

LAKSHMY VASAN

PhD student

Collaborative program in Neuroscience
Department of Laboratory Medicine and Pathobiology
University of Toronto, ON, Canada
lakshmy.vasan@mail.utoronto.ca
lakshmyvasan@gmail.com | +1 437 985 4594

RESEARCH EXPERIENCE

University of Toronto

PhD student

Toronto

September 2019 - Present

Collaborative program in Neuroscience and Department of Laboratory Medicine and Pathobiology

Mentor: Dr. Carol Schuurmans

Topic: "Elucidating the role of proneural genes in neuronal reprogramming"

Indian Institute of Science Education and Research

Project student

Kolkata

July 2018 – July 2019

Mentor: Prof. Jayasri Das Sarma, Department of Biological Sciences

Topic : "The role of amyloid- β in modulating the astrocytic gap junction protein connexin43"

Indian Institute of Science Education and Research

MS Thesis

Kolkata

May 2017- June 2018

Mentor: Prof. Jayasri Das Sarma, Department of Biological Sciences

Topic : "The role of amyloid- β in modulating the astrocytic gap junction protein connexin43"

Indian Institute of Science Education and Research

Summer Internship

Kolkata

May 2016 – July 2016

Mentor: Prof. Jayasri Das Sarma, Department of Biological Sciences

Topic : "The change in connexin expression profile of human neuroblastoma cell upon differentiation."

Indian Institute of Science Education and Research

Visiting Undergraduate Student

Kolkata

December 2015 – May 2017

Mentor: Prof. Jayasri Das Sarma, Department of Biological Sciences

Indian Institute of Science

Summer Internship

Bangalore

May 2015 – July 2015

Mentor: Dr. Shyamala Mani, Centre for Neuroscience

Topic : "Cloning of mouse *stl* gene to check its expression in mouse brain via in-situ hybridization."

Indian Institute of Science

Summer Internship

Mentor: Dr N Ravi Sundaresan, Department of Molecular Biology and Cell Biology

Topic : "Plasmid isolation and basic molecular biology techniques."

Bangalore

May 2014 – July 2014

PUBLICATIONS

- Effect of Amyloid- β on Connexin 43 mediated gap junction intercellular communication in mouse primary astrocytes; Mahua Maulik, **Lakshmy Vasan**, Abhishek Bose, Jayasri Das Sarma (*Manuscript under submission*)
- Investigating the role of extracellular vesicles in a human oligodendrogloma model system Anjali Balakrishnan, Vorapin Chinchalongporn, Oleksandr Prokopchuk, **Lakshmy Vasan**, Myra J Chen, Lata Adnani , Ahmed El-Sehemy, Sheikh Tanveer Ahmad, Sajeevan Sujanthan, Thomas Olender, Yacine Touahri, Lacrimioara C Comanita, Boris Kan, J Gregory Cairncross, Marjorie Brand, Valerie A Wallace, Jennifer A Chan, Carol Schuurmans (*Manuscript under preparation*)

POSTERS

- Anjali Balakrishnan^{1,2}, Lata Adnani^{1,3}, Myra Chen⁴, Tanveer Sheikh⁴, **Lakshmy Vasan**¹, Vorapin Chinchalongporn¹, Thomas Olender⁵ , Sajeevan Sujanthan¹, Ahmed El-Sehemy⁶, Valerie Wallace⁶, Marjorie Brand⁵, Jennifer Chan⁴, Carol Schuurmans^{1,2}; "Investigating the role of extracellular vesicles in a human oligodendrogloma model system" at Brain Sciences day; Sunnybrook Health Sciences, Toronto, ON, Canada; January 2020
- Mahua Maulik, **Lakshmy Vasan**, Abhishek Bose, Jayasri Das Sarma; "Effect of Amyloid- β on astrocytic gap junction protein Cx43 and its reversal by 4-PBA" at Department of Biological Sciences Day; IISER Kolkata, 2019
- Mahua Maulik, **Lakshmy Vasan**, Jayasri Das Sarma; "Effect of inflammation induced by viral infection on β - amyloid metabolism: implications for Alzheimer's disease pathogenesis" at Indo-US Bilateral Symposium on "Central Nervous System Virus Infection and its Therapy"; IISER-Kolkata in collaboration with University of Iowa, USA and Banaras Hindu University, India ; 2016
- Abhishek Bose, Mahua Maulik, Deepthi Thomas, **Lakshmy Vasan**, Jayasri Das Sarma; "Gap junction protein Connexin: implications in neural cell differentiation to disorder" at Advances in Life Sciences; IISER-Kolkata, 2017

EDUCATION

Indian Institute of Science Education and Research

BS-MS Dual Degree
(Bachelor of Science- Master of Science)
Department of Biological Sciences
CGPA : **8.60/10**

Kolkata
Aug 2013- June 2018

St Antony's Higher Secondary School

12th Grade
State Council Education Research and Training
Percentage: 97.3%

Kerala
June 2010–April 2012

AWARDS AND RECOGNITIONS

- Science Academies' Summer Research Fellowship, 2015; Offered by Indian Academy of Sciences, Indian National Science Academy and The National Academy of Sciences, India.
- Innovation in Science Pursuit for Inspired Research-Scholarship for Higher Education (INSPIRE-SHE, 2013-2018) from Department of Science & Technology (DST), Gov. of India. (Awarded for top 1% students in higher secondary examination)
- District Merit Scholarship for best performance in SSLC (2010) Examination from Department of Collegiate Education, Government of Kerala.

CONFERENCES AND SYMPOSIUMS

- Workshop on advanced bioanalytical methods and applications; Gangtok, Sikkim; 2018
- Advances in Life Sciences; IISER-Kolkata, 2017
- Indo-US Bilateral Symposium on "Central Nervous System Virus Infection and its Therapy"; IISER-Kolkata in collaboration with University of Iowa, USA and Banaras Hindu University, India ; November 2016
- Workshop on Mathematical and Computational Biology; IISER-Kolkata; 2016
- Frontiers in Modern Biology [FIMB] Symposium; IISER-Kolkata; December 2015
- The 26th midyear meeting of Indian Academy of Sciences; Indian Institute of Science (IISc) Bangalore; July 2015