 2009.

* Equally contributing authors

B) other publications: -

C) Patents: -

