

KOUSHIK CHAKRABARTY

Work History

- 2017/01- Current** **Scientist, GROW** Laboratory Narayana Nethralaya Foundation, Bengaluru, India
- 2014/08- 2016/12** **Research Faculty**, Centre for Neuroscience, Indian Institute of Science, Bengaluru, India
- 2011/07- 2014/03** **Research Scientist/ Co-principal Investigator**, Department of Molecular Neurobiochemistry, Ruhr University Bochum (RUB),
- 2008/08- 2011/6** **Postdoctoral Researcher**, Rudolf Magnus Institute of Neuroscience, Utrecht Medical Centre, Utrecht University (UU), Netherlands
- 2006/05-2008/7** **Postdoctoral Researcher**, Department of Molecular Neurobiochemistry, Ruhr University Bochum, Germany
- 2001/08- 2002/8** **Junior Research Fellow**, Department of Biological Psychiatry, National Institute of Mental Health and Neurosciences, Bangalore, India

Education

- 2002/09- 2006/04** **PhD in Neuroscience**
International Graduate School of Neuroscience (IGSN): www.rub.de/igsn. Ruhr University Bochum, Germany. Awarded “***Summa cum laude***”
- 1999/06-2001/05** **MSc Microbiology**
Bangalore University, India. Awarded: **1st Class**
- 1995/06- 1998/06** **BSc Microbiology**
Bangalore University, India. Awarded: **1st Class**

Awards & Honors

Research Funding

- **Department of BioTechnology**, Govt. Of India (BT/PR26190/GET/119/118/2017), 2018- 2021, Title: Gene editing and cellular reprogramming for treating macular corneal dystrophy, **Principal Investigator**
- **Biotechnology Ignition Grant Scheme (BIG) – BIRAC**, Department of Biotechnology grant 2020-Ongoing: Development of xeno free medium for human embryoid bodies from iPSCs, **Principal Investigator**
- World without GNE myopathy, India, 2019-2021, Generation of GNE patient derived iPSCs for modeling GNE myopathy. **Principal Investigator**
- Parent Project Muscular Dystrophy, 2020- Ongoing, **Principal Investigator**.

Travel & Meeting grant: International Society for Stem Cell Research, Yokohama, Japan, 2012

Consortium research grant BMBF, Germany, 2010 (**250,000 €**) as Co-principal Investigator

Best team & team lead, Drug Development Course, 2009, TI Pharma, The Netherland

Selected Fellow 2009, Genomics workshop, European Molecular. Biol. Lab. (Heidelberg)

Selected Fellowships

- 2004, Charite University (Berlin) Biostatistics summer school
- Young Scientist Fellowships 2003: Federation of European Neurosciences (FENS)
- PhD Fellowship (2002-05) & best grant proposal award (20,000 €), Ruhr University Bochum.
- Merit Scholarship (1999-2001), MSc, Bangalore University, India.

Organizational skills

2012: Institutional coordinator for the German Society for biochemistry and Molecular Biology (GBM)

2011-2013 Biochemistry Course design and Lecture (RUB Stem Cell Master's Program)

2007/8- 11/13 GLP instructor and Stem cell isolation course, Ruhr University Bochum (RUB)

2006-13: Course Instructor Ruhr University Bochum: Cryopreservation, IHC, Confocal microscopy

2008- 11 Course Instructor: In-situ hybridization/IHC/Microscopy and Bioinformatics. RMI, Utrecht.

Keynote speaker: GBM annual meetings (2005,06), Freiburg University (2005), Christian Medical college, India (2006), TU Dortmund (2010), Bielefeld University (2011), IISER (Kolkata) 2014, NIMHANS (Bangalore) 2014, Vellore Institute of Technology (VIT, India) 2017, 2019.

Posters & Abstracts: GBM annual meetings (2003, 2007), Society for Neuroscience meetings USA (2005, 2007), Federation of European neuroscience society meetings (2004-2010), International society for stem cell annual meeting (2012) in Japan. NRW stem cell annual meeting (2005-2013).

publications

- **Chakrabarty K, Shetty R, Ghosh A.** iPSC-based disease modeling and prospective immune therapy for COVID-19, **Cytotherapy, Sept(2021).**
- **Chakrabarty K, et al.** Generation of iPSC line (GLNNFi001-A) from peripheral blood mononuclear cells of a patient with macular corneal dystrophy. **Stem Cell Res. 2022 Apr 22;62:102789.**
- Vinekar A, Nair AP, Sinha S, Vaidya T, **Chakrabarty K**, et al. Tear Fluid Angiogenic Factors: Potential Noninvasive Biomarkers for Retinopathy of Prematurity Screening in Preterm Infants. **Invest Ophthalmol Vis Sci. 2021 Mar 1;62(3):2.**
- Shetty R, Murugeswari P, **Chakrabarty K, et al.** Stem cell therapy in coronavirus disease 2019: current evidence and future potential. **Cytotherapy. 2020 Nov 9;S1465-3249(20)30932-4.**
- Shetty R, Naidu JR, .., **Chakrabarty K.** Distinct ocular surface soluble factor profile in human corneal dystrophies. **Ocul Surf. 2019 Nov 19.**
- **Chakrabarty K, Shetty R, Ghosh A.** Corneal cell therapy: with iPSCs, it is no more a far-sight. **Stem Cell Res Ther. 2018 Oct 25;9(1):287.**
- **Heumann R, Moratalla R, Herrero MT, Chakrabarty K,** et al. Mechanisms underlying dyskinesia in Parkinson's disease and nonpharmacological therapies. **Journal of Neurochemistry, 2014 Apr 29.**
- Roessler R, Smallwood S, Veenvliet JV, Pechlivanoglou P, Peng S, **Chakrabarty K,** and Copray S. Detailed Analysis of the Genetic and Epigenetic Signatures of iPSC Derived Mesodiencephalic Dopaminergic Neurons. **Stem cell Reports, 2014 Apr 3; 2(4):520-33.**



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- **Chakrabarty K, et al.**, Genome wide expression profiling of the mesodiencephalic region identifies novel factors involved in early and late dopaminergic development, **Biol Open.2012 Aug 15;1(8): 673-704**
- Bhattacharyya S, Khanna S, **Chakrabarty K**, et al. Anti-brain autoantibodies and altered excitatory neurotransmitters in obsessive compulsive disorder. **Neuropsychopharmacology. 2009 Aug 12.**
- **Chakrabarty K, Heumann R.** Prospective of Ras signaling in stem cells. **Biological Chemistry, 2008 Jul; 389(7):791-8.**
- **Chakrabarty K**, et al. Neuronal activation of Ras promotes enhancement and stabilization of dopaminergic properties in differentiating neurospheres. **Eur J Neurosci. 2007 Apr; 25(7):1971-1981.**
- **S Bhattacharyya and K Chakrabarty.** Glutamatergic Dysfunction-Newer Targets for AntiObsessional Drugs. **Recent Patents on CNS Drug Discovery Volume 2(1), Jan 2007**
- **Chakrabarty K**, Bhattacharyya S, Christopher R, Khanna S. Glutamatergic dysfunction in OCD. **Neuropsychopharmacology. 2005 Sep; 30(9):1735-40.**