

## Dr. Kavina Ganapathy

Assistant Professor

### Specialization

Regenerative Medicine

### Education

- 2017 - Ph.D., School of Regenerative Medicine, Manipal University, Bengaluru



### Work Experience

- 2021 onwards JAIN (Deemed-to-be University), Bengaluru
- 2019-2021 – Senior Scientist, ONNSA Research Innovations Pvt Ltd, Bengaluru
- 2018-2019 – Post Doctoral Fellow (PDF) National Centre for Biological Sciences (NCBS)
- 2017-2018 – Research Associate, NIMHANS

### Key Areas of Research

- Stem cell application in Neurodegenerative diseases
- *In-vitro* disease modelling: Embryonic Stem Cells and Induced Pluripotent Stem Cells
- Cancer -Oral and glial, disease modelling and drug screening

### Regenerative Medicine: Publications:

- Bilal M. Akhtar, Priyanka Bhatia, Shubhra Acharya, Sanjeev Sharma, Yojet Sharma, Aswathy Bhuvanendran Nair Suseela Devi, **Kavina Ganapathy**, Anil Vasudevan, Padinjat Raghu; A human stem cell resource to decipher the biochemical and cellular basis of neurodevelopmental defects in Lowe syndrome. *Biol Open* 15 January 2022; 11 (1): bio059066. doi: <https://doi.org/10.1242/bio.059066>
- Datta I, Mekha Kausal A, **Ganapathy K**, Razdan R 2019. Influence of intranasal exposure of MPTP in multiple doses on liver functions and transition from non-motor to motor symptoms in a rat PD model <https://doi.org/10.1007/s00210-019-01715-1>
- **Ganapathy K**, Datta I, Bhonde R 2018. Astrocyte-Like Cells Differentiated from Dental Pulp Stem Cells Protect Dopaminergic Neurons Against 6-Hydroxydopamine Toxicity. *Mol Neurobiol.* 2018 Oct 16. doi: 10.1007/s12035-018-1367-3.

- **Ganapathy K**, Datta I, Razdan R, Bhonde R. Location and Number of Astrocytes Determine Dopaminergic Neuron Survival and Function Under 6-OHDA Stress Mediated Through Differential BDNF Release. *Mol Neurobiol.* 2018 Jul;55(7):5505-5525. doi: 10.1007/s12035-017- 0767-0. Epub 2017 Sep 30.
- Datta I and **Ganapathy K** 2017. "Modification of  $\alpha$ -synuclein by phosphorylation: A pivotal event to unravel cellular pathogenesis of Parkinson's disease" Under the book titled 'Phosphorylation'. ISBN 978-953-51-5365-8. (Chapter)
- **Ganapathy K**, Datta I, Sowmithra S, Joshi P, and Bhonde R. 2016a. Influence of 6- Hydroxydopamine Toxicity on  $\alpha$ -Synuclein Phosphorylation, Resting Vesicle Expression, and Vesicular Dopamine Release. *J. Cell. Biochem.* 9999:1-18 (Article).
- **Ganapathy K**, Sowmithra S, Bhonde R, Datta I. 2016b. By Changing Dimensionality, Sequential Culturing of Midbrain Cells, rather than Two-Dimensional Culture, Generates a Neuron-Glia Ratio Closer to in vivo Adult Midbrain. *Cells Tissues Organs* 201:445-463 (Article).
- Datta I, Majumdar D, **Ganapathy K**, Bhonde RR. Stem Cells and Neuronal Differentiation. In *Stem Cell Therapy for Organ Failure 2014* (pp. 71-101). Springer India (Chapter).
- Datta, I., **Ganapathy K.**, Tattikota, S. M. and Bhonde, R. (2013), Directed differentiation of human embryonic stem cell-line HUES9 to dopaminergic neurons in a serum-free defined culture niche. *Cell Biol Int*, 37: 54–64. doi:10.1002/cbin.10012. (Article)