

**Sneha Kotagudda Murali Mohan**  
**Email id.: snehakm@uga.edu**

**Education and research**

• **PhD student (August 2019 - present)**

Neuroscience graduate program. University of Georgia, Athens GA

**Project:** Role of PAX6 gene in corneal development

**Major professor:** Dr. James D. Lauderdale

• **Senior Research Fellow (Feb 2018- June 2019)**

**[Accelerator program for Discovery in Brain disorders using Stem cells \(ADBS\) Program](#)**

**Mentors:** Prof. Mahendra Rao ([inStem](#)), Prof. Raghu Padinjat ([NCBS](#)) and Dr. Odity Mukherjee (inStem)

**Skillset:** Neural Stem Cells (NSCs) derivation from Human induced Pluripotent Stem Cells (HiPSCs), Analysis of RNA sequencing data.

**Additional project:** Role of mitochondrial dysfunction in Alzheimer's disease (AD).

**Mentor:** Dr. Odity Mukherjee (inStem), Prof. Mitradas M. Panicker (NCBS)

• **Junior Research Fellow (Feb 2016 – Feb 2018)**

**ADBS Program**

**Mentors:** Prof. Mahendra Rao (inStem), Prof. Raghu Padinjat (NCBS) and Dr. Odity Mukherjee (inStem)

**Skillset:** Standardization of HiPSCs generation from Lymphoblastoid Cell Lines (LCLs), karyotyping of stem cells, plasmid DNA isolation, RNA isolation and RT-PCR.

• **Junior Research Fellow (Aug 2015- Feb 2016)**

**Mentor:** Prof. Mitradas M. Panicker (NCBS)

**Skillset:** Molecular biology techniques like genomic DNA isolation and PCR, basics of cell culture, standardization of LCL generation from Peripheral Blood Mono nuclear cells (PBMNC), generation of iPSC from fibroblast using lentivirus.

• **Bachelor of Engineering (BE) project:**

**Title:** *In vitro* characterisation of Amyloid Precursor Protein (APP) pathway using patient derived cell lines.

**Mentors:** Dr. Odity Mukherjee (inStem), Dr. Reshma S.V. ([PESIT](#))

**Academic Records:**

- Bachelor of Engineering (BE), Biotechnology,  
2011 – 2015. PES Institute of Technology (PESIT), CGPA: 9.65/10
- Deeksha Centre for learning, Pre-University College  
2009 – 2011. Physics, Chemistry, Math, Biology: 87.83%
- Jyothy Kendriya Vidyalaya, Central Board of Secondary Education  
2009. 90.60%

**Teaching experience:**

- Teaching assistance for CBIO2210L Human Anatomy and Physiology II Lab during Summer 2021
- Teaching assistance for CBIO3800 Neurobiology during Spring 2021

**Awards & Honors:**

- 2<sup>nd</sup> prize in the Fujio cup quiz on stem cells and regenerative medicine organized by [NCRM-NICHE](#) in Japan from 21<sup>st</sup>– 23<sup>th</sup> October 2018.
- 2<sup>nd</sup> rank holder in BE biotechnology at college level.
- Qualified GATE-Biotechnology 2015.
- Prof. MRD Merit Scholarship in 7<sup>th</sup> semester for being one of the toppers.

- 2<sup>nd</sup> prize for oral presentation on “glycerol purification and optimization” in a National level technical symposium held at Siddaganga Institute of Technology Tumkur on 17<sup>th</sup> October 2014.

#### **Initiatives & training:**

- Teaching assistant in “Reprogramming human somatic cells to HiPSCs workshop” organized by Department of Biotechnology (DBT) at inStem/NCBS from November 6-11th 2017, June- July 2018 and in June 3- 14th, 2019.
- Pioneer member of the ADBS lab; assisted in setting up the laboratory and optimizing protocols.
- Participated in stem cell workshop and dry lab demo hosted by Thermo Fisher Scientific in Bangalore on 1<sup>st</sup> August 2016.
- Summer internship in Molecular oncology laboratory at IIT- Madras during June 2014 – August 2014. Skill set in molecular biology techniques acquired during the training.
- Active participation at Prakalpa 2014 – a science fest organized by PESIT Bangalore.
- Voluntary Project on “Production of biodiesel from waste vegetable oil” at PESIT.
- Vocational training in cloning, expression of gene and PCR techniques at Aristogene Biosciences, Bangalore during the period 18<sup>th</sup> July 2013 – 28<sup>th</sup> July 2013.

#### **Publication:**

- Ashaq H Najar\*, **Sneha KM\***, Aparna Ashok, Swathy Babu, Anand G. Subramaniam, Ramkrishnan Kannan, Biju Viswanath, Meera Purushottam, Mathew Varghese, Suhel Parvez, Mitradas M Panicker, Odity Mukherjee, Sanjeev Jain. Derivation of iPSC lines from two patients with familial Alzheimer’s disease from India. (Submitted to Stem Cell Research).

#### **Presentations:**

- **Sneha KM\***, Hussain A\*, Kannan R, Viswanath B, Jain S, Panicker MM, Mukherjee O. Influence of APOE genotype in NSC stress response derived from Alzheimer’s patients. Poster presented at: inStem annual review of research; 2018 Feb 26-28; inStem, Bangalore.
- **Sneha KM\***, Hussain A\*, Kannan R, Viswanath B, Jain S, Panicker MM, Mukherjee O. Mapping mitochondrial dysfunction in Alzheimer’s disease patient derived Neural Stem cells. Poster presented at: Stem cell biology and disease models mini symposium; 2018 Feb 2-3; inStem, NCBS, Bangalore.
- Iyer S, Adhikarla S, Hussain A, Panicker A, **Sneha KM**, Mohammed F, Seshadri M, Kota LN, Vishwanath B, Purushottam M, Varghese M, Jain S, Padinjat R, Rao M, Mukherjee O. Modelling neuropsychiatric disorders using patient derived cell lines: A workflow for bridging genotype-phenotype gap. Poster presented at: inStem annual review of research and SAB meeting; 2016 Mar 7-9; inStem, Bangalore.

#### **Conferences attended:**

- ARVO 2021 annual meeting – May 1 - May7, virtual meeting
- 2021 Southeast regional meeting – Developmental biology group – May18 – May 20, virtual meeting

#### **Professional Affiliations:**

- ARVO member February 2021 – Present
- Society for Developmental Biology member June 2021 - Present