



CV IN DETAIL

Research/Teaching Experience:

- Postdoctoral Research Fellow: May 2007 - Feb 2008 (Ibanez Group, Karolinska Institute, Stockholm, Sweden).
- Postdoctoral Research Fellow: July 2008 - June 2011 (Peeper Group, Netherlands Cancer Institute (NKI), Amsterdam, The Netherlands)
- Guest Lecturer in Biotech: July 2012 - Sep 2012 (Government Arts college Tiruvananthapuram, Kerala, India.
- Research Scientist: Oct 2012 – Dec 2012 (Premas Biotech, Manesar (Near Delhi), India.
- Assistant Professor: January 2013 – present (Integrated Science Education & Research Centre (ISERC), Visva-Bharati (A Central University), Santiniketan, West Bengal, India.

Journal Publications

1. **The molecular basis of acid insensitivity in the African naked mole-rat.** Ewan St. John Smith, Damir Omerbasic, Stefan G. Lechner, **Gireesh Anirudhan**, Liudmila Lapatsina and Gary R. Lewin. **Science**. 2011; 6062 (334):1557-1560.
2. **The sensory mechanotransduction ion channel ASIC2 (Acid Sensitive Ion Channel 2) is regulated by neurotrophin availability.** McIlwrath SL, Hu J, **Anirudhan G**, Shin JB, Lewin GR. **Neuroscience**. 2005;131(2):499-511.

Conference Presentations:

1. **Poster Presentation in Drug Discovery and Cancer Therapy - 2016 meeting conducted at Pondicherry University, Puducherry, India. Algorithmic characterisation for computation of certain mutations in genomic sequences.**
Gireesh A*, Ashish Sneh, Sri Narayan Ojha.
2. **Poster presentation in SFN annual meeting 2006, Conducted by Society for Neuroscience. Anatomical, molecular, and physiological analysis of neurotrophin 3/neurotrophin 4 double-mutant mice.**
Gireesh Anirudhan* and Gary R Lewin.

3. **Poster Presentation in Gordon Research Conference on Molecular and Cellular Neurobiology 2004**, at Hong Kong University of Science and Technology, Hong Kong, China.
High through put *in situ* hybridisation screening for touch receptor genes in dorsal root ganglia neurons.
Gireesh Anirudhan*, Jung Bum Shin, Steeve Bourane, Stephanie Venteo, Patrick Carroll, Gary R. Lewin.

Genebank Submissions:

1. *Heterocephalus glaber* ASIC1b (Accn2) mRNA, complete cds. (ACCESSION: JN703734).
2. *Heterocephalus glaber* TRPV1 (Trpv1) mRNA, complete cds. (ACCESSION: JF912492).
3. *Heterocephalus glaber* NaV1.8 (SCN10A) mRNA, partial cds. (ACCESSION: JF912495).
4. *Heterocephalus glaber* NaV1.7 (SCN9A) mRNA, partial cds. (ACCESSION: JF912494).
5. *Heterocephalus glaber* ASIC1a (Accn2) mRNA, complete cds. (ACCESSION: JF912493).

Fellowships/Awards:

1. Qualified for CSIR Junior Research fellowship.
2. Awarded University Grants Commission, India/ JNU Junior Research Fellowship, during M.Phil./Ph.D.
3. Awarded Department of Biotechnology, India fellowship during M.Sc.

Research Experience:

Post Doctoral Projects: Detecting novel tumor suppressors in melanoma by in situ hybridization.

Oncogene induced senescence (OIS) is a protective mechanism against tumorigenesis. In case of melanocytes, after oncogene induction, and after an initial burst of proliferation, cells become senescent resulting in the formation of nevi (moles), which is the benign form of malignant melanoma. The objective of the project was aimed at finding key players involved in oncogene induced senescence (OIS) in benign nevus and malignant melanoma doing in situ hybridization for candidate genes. The technique was standardized for melanocyte markers on human skin nevus and on melanoma sections and prospective candidate genes tested.

Ph.D Project : Screening for Touch Receptor Genes.

<http://www.diss.fu-berlin.de/2007/854/indexe.html>

Under this broad title, I tried to identify molecule(s) involved in the mechanotransduction apparatus in the skin. Somatosensory neurons of dorsal root ganglia (DRG) are involved in sensing pressure, nociception (sensing harmful mechanical, thermal and chemical stimulations) and proprioception (detection of muscle tension and joint position). They are dependent on neurotrophins (NT) for their development and (or) survival. Also neurotrophins influence their differentiation in to different types of neurons that differ in their sensory and morphological characteristics. The outline of the project was to find genes regulated by neurotrophins, screen them for their expression pattern (to find out transcripts with a subpopulation specific expression pattern) and to test promising candidates for their role in mechanotransduction using electrophysiology and behavioral analysis in mouse model. Also an attempt was made to find out the extracellular matrix binding partners of a mechanosensitive ion channel ASIC3 using a phage display library of mouse skin.

M.Phil. Dissertation:

Title : Construction and Expression Screening of cDNA Library of Mycobacterium.

M. Sc. Dissertation:

Title : Isolation of Lipase producing micro-organisms, partial purification and characterization of the lipase and application in detergents and organic-phase synthesis.