Vidyadhara D J, PhD, MSc - Medical
Associate Research Scientist, Depts. of Neuroscience & Neurology,
BCMM 149, Yale University School of Medicine, New Haven, CT-06519
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POSITIONS:

Associate Research Scientist **Aug. 2023 - to date**
Postdoctoral Associate *(DoD Early Career Investigator, 2019-2021)* Aug. 2018 - Aug. 2023
Sreeganga Chandra Lab, Depts. of Neuroscience & Neurology
Yale University School of Medicine, New Haven, USA

Visiting Scientist Dec. 2017 - June 2018
Autophagy Lab, Molecular Biology and Genetics Unit
Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore, India

Tutor in Physiology Nov. 2011 - April 2012
Hassan Institute of Medical Sciences
Rajiv Gandhi University of Health Sciences, Karnataka, India

EDUCATION:

Ph.D. in Neuroscience (Neurodegeneration, Parkinson's disease) May 2012 - Feb. 2018
National Institute of Mental Health and Neurosciences (NIMHANS), Bangalore, India

M.Sc. Medical Physiology Aug. 2007 - Aug. 2011
Kasturba Medical College, Manipal University (MAHE), Manipal, India

B.Sc. in Biochemistry, Microbiology & Biotechnology June 2004 - June 2007
Yuvaraja College, University of Mysore, Mysore, India

RESEARCH SUPPORT/GRANTS:

Michael J. Fox Foundation, Target Advancement Program Grant Aug. 2021 - present
Project: Pathogenic Mechanisms for Auxilin-mediated Parkinson's Disease
Role: ***Co-Principal Investigator*** *(US$150,000)*

U.S. Dept. of Defense, CDMRP Early Investigator Research Award July 2019 - 21, NCE till 2022
Project: Role of Lipid Dyshomeostasis in Cognitive Dysfunction of Parkinson's Disease
Role: ***Principal Investigator*** *(US$340,000)* ***(Click here to read the final report)***

National Institute of Mental Health and Neurosciences (NIMHANS) Fellowship May 2012 - April 2017
Role: ***Ph.D. Scholar*** *(INR 1,260,000, covers complete stipend for 5 years)*

Indian Council of Medical Research (ICMR) Declined as I received
Role: ***Senior Research Fellow*** *(covers two-year PhD stipend)* an extension for previous

RESEARCH PROJECTS:

Postdoctoral projects: *Mentor: Sreeganga S. Chandra, Collaborators/Co-mentors: David Sulzer, Pramod Mistry*

1. Role of clathrin-mediated endocytosis and auxilin in pathogenesis of Parkinson's disease:
Auxilin participates in clathrin uncoating to facilitate presynaptic endocytosis. Loss-of-function mutations of auxilin (*PARK19*) cause Parkinson's disease (PD). We used auxilin-knockout (KO) mice, and patient iPSC-derived neurons to elucidate the underlying mechanisms. Auxilin KO mice displayed key motor and histopathological deficits of PD and responded to L-DOPA. Our findings suggest that defects in dopamine transporter and synaptic vesicle sorting result in ineffective dopamine compartmentalization, ultimately leading to neurodegeneration in auxilin-linked PD. These findings have contributed to establishing the importance of presynaptic endocytosis in PD etiology and auxilin as a novel target. We also successfully used auxilin KO mice for PD drug development and to study mechanisms for visual hallucinations in PD.

2. Mechanisms for GBA-linked cognitive dysfunction of Parkinson's disease:
Cognitive impairment is a common non-motor symptom of PD, especially in patients with *GBA* mutations. We investigated this using *GBA* and *SNCA* mutant mice. We found that dysfunctional *GBA*-mediated lipid accumulation worsens pre-existing synucleinopathy and induces cognitive impairment in *SNCA* mutants.

snRNA-seq and proteomics analyses revealed presynaptic endocytosis defects and identified GANC as a potential modifier of GBA-linked lipid accumulation and PD. We validated these findings by several methods, including on GBA-patient iPSC-derived neurons. We are assessing if we can alleviate cognitive impairment in GBA mutants through targeted AAV-shRNA mediated reduction in lipid accumulation.

Ph.D. projects: *Mentors: Phalguni Anand Alladi, T. R. Raju, Ravi Manjithaya*

1. Mice-strain specific differential vulnerability to parkinsonian toxin MPTP and its modulation upon admixing: Different mice strains are differentially vulnerable to parkinsonian toxin MPTP. We found that mice that are resilient to MPTP-toxicity possess higher number of dopaminergic neurons (A9), higher calbindin and GDNF levels, and resilient electrophysiological properties. Interestingly, admixing enhanced this resilience. We also found lesser developmental apoptosis of nigral dopaminergic neurons in resilient mice strains, suggesting ontogenic origin of PD vulnerability. Along with addressing heterogeneity in PD occurrence, our findings reiterate the importance of choosing right mice strains to study PD.

2. Age-related glial changes in human substantia nigra pars compacta (SNpc): Neuroinflammation is a hallmark of PD pathology mediated by glial cells in the brain. Here, we profiled age-related glial changes in human SNpc for the first time. Using normal human brains donated at death, we found that SNpc glial count shows a biphasic increase during a lifetime; the first prominent phase from fetal age to birth, could be physiological gliogenesis, whereas the second one after middle age which may reflect mild age-related gliosis. Overall, we found that aging SNpc display only mild glial changes in contrast to SNpc in PD patients.

3. Efficacy of autophagy modulating small molecules in treating PD: I supported an *in vitro* team by conducting *in vivo* experiments to demonstrate that the small molecules 6-Bio and XCT 790 can clear α-synuclein aggregates and ameliorate PD pathology through autophagy induction. After completion of my Ph.D., I continued these experiments as a Visiting Scientist for 7 months. I was able to show that a small molecule inhibitor of c-abl kinase, with its dual anti-inflammatory and autophagy induction roles, can alleviate neurodegeneration in MPTP mice model of PD.

M.Sc.-Medical Physiology project: *Mentors: Sivakumar G, Kiranmai S. Rai*

1. **Developing treatment strategies for ischemic hippocampal injury:** I contributed to showing that dietary supplementation of choline, docosahexaenoic acid, and extracts from medicinal herbs *Pluchea Lanceolata* is beneficial in treating hippocampal injury and related cognitive dysfunctions in a rat model of ischemic stroke. I independently led the *Pluchea Lanceolata* study.

Please see the "Contributing author" publications for my involvement in collaborators' projects.

PUBLICATIONS: *(please click on the title to access full publication)* My Google Scholar & PubMed

Postdoctoral projects:

1. **DJ Vidyadhara**, M. Somayaji, N Wade, J Ribaudo, N Shashaank, H Zhao, B Yucel, J Gupta, T Lam, Dalibor Sames, Lois Greene, David Sulzer, and Sreganga S. Chandra. Dopamine transporter and synaptic vesicle sorting defects underlie auxilin-associated Parkinson's disease. *Cell Reports,* ***2023***
2. **DJ Vidyadhara***, JE Lee, SS Chandra. Role of the endolysosomal system in Parkinson's disease, *Journal of neurochemistry,* ***2019 (review) *Corresponding author***
3. S. Massaro Tieze, SS. Chandra, **DJ Vidyadhara***. Subcellular Fractionation for the Isolation of Synaptic Components from the Murine Brain, *J. of Visualized Experiments (JoVE),* ***2022 (methods) *Corresponding Author***
4. EM Lopez, **DJ Vidyadhara,** T Liberia, SJ. Meller, LE. Harmon, RM. Hsu, K Han, B Yücel, SS Chandra, CA Greer. α-Synuclein pathology and reduced neurogenesis in the olfactory system affect olfaction in a mouse model of Parkinson's disease. *Journal of Neuroscience,* ***2023***
5. Xi Cheng, Yu Tang, **DJ Vidyadhara**, Ben-Zheng Li, M. Zimmerman, Alexander Pak, Achim Klug, SS Chandra, A Chubykin. Impaired Presynaptic Plasticity, Visual Mismatch Negativity, and Familiarity-Evoked Oscillations in Auxilin Knockout Mice., preprint, SSRN, *accepted in iScience,* ***2023***

6. Michael C, H Bock, I Serrano, B Bechand, **DJ Vidyadhara**…… SS Chandra, J McCorvy, D Sames. Pharmacological mechanism of the non-Hallucinogenic 5-HT2A agonist Ariadne and analogs, *ACS Chemical Neuroscience, **2022***
7. CS Boddupalli, S Nair, G Belinsky, J Gans, E Teeple, T Nguyen, S Mehta, L Guo, M Kramer, J Ruan, M Davison, **DJ Vidyadhara**, B Zhang, K Klinger, Pramod Mistry. Neuroinflammation in neuronopathic Gaucher disease: Role of microglia and NK cells. *eLife, **2022***

Manuscript under preparation:

8. **DJ Vidyadhara,** David Bäckström, Risha Chakraborty, Jiapeng Ruan, Pramod Mistry, Sreeganga. S. Chandra. GBA mutation aggravates α-synuclein and synaptic pathology, impairing cognition in a Parkinsonian mouse. Being submitted to *npj Parkinson's disease*, ***2023***
9. **DJ Vidyadhara,** Risha Chakraborty, Chung-Jung Li, Jiapeng Ruan, Pramod Mistry, Sreeganga. S. Chandra. GANC is a putative modifier of GBA-linked Parkinson's disease. ***2023***

Ph.D. projects: *(Publication no. 8 was result of my efforts as Visiting Scientist after Ph.D.)*

1. **DJ Vidyadhara**, Yarre. H, Raju TR, Alladi PA. Admixing of MPTP-Resistant and Susceptible Mice Strains Augments Nigrostriatal Neuronal Correlates to Resist MPTP-Induced Neurodegeneration. *Molecular Neurobiology*, ***2017***
2. Jyothi HJ[$], **DJ Vidyadhara[$],** Anita M, Mariamma Philip, Suresh KP, S. Gowri Manohari, Shankar SK, Raju TR, Alladi PA. Aging causes morphological alterations in astrocytes and microglia in human substantia nigra pars compacta. *Neurobiology of Aging*, ***2015 ([$]co-first author*)**
3. **DJ Vidyadhara**, Yarreiphang H, Raju TR, Alladi PA. Differences in neuronal numbers, morphology and developmental apoptosis in mice nigra provide experimental evidence of ontogenic origin of vulnerability to Parkinson's disease*. Neurotoxicity Research, **2021***
4. **DJ Vidyadhara,** A Sasidharan, BM Kutty, TR Raju, PA Alladi. Admixing MPTP-resistant and MPTP-vulnerable mice enhances striatal field potentials and calbindin-D28K expression to avert motor behaviour deficits, *Behavioural brain research*, ***2019***
5. **DJ Vidyadhara**[$], Yarreiphang H[$], Abhilash PL[$], Raju TR, Alladi PA.. Role of nigral dopaminergic neuronal calbindin in determining the differential susceptibility of mice strains to 1-Methyl-4-Phenyl-1,2,3,6-Tetrahydropyridine*. J. of Chemical Neuroanatomy*, ***2016 ([$]contributed equally*)**
6. Yarreiphang H, **DJ Vidyadhara**, AN Nambisan, Raju TR, C Sagar, Alladi PA. Apoptotic factors and mitochondrial complexes assist determination of strain-specific susceptibility of mice to Parkinsonian neurotoxin MPTP. *Molecular Neurobiology, **2023***
7. Suresh S.N., Aravinda C, **Vidyadhara DJ**, Yarrei H, Shashank Rai, Abhik Paul, JP Clement, Alladi PA, Ravi. M*.* A novel autophagy modulator 6-Bio ameliorates SNCA/α-synuclein toxicity. *Autophagy, **2017***
8. SN Suresh, J Pandurangi[$], R Murumalla[$], **DJ Vidyadhara[$]**, L Garimella, A Acharya, S Rai, A Paul, H Yarreiphang, M S Pillai, M Giridharan, JP Clement, PA Alladi, T Saiyed, R Manjithaya, Small molecule modulator of aggrephagy regulates neuroinflammation to curb pathogenesis of neurodegeneration*, The Lancet EBioMedicine, **2019 ([$]contributed equally)***
9. Suresh SN, Aravinda C, Malini P, Veena A, **DJ Vidyadhara**, H Yarreiphang, Shashank Rai, Abhik Paul, James P Clement, Alladi PA, Ravi. M. Modulation of autophagy by a small molecule inverse agonist of ERRα is neuroprotective. *Frontiers in Molecular Neuroscience, **2018***

Master's projects: *(It was a 3-year program)*

1. Ravi M, Senthilkumar S, Popa-Wagner A, Padmaja U, Ramalingam K, Guruprasad KP, **DJ Vidyadhara***. Pluchea lanceolata protects hippocampal neurons from endothelin-1 induced ischemic injury to ameliorate cognitive deficits. *J. of Chemical Neuroanatomy*, ***2018. *Corresponding author***
2. Ravi M, Senthilkumar S, Padmaja U, **DJ Vidyadhara**, Suchitra P, Basavaiah R. Neuroprotective functions of Alpinia galanga in forebrain ischemia induced neuronal damage and oxidative insults in rat hippocampus, *Indian Journal of Pharmaceutical Education and Research*, ***2018***

3. G Sivakumar, **DJ Vidyadhara**, KN Shivananda, T Rajesh, K G Mohandas Rao, Kiranmai S Rai. Prophylactic choline supplementation attenuates vascular cognitive impairment in rodent model of ischemic stroke. *Indian Journal of Physiology & Pharmacology, **2017***
4. G Sivakumar, **DJ Vidyadhara**, S Reddy, T Rajesh, R Babu, Mohandas Rao, Kiranmai S Rai. Prophylactic combined supplementation of choline and docosahexaenoic acid attenuates vascular cognitive impairment and preserves hippocampal cell viability in a rat model of chronic cerebral hypoperfusion ischemic brain injury, *Int. Jou. of Basic & Clinical Pharmacology*, ***2015***

TRAINING AND MENTORSHIP (direct reports):

1. Risha Chakraborty, Undergrad thesis, Yale University, USA — Oct. 2021 - present
2. Lorenzo Arvanitis, Undergrad thesis, Yale University, USA — May 2020 - July 2021
3. Joseph Ribaudo, Undergrad thesis, Yale University, USA — April 2019 - July 2021
4. Nigel Wade, Undergrad thesis, Yale University, USA — June 2019 - July 2021
5. Min Jae Kim, Visiting student, Johns Hopkins University, USA — Jan. - Feb. 2019
6. Nikhita Doddabela, Master's thesis, Ramaiah Institute of Technology, India — Dec. 2016 - July 2017
7. Anand Krishnan, Master's thesis, Vellore Institute of Technology, India — April 2016 - July 2017
8. Vaidehi Kelkar, Master's thesis, D.Y. P Biotech. & Bioinfo. Institute, India — Jan. - May 2016
9. Vidya Jadhav, Trainee, M.Sc. Neuroscience, Sophia College for Women, India — June - Dec. 2015
10. Disha Subramanian, Trainee, B.M.S. College of Engineering, India — Dec. 2014 - June 2015
11. Niranjan S, Junior Research Fellow, NIMHANS, India — May 2013 - June 2014
12. Aishwarya Vyas, Undergrad, Kasturba Medical College International Center, India — July - Sep. 2011
13. Varada Nambiar, M.Sc-Medical, Kasturba Medical College, India — Sept. - Nov. 2009

TEACHING:

1. Adjunct Faculty, Dept. of Physiology, Kasturba Medical College, Manipal, India — April 2021 - till date
   Mentor post-graduate students in their research through monthly/quarterly meetings/classes
2. Poorvu Center for Teaching & Learning, and Yale Postdoc. Asso., Yale University — Nov. 2021 & 2022
   Selected to teach Neurodegeneration at Yale in Modern Instructor Series (two classes of 1 hour each)
3. Poorvu Center for Teaching & Learning, Yale University — 2018 - present
   Certificate of College Teaching Preparation (CCTP)
4. Cornell University, and the CIRTL network (online course) — Sept. - Nov. 2021
   An Introduction to Evidence-Based Undergraduate STEM Teaching
5. National Institute of Mental Health & Neurosciences (NIHHANS), Bengaluru, India — 2015 - 17
   Neuroanatomy for M.Phil & Ph.D. courses in Clinical Psychology
   Neurophysiology for B.Sc. Nursing students
6. Hassan Institute of Medical Sciences, RGUHS, Hassan, India — 2011 - 12
   Human Physiology for Medical and Allied Health Sciences courses
7. Kasturba Medical College, Manipal University, Manipal, India — 2008 - 2010
   Human Physiology practical classes for Medical and Dental Sciences courses

REFEREEING/REVIEWING:

1. Grant reviewer, Science Fund of the Republic of Serbia — 2023
2. Grant reviewer, National Science Centre, Poland — 2022
3. Review Editor, Frontiers in Aging Neuroscience — June 2022 - Present
4. Topic Editor, Frontiers in Aging Neuroscience — March 2021 - Present
5. Book editor, Protein misfolding in Neurodegenerative Disorders, Elsevier — Sept. 2021 - Present
6. Guest Editor, Journal of Visualized Experiments (JoVE) — April 2020 - Present
7. Judge at Yale Undergrad Research Symposium, USA — 2020, 21
8. Reviewed articles for *Molecular Omics, Journal of Neurochemistry, Experimental Neurology*, *The FEBS Journal, FASEB Journal, Translational Stroke Research, Frontiers in Molecular Neuroscience, Frontiers*

in Neuroscience, Frontiers in Aging Neuroscience, Journal of Neuroscience Research, Cell Transplantation, BMC Complementary and Alternative Medicine, J. of Chemical Neuroanatomy, BMC Complementary Medicine and Therapies, Brain & Behavior. (Contributed to reviewing articles for Nature Neuroscience with my postdoc mentor)

DEI, VOLUNTEERING & OUTREACH ACTIVITIES:

1. Mentored high school students in USA for SfN brain awareness video contest 2023
2. National Council for Behavioral Health, USA certified Mental Health First Aider 2021 - 24
3. Mentoring students at Kasturba Medical College, Manipal, India as a Visiting Faculty 2021 - Present
4. Mentor at Yale Biological & Biomed. Sciences Diversity & Inclusion Collective (YBDIC) 2021- Present
5. Founding member of Yale Neuroscience Postdoc Committee 2020 – Present
6. Member of National Postdoctoral Association (NPA) Advocacy Committee 2021 – 22
7. Mentor at Women in STEM Research (WISR) India 2022
8. Mentor & Judge at Annual Biomedical Research Conference for Minority Students, USA, 2020, 2021
9. Judge at Intersections Science Fellows (ISFS) Symposium, USA 2021
10. Volunteered to give feedbacks to undergrads from NIH BP EDURE program Nov. 2020, Sept. 2021
11. Member of Yale Neuroscience Committee for Diversity, Equity & Inclusion 2020
12. Member of Yale Neuroscience SYNAPSES committee 2019-20
13. Student organizer at Int. Symposium on Neurodegenerative Disorders, Bengaluru, India 2017
14. Organized Neurophysiology (NIMHANS) outreach program at Indian National Science Day, India 2017
15. Instructor, Society for Neuroscience - Bangalore chapter popularizing neuroscience programs 2015 - 16
16. Student organizer at MDS Parkinson's Disease Education Program, Bengaluru, India 2014
17. Student organizer at 59th Annual Conf. of Assoc. of Physiologists & Pharmacologists of India 2013
18. Volunteer at Indian Red Cross Society (Manipal, Udupi, India) 2008 - 10
19. Student organizer at CME on "Trends in Neuroscience Research, an eye opener", Manipal, India 2009

DISTINCTIONS/AWARDS/SCHOLARSHIPS:

1. Selected as Intersections Science Fellows Symposium (ISFS) Associate 2023
2. Selected to represent Yale Neuroscience at Johns Hopkins' Kavli NDI-X Speaker Series 2023
3. Society for Neuroscience Trainee Professional Development Award 2022
4. Yale University Undergrad/Postgrad Mentoring Award 2022
5. Parkinson Disease & Movement Disorders Society travel award 2022
6. Best poster award, The 4th Annual Postdoctoral Symposium, Yale University 2021
7. Top downloaded article in the Journal of Neurochemistry for the year 2018-19 2020
8. Selected as an early career speaker for CSHL meeting on Protein Homeostasis 2020
9. APPI B K Anand award for best paper in Physiology 2017
10. Selected as scholar speaker for Singapore Neuroscience Association Symposium 2017
11. International Brain Research Organization (IBRO) travel fellowship 2017
12. Goethe University, Frankfurt, Germany travel support 2017
13. Parkinson Disease & Movement Disorders Society travel award 2017
14. Best poster award, Int. Symposium on Neurodegenerative Disorders, Bengaluru, India 2017
15. Wellcome Trust/DBT India Alliance travel award 2017
16. APPI B K Anand award for best paper in Physiology 2015
17. Dept. of Science & Technology, Govt. of India, travel award 2015
18. Dept. of Biotechnology, Govt. of India, travel award 2015
19. Int. Association of Parkinsonism & Related Disorders travel award 2015
20. Grad. Student Scholarship, NeuroRenew, Inc. & MBF Bioscience, Chicago 2013
21. 2nd place in National (India) Level Physiology quiz conducted by APPI 2013
22. IBRO travel fellowship 2013
23. National (India) 2nd rank in exams conducted for Ph.D. Neurophysiology, NIMHANS 2012

24. National (India) 2nd rank in exams for M.Phil. Neurophysiology, NIMHANS 2012
25. Manipal University (MAHE) Travel Award 2010

TALKS:

1. Intersections Science Fellows Symposium, USA scheduled for Oct. 2023
   Presynaptic endolysososomal dysfunction in neurodegeneration
2. Dept. of Neuroscience, Yale University, Postdoc Mock-talks May 2023
   Presynaptic endolysososomal dysfunction in neurodegeneration
3. Society for Neuroscience Meeting 2022, San Diego, USA Nov. 2022
   Dopamine compartmentalization defects initiate auxilin-linked Parkinson's disease
4. Cold Spring Harbor Laboratory meeting on Protein Homeostasis in Health & Disease Nov. 2020
   Auxilin knockout mice: a model of Parkinsonism with dopamine dysregulation and synucleinopathy
5. CT Early Career Researcher Symposium, Cellular & Metabolic Pathways in Neurodeg. March 2022
   Dopamine transporter and synaptic vesicle sorting defects initiate auxilin-linked Parkinson's disease
6. International Congress of Parkinson's Disease and Movement Disorders Sept. 2020
   Auxilin knockout mice: a model of Parkinsonism with dopamine dysregulation and synucleinopathy
7. Singapore Neuroscience Association Symposium, NUS, Singapore July 2017
   Differential vulnerability to MPTP-induced Parkinsonism in mice strains may arise during development
8. Institute of Neurophysiology, Goethe University, Germany June 2017
   Understanding Heterogeneity in Parkinson's Disease Pathogenesis: a Tale of Two Mice Strains
9. CUSAT Neuroscience Lecture Series, Cochin, India Aug. 2022
   Endolysosomal system dysfunction in Parkinson's disease
10. Indian Academy of Neurosciences Society Meeting 2021 Dec. 2021
    Endolysosomal system dysfunctions in Parkinson's disease – evidence from recent studies
11. Kasturba Medical College, Manipal University, Manipal, India Aug. 2021
    Endolysosomal system dysfunction in Parkinson's disease
12. The Oxford College of Science, Bangalore University, India Feb. 2021
    Understanding neurodegeneration using mice models
13. Yale Neuroscience Research in Progress Seminars Jan. 2021
    Dopamine compartmentalization defects initiate parkinsonism in auxilin knockout mice
14. Indian Academy of Neuroscience - Bangalore Chapter Symposium Dec. 2020
    Auxilin knockout mice: a window to early mechanisms for Parkinson's disease pathogenesis
15. 3rd Annual Postdoc Symposium, Yale University July 2020
    Auxilin knockout mice: a window to early mechanisms for Parkinson's disease pathogenesis
16. Monsoon Brain Meeting June 2020
    Dopamine dysregulation and synucleinopathy in auxilin knockout mice
17. Yale Neuroscience Research in Progress Seminars Nov. 2019
    Parkinsonism in Auxilin Knockout Mice
18. Dept. of Neurophysiology, NIMHANS, Ph.D. thesis defense Feb. 2018
    Ontogenesis of nigral dopaminergic neurons and electrophysiological assessment of substantia nigra of crossbreds of two mice strains with differential susceptibility to MPTP
19. 61st Annual Conference of Assoc. of Physiologists & Pharmacologists of India Dec. 2015
    Aging causes morphological alterations in astrocytes and microglia in human substantia nigra pars compacta
20. MDS sponsored Parkison's Disease Education Programme, Bengaluru, India March 2014
    Immunohistochemical Staining: Principles and Practice (workshop)
21. 59th Annual Conference of Assoc. of Physiologists & Pharmacologists of India Nov. 2013
    Emerging trends in Neurophysiology from Cell to System (workshop)
22. 44th Annual Conference of Indian Pharmacological Society, Manipal, India Dec. 2011
    Neuropsychopharmacology & Wound Healing Methodology (workshop)
23. 56th Annual Conference of Assoc. of Physiologists & Pharmacologists of India Dec. 2010
    Ischemic Hippocampal Injury Induced Amnesia in a Rat Model (workshop)

POSTERS:

1. Aligning Science Across Parkinson's (ASAP) meeting, San Diego July 2023
   Dopamine transporter and synaptic vesicle sorting defects initiate auxilin-linked Parkinson's disease

2. 2023 Department of Neuroscience Retreat, Yale University May 2023
GBA mutation aggravates α-synuclein and synaptic pathology, impairing cognition in a parkinsonian mouse
3. NeuroDay 2023, Yale University, New Haven, USA March 2023
Dopamine compartmentalization defects initiate auxilin-linked Parkinson's disease
4. Society for Neuroscience meeting 2022, Award posters + virtual poster Nov. 2022
Dopamine compartmentalization defects initiate auxilin-linked Parkinson's disease
5. NeuroDay 2022, Yale University, New Haven, USA August 2022
Dopamine transporter and synaptic vesicle sorting defects initiate auxilin-linked Parkinson's disease
6. The 5th Annual Postdoctoral Symposium, Yale University June 2022
Dopamine transporter and synaptic vesicle sorting defects initiate auxilin-linked Parkinson's disease
7. 2022 Department of Neuroscience Retreat, Yale University May 2022
Dopamine transporter and synaptic vesicle sorting defects initiate auxilin-linked Parkinson's disease
8. Van Andel Institute Grand Challenges in Parkinson's Disease, 2021 Oct. 2021
Dopamine compartmentalization defects initiate parkinsonism in auxilin knockout mice
9. The 4th Annual Postdoctoral Symposium, Yale University June 2021
Dopamine compartmentalization defects initiate parkinsonism in auxilin knockout mice
10. 2021 Department of Neuroscience Retreat, Yale University April 2021
Dopamine compartmentalization defects initiate parkinsonism in auxilin knockout mice
11. Van Andel Institute Grand Challenges in Parkinson's Disease, 2020 Sept. 2020
Auxilin knockout mice: a model for parkinsonism with dopamine dysregulation and synucleinopathy
12. NeuroDay 2019, Yale University, New Haven, USA Aug. 2019
a. Role of Auxilin in Pathogenesis of Parkinson's Disease
b. Cellular and Molecular Studies of Synaptic Function in Neurodegenerative Disease
13. 2019 Department of Neuroscience Retreat, Yale University May 2019
Role of Auxilin in Pathogenesis of Parkinson's Disease
14. Int. Congress of Parkinson's Disease & Movement Disorder, Vancouver, Canada June 2017
Admixing augments nigral dopaminergic correlates during development to impart resistance to MPTP-toxicity at adulthood
15. Int. Symposium on Neurodegenerative Diseases, Bengaluru, India March 2017
Differential vulnerability to MPTP-induced Parkinsonism in mice strains may arise during development
16. 2nd Annual Conference of the Movement Disorder Society of India, Bengaluru, India Jan. 2017
Admixing mitigates MPTP induced behavioural deficits in mice
17. Centre for Brain Research Int. Conference, Bengaluru, India Nov. 2015
Admixing augments nigral correlates to resist MPTP toxicity
18. 45th Annual Meeting of Society for Neuroscience, Chicago, USA Oct. 2015
Admixing of two mice strains with differential susceptibility to MPTP positively modulates the nigral dopaminergic phenotype
19. XXXII Annual Conference of Indian Academy of Neurosciences, Bengaluru, India Nov. 2014
Nigral dopaminergic neuronal phenotype in two mice strains with differential susceptibility to MPTP
20. 56th Annual Conf. of Assoc. of Physiologists & Pharmacologists of India, Wardah, India Dec. 2010
Carotid Artery Occlusion in Wistar Rat is not fatal but Results in Definite Learning and Memory Impairment

PROFESSIONAL MEMBERSHIPS:

1. Society for Neuroscience, USA 2015 - Present
2. International Parkinson and Movement Disorder Society 2015 - Present
3. Aligning Science Across Parkinson's (ASAP), USA 2020 - Present
4. National Center for Faculty Development & Diversity, USA 2020 - Present
5. National Postdoctoral Association, USA 2018 - Present
6. Molecular and Cellular Cognition Society, USA 2015 - Present
7. International Association of Parkinsonism and Related Disorders 2015
8. International Society for Neurochemistry 2015 - 17
9. Life member of the Association of Physiologists and Pharmacologists of India 2011 onwards
10. Life member of the Indian Academy of Neurosciences 2013 onwards