Curriculum Vitae

Prof. Subramaniam Ganesh, FASc, FNASc

Deputy Director
P.K. Kelkar Endowed Chair Professor
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Date of birth: May 23, 1968 [Married]

PROFESSIONAL BACKGROUND

Apr 2020 – onwards	Deputy Director, IIT Kanpur
Feb 2017 – Jan 2020	Dean, Research & Development, IIT Kanpur
Sep 2013 –Aug 2016	Head, Department of Biological Sciences and Bioengineering, IIT Kanpur
Aug 2017 -	Senior Professors (HAG Scale), IIT Kanpur
Dec 2010 – Jul 2017	Professor, IIT Kanpur
Dec 2005 - Nov 2010	Associate Professor, IIT Kanpur
Dec 2008	Visiting Scientist, RIKEN Brain Sciences Institute, Wako-shi, Japan.
April 2002 – Nov 2005	Assistant Professor, Department of Biological Sciences and Bioengineering, Indian Institute of Technology, Kanpur
Mar 1998 – Mar 2002	Staff Scientist, RIKEN Brain Science Institute, Wako-shi, Japan
Mar 1997 – Feb 1998	Research Associate, Molecular Biophysics Unit, Indian Institute of Sciences, Bangalore

EDUCATIONAL BACKGROUND

Ph.D	1988	Zoology (Molecular Genetics)	Banaras Hindu University Varanasi
M.Sc	1990	Zoology (Major)	University of Madras Madras
B.Sc	1988	Zoology (Major) Chemistry (Minor) Botany (Minor)	University of Madras Madras

AWARDS AND HONORS

- Excellence-in-Teaching Award, Indian Institute of Technology Kanpur (2021)
- Prof. J. Das Memorial Award Lecture of the Indian Society of Cell Biology (2019)
- Tata Innovation Fellowship (Dept. of Biotechnology) (2017-2022)
- P.K. Kelkar Endowed Chair Professor (2017-20)
- Basanti Devi Amir Chand Prize, Indian Council of Medical Research (2016)
- OPPI Scientist Award, Organization of Pharmaceutical Producers of India (2016)
- Fellow, Indian Academy of Sciences, Bangalore (2016)
- KT Shetty Memorial Oration Award of the Indian Academy of Neurosciences (2015)
- Fellow, National Academy of Sciences, India. (2012)
- CDRI Award for Excellence in Drug Research (CDRI, Lucknow) (2012).
- Ramanna Fellowship (Dept. of Science & Technology) (2012).
- Rajib Goyal Prize in Biology (Goyal Foundation, Kurukshetra University). (2011)
- Joy-Gill Chair Professor (IIT Kanpur) (2011-14)
- DAE-SRC Outstanding Research Investigator Award (Dept. of Atomic Energy, Govt. of India) (2010).
- B.M. Birla Science Prize in Biology for the year 2008.
- National Bioscience Award for Career Development for the year 2008 (Department of Biotechnology, Govt. of India).
- Scopus Young Scientist Award in Biological Sciences for the year 2008 (institute by Elsevier South Asia).
- Biotechnology Overseas Associateship (Department of Biotechnology, Govt. of India) (2008)
- Alexander von Humboldt Fellowship for the year 1998 (not availed)
- Post-doctoral Fellowship from the Dept. of Biotechnology (1997)
- Travel fellowship from International Cell Research Organization, Latvia (1995 – not availed)
- Senior Research Fellowship from Indian Council of Medical Research (1994)
- Junior research Fellowship from University Grants commission (1990)
- Merit Scholarship from Devi Charity for MSc program (1988-90)
- Silver Medal (College Topper in BSc Degree) (1998)

PEER RECOGNITION

- Nominated expert member, Search-cum-selection committee for POWER Fellowship Science and Engineering Research Board (SERB), Department of Science & Technology (2020 onwards)

- Nominated expert member, SERB – POWER PAC for Biomedical and Health Science, Science and Engineering Research Board (SERB), Department of Science & Technology (2020 onwards).
- Nominate expert member, Board of Studies of School of Health Sciences, Central University of Punjab (2019-2021)
- Nominated Expert Member of the Research Advisory Committee of HRDG, Council of Scientific and Industrial Research (2019 onwards)
- Nominated Expert Member of the Program Advisory Committee of Science and Engineering Research Board (SERB), Department of Science & Technology (2019 onwards).
- Expert Member, Board of Studies for Bioengineering, Vellore Institute Technology – Bhopal (2018 onwards)
- Nominated Expert Member of the Task Force of the Department of Biotechnology for Human Resource Development (2017 onwards).
- Nominated Expert Member of the Committees that evaluates the proposal submitted for the FAST Track Young Scientists scheme of SERB, Dept. of Science & Technology, Govt. of India (2017-2018).
- Editorial Board Member, *Meta Gene*, a *Gene* family journal, published by Elsevier
- Editorial Board Member, *Gene Reports*, a *Gene* family journal, published by Elsevier
- Elected as one of the regular speakers (only one from Asia) in the triennial International Workshop on Progressive Myoclonus Epilepsies being organized by the Sanford Consortium for Regenerative Medicine in La Jolla, California, USA.
- Serving Associate Editor of *Journal of Genetics*, published jointly by Indian Academy of Science and Springer India (2015-17).
- Nominated Expert Member of the PAC (Biochemistry, Biophysics, Molecular Biology and Microbiology), SERB, Dept. of Science & Technology, Govt. of India (2016-18)
- Nominated Expert Member of the human genetics/human genome taskforce that evaluates the proposal submitted for funding in Dept. of Biotechnology, Govt. of India (since 2014-2016).
- Nominated Expert Member of the Committees that evaluates the proposal submitted for the FAST Track Young Scientists scheme of SERB, Dept. of Science & Technology, Govt. of India (2012-15).
- Serving Associate Editor of the journal, *Annals of Neuroscience*, published by the Indian Academy of Neuroscience.
- Serving Review Editor for the journal, *Frontiers in Evolutionary and Population Genetics,* published by Frontiers Research Foundation, Switzerland.
- Listed among the 20 leading Indian scientists chosen by the *India Today* publication (Issue: September 19, 2011).

RESEARCH INTERESTS

Neurodegenerative diseases are a varied assortment of central nervous system disorders characterized by the gradual and progressive loss of neural tissue or nerve cells. A major research focus of my group is to identify and characterize molecular players in neurodegenerative pathways. For this, we conduct

genetic screens in affected families and utilize cellular/animal models for testing and validating our hypothesis. Discovery of critical players in neurodegeneration is undoubtedly the first step towards developing effective therapeutics.

THESIS SUPERVISION

PhD students: Graduated – 17 | Currently under supervision – 4

M.Tech students: Graduated – 15 | Currently under supervision – 2

Postdoctoral fellows: Supervised in the past – 11
Currently under supervision – 2

PATENTS FILED

Ganesh S and Parihar S. (2020) GERM-PROOF MULTIUTILITY DISPLAY CUM SERVICE BOX (design patent application No. 329746-001)

Verma S, Sen S, Ganesh S, Ali R, Onkara A, Sinha P, Quazi S (2020) THERMOSTABLE HUMAN INSULIN AND USES THEREOF (Application No. 202011016961) (patent filed)

Kaur G, Kumari S, Saha P, Pail S, Ganesh S and Verma S (2018) ELECTROSPUN FIBROUS NANOMAT COMPOSITION AND A METHOD OF SYNTHESIZING THE SAME FOR CANCER CELL DETECTION (TEMP/E-1/27519/2018-DEL): Indian Patent Office (patent application filed)

Ganesh S and Upadhyay M (2016) AN ASSAY SYSTEM AND PROCESS FOR DRUG SCREENING FOR THERAPY IN LAFORA DISEASE (121/DEL/2015): Indian Patent Office (patent application filed)

PUBLICATIONS LIST

H-index: Overall – 33; Since 2016 – 20

i10 index: Overall – 64; Since 2016 – 41

Publications since joining the IITK (2002 onwards) [*corresponding author]

1. Joshi S, Agarwal S, Panjla A, Valiyaveettil S, **Ganesh S**, and Verma S, (2021) Inhibiting erastin-induced ferroptotic cell death by purine-based chelators. ***ChemComm*** (under review)
2. Sen S, Ali R, Onkar A, **Ganesh S**, and Verma S (2021) Strategies for preventing insulin fibrillogenesis: challenges and advances. ***Accounts of Chemical Research*** (Under review)
3. Verma B, Sinha P and **Ganesh S*** (2021) Ayurvedic formulations Amalaki Rasayana and Rasa Sindoor improve age-associated memory deficits in mice

by modulating dendritic spine densities. ***Journal of Ayurveda and Integrative Medicine*** (under review)

4. Sinha P, Verma B and **Ganesh S*** (2021) Age-dependent reduction in the expression levels of genes involved in progressive myoclonus epilepsy correlates with increased neuroinflammation and seizure susceptibility in mouse models, ***Human Molecular Genetics*** (recommended for revision)
5. Sheshadri D, Onkar A, and **Ganesh S*** (2021) Neuronal glycogen alteration reduces lifespan and influence life-history traits in female Drosophila melanogaster. ***Biology Open*** (recommended for revision).
6. Bhadauriya P, Parihar R, and **Ganesh S*** (2021) Pesticides DEET, fipronil and mane induce stress granule assembly and translation arrest in neuronal cells. ***Biochemistry and Biophysics Reports,*** 28:101110
7. Lin A, Peiris NJ, Dhaliwal H, Hakim M, Li W, **Ganesh S**, Ramaswamy Y, Patel S, and Misra A (2021) Mural Cells: Potential Therapeutic Targets to Bridge Cardiovascular Disease and Neurodegeneration. ***Cells*** 10 (3): 593
8. Sen S, Singh P, Mishra NK, **Ganesh S**, Sivakumar S, and Verma S (2021) Blended polar/nonpolar peptide conjugate interferes with human insulin amyloid-mediated cell apoptotic events. ***Bioorganic Chemistry*** 111:104899
9. Sinha P, Verma B, and **Ganesh S*** (2021) Dexamethasone-induced activation of heat shock response ameliorates seizure susceptibility and neuroinflammation in mouse models of Lafora disease. ***Experimental Neurology*** 340:113656. **[Cover page article]**
10. Sinha P, Verma B, and **Ganesh S*** (2021) Trehalose ameliorates seizure susceptibility in Lafora disease mice models by suppressing neuroinflammation and endoplasmic reticulum stress. ***Molecular Neurobiology*** 58 (3): 1088-1101.
11. Taneja K and **Ganesh S*** (2021) Dendritic spine abnormalities correlate with behavioral and cognitive deficits in mouse models of Lafora disease. ***Journal of Comparative Neurology*** 529(6):1099-1120
12. Onkar A, Sheshadri D, and **Ganesh S*** (2020) Glycogen: the missing link in neuronal autophagy? ***Autophagy*** 16 (11): 2102-2104.
13. Agarwal S and **Ganesh S*** (2020) Perinuclear mitochondrial clustering, increased ROS levels, and HIF1 are required for the activation of HSF1 by heat stress. ***Journal of Cell Science*** 133 (13): jcs245589. [**Highlighted in editorial**]
14. Singh V, Patel K, Sharma R, Patil P, Joshi A, Parihar R, Athilingam T, Sinha N, **Ganesh S**, Sinha P, Roy I, Thakur AK (2019) Discovery of arginine ethyl ester as polyglutamine aggregation inhibitor: Conformational transitioning of huntingtin N-terminus augments aggregation suppression. ***ACS Chemical Neuroscience*** 10 (9): 3969-3985.
15. Rai A, and **Ganesh S*** (2019) Polyglucosan bodies in aged brain and neurodegeneration: cause or consequence? (Chapter 4) In ***Models, Molecules and Mechanisms in Biogerontology*** (Editor: Rath PC) Springer Nature Singapore Pte Ltd (pp 57-89).
16. Gupta S, Singhal NK, **Ganesh S**, Sandhir R. (2019) Extending Arms of Insulin Resistance from Diabetes to Alzheimer's Disease: Identification of

Potential Therapeutic Targets. ***CNS & Neurological Disorders - Drug Targets***, 18(3): 172-184.

17. Kaur G, Kumari S, Saha P, Ali R, Patil S, **Ganesh S**, and Verma S (2019) Selective cell adhesion on a peptide-polymer electrospun fiber mats. ***ACS Omega*** 4 (2), 4376-4383
18. Yu WH, Outeiro TF, Ludovico P and **Ganesh S** (Editors) (2018) Reports on Cellular Homeostasis in the Brain: Protein and Lipid Metabolism and Consequences in Aging and Neurodegeneration, ***Frontiers' Research Topics***, Lausanne, Switzerland.
19. Bhatt S and **Ganesh S*** (2018) New discoveries in progressive myoclonus epilepsies: a clinical outlook, ***Expert Review of Neurotherapeutics*** 18 (8): 649-667.
20. Goenka A, Parihar R, and **Ganesh S*** (2018) Heat Shock-induced Transcriptional and Translational Arrest in Mammalian Cells (Chapter 12) In ***Heat Shock Proteins in Stress*** (Editors: Asea AAA and Kaur P) Vol 15, Springer (pp 267-280).
21. Singh K, Goenka A, **Ganesh S**, and Patra AK (2018) Luminescent Eu(III) and Tb(III) Complexes Containing Dopamine Neurotransmitter: Biological Interactions, Antioxidant Activity and Cellular Imaging Studies. ***European Journal of Inorganic Chemistry*** 2018 (35): 3942-3951.
22. Gupta S, Yadav K, Mantri SS, Singhal NK, **Ganesh S** and Sandhir R (2018) Evidence for compromised insulin signaling and neuronal vulnerability in an experimental model of sporadic Alzheimer's disease. ***Molecular Neurobiology*** 55 (12): 8916-8935.
23. **Ganesh S*** (2018) Genetic pathways to neurodegeneration: Preface to Special Issue. ***Journal of Genetics*** 97 (3): 587-588 [**Special Issue Edited by Ganesh S**].
24. Parihar R, Rai A, and **Ganesh S*** (2018) Lafora disease: from genotype to phenotype, ***Journal of Genetics*** 97 (3): 611-624.
25. Goenka A, Parihar R, and **Ganesh S*** (2018) Role of long non-coding RNAs in cellular stress response, ***Proceedings of the Indian National Science Academy*** 84 (2), 513-520.
26. Misra P and **Ganesh S*** (2018) Sex-biased transgenerational effect of maternal stress on neurodevelopment and cognitive functions. ***Journal of Genetics*** 97 (2):581-583.
27. Rai A, Singh PK, Singh V, Kumar V, Mishra R, Thakur AK, Mahadevan A, Shankar SK, Jana NR, and **Ganesh S*** (2018) Glycogen synthase protects neurons from cytotoxicity of mutant huntingtin by enhancing the autophagy flux. ***Cell Death & Disease*** 9 (2): 201. [**Highlighted in the Editorial of *FEBS J***]
28. Rai A, Mishra R, and **Ganesh S*** (2017) Suppression of leptin signalling reduces polyglucosan inclusions and seizure susceptibility in a mouse model for Lafora disease. ***Human Molecular Genetics*** 26 (24): 4778–4785.
29. Tomar K, Soni S, Bhadauriya P, Parihar R, **Ganesh S**, Nair NN, and Ramanathan G (2017) Mercuric ion sensing by overlapping β-turn containing peptide. ***ChemistrySelect*** 2 (26): 8072–8075.

30. Upadhyay M, Agarwal S, Bhadauriya P, and **Ganesh S*** (2017) Loss of laforin or malin results in increased Drp1 level and concomitant mitochondrial fragmentation in Lafora disease mice models. ***Neurobiology of Disease***, 100: 39-51.

31. Jain N, Rai A, Mishra R, and **Ganesh S*** (2017) Role of Lafora disease proteins laforin and malin in cellular heat shock response: malin is required for the autophagy and proteasomal activity during the heat shock recovery. ***Cell Stress and Chaperone,*** 22: 307-315

32. Goenka A, Sengupta S, Pandey R, Parihar R, Mohant G, Mukerji M and **Ganesh S*** (2016) Human satellite-III non-coding RNAs modulate heat shock-induced transcriptional repression. ***Journal of Cell Science***, 129: 3541-3552. **[Cover Page Article | Highlighted in the editorial]**

33. Parihar R and **Ganesh S*** (2016) Autism genes: a continuum that connects us all. ***Journal of Genetics,*** 95: 481-483

34. Jain N, Mishra R, and **Ganesh S*** (2016) FoxO3a-mediated autophagy is down-regulated in laforin deficient mice, an animal model for Lafora progressive myoclonus epilepsy. ***Biochemical and Biophysical Research Communications*** 474 (2): 321–327.

35. Jain N, and **Ganesh S*** (2016) Emerging nexus between Rab GTPases, autophagy and neurodegeneration. ***Autophagy*** 12 (5):900-904.

36. Upadhyay M, Bhadauriya P, and **Ganesh S*** (2016) Heat shock modulates the subcellular localization, stability, and activity of HIPK2. ***Biochemical and Biophysical Research Communications*** 472(4):580-4.

37. Singh PK, and **Ganesh S*** (2016) Autophagy defects and Lafora disease (Chapter 10). In ***Autophagy*** (Volume 8: ***Autophagy: Cancer, Other Pathologies, Inflammation, Immunity, Infection, and Aging***) (Ed: M.A. Hayat), Elsevier Inc., pp 187-195. [Book Chapter]

38. Mittal S, Upadhyay M, Singh PK, Parihar R, and **Ganesh S*** (2015) Interdependence of laforin and malin proteins for their stability and functions could underlie the molecular basis of locus heterogeneity in Lafora disease. ***Journal of Biosciences*** 40(5):863-71.

39. Upadhyay M, Gupta S, Bhadauriya P, **Ganesh S*** (2015) Lafora disease proteins laforin and malin negatively regulate the HIPK2-p53 cell death pathway. ***Biochemical and Biophysical Research Communications*** 464(1):106-11.

40. Kumar A, Singh PK, Parihar R, Dwivedi V, Lakhotia SC, **Ganesh S***.(2014) Decreased O-linked GlcNAcylation protects from cytotoxicity mediated by huntingtin exon1 protein fragment. ***Journal of Biological Chemistry,*** 289(19):13543-53.

41. Parihar R, Misra R, Singh SK, Jayalakshmi S, Mehndiratta MM, and **Ganesh S*** (2014) Association of the GRM4 gene variants with juvenile myoclonic epilepsy in an Indian population. ***Journal of Genetics*** 93(1):193-7.

42. Singh PK, Singh S, and **Ganesh S*** (2013) Activation of serum/glucocorticoid-induced kinase 1 (SGK1) underlie increased glycogen

levels, mTOR activation, and autophagy defects in Lafora disease. ***Molecular Biology of the Cell*** 24 (24):3776-86.

43. Parihar R, and **Ganesh S*** (2013) The SCN1A gene variants and epileptic encephalopathies. ***Journal of Human Genetics*** 58 (9): 573-80.
44. Singh S, Singh, PK, Bhadauriya P, and **Ganesh S*** (2012) Lafora disease E3 ubiquitin ligase malin is recruited to the processing bodies and regulates the miRNA-mediated gene silencing via the decapping enzyme Dcp1a. ***RNA Biology*** 9(12):1440-9.
45. Serratosa JM, Minassian B, and **Ganesh S** (2012) Progressive myoclonus epilepsy of Lafora. In **Jasper's Basic Mechanisms of the Epilepsies, 4th Edition** (Eds: Noebels J, Avoli M, Rogawski M, Olsen R and Delgado-Escueta A), Oxford University press, USA, pp 874-878. [Book Chapter]
46. Klionsky DJ **and 1269 others, including Ganesh S**. (2012) Guidelines for the use and interpretation of assays for monitoring autophagy. ***Autophagy*** 8 (4): 445-544.
47. Singh S and **Ganesh S** (2012) Phenotype variations in Lafora progressive myoclonus epilepsy: possible involvement of genetic modifiers? ***Journal of Human Genetics***, 57(5): 283-285. [Commentary Article]
48. Puri R and **Ganesh S*** (2012) Autophagy in Lafora disease: cause or consequence? ***Autophagy*** 8(2): 289-290. [Commentary Article]
49. Singh, PK, Singh S, and **Ganesh S*** (2012) Laforin-malin complex negatively regulates glycogen synthesis by modulating the cellular glucose uptake via glucose transporters. ***Molecular and Cellular Biology*** 32(3):652-63.
50. Tripathi P, Awasthi S, Prasad R, **Ganesh S**. (2012) Haplotypic association of ADAM33 (T+1, S+1 and V - 3) gene variants in genetic susceptibility to asthma in Indian population. ***Annals of Human Biology,*** 39(6):479-83.
51. Dubey D, Parihar R, and **Ganesh S*** (2012) Identification and characterization of novel splice variants of the human EPM2A gene mutated in Lafora progressive myoclonus epilepsy. ***Genomics*** 99(1):36-43.
52. Puri R, Suzuki T, Yamakawa K, and **Ganesh S*** (2012) Dysfunctions in endosomal-lysosomal and autophagy pathways underlie neuropathology in a mouse model for Lafora disease. ***Human Molecular Genetics,*** 121, (1): 175-184.
53. Chandrasekhar V, Das S, Yadav R, Hossain S, Parihar R, **Ganesh S**, and Sen P (2012). Novel chemosensor for the visual detection of copper (II) in aqueous solution at the ppm level. ***Inorganic Chemistry,*** 51 (16): 8664–8666.
54. Puri R, Jain N, and **Ganesh S*** (2011) Proteasomal stress results in the recruitment of glycogen particles to the aggresomal structures. ***FEBS Journal,*** 278 (19): 3688-3698.
55. Pandey U, Kumari R, Nath B, **Ganesh S**, Banerjee I, Hasan OM, Midha T, Pandey S. (2011) Association of angiotensin-converting enzyme, methylene tetrahydrofolate reductase and paraoxonase gene polymorphism and coronary artery disease in an Indian population. ***Cardiology Journal***. 18(4): 385-94.

56. Tripathi P, Awasthi S, Prasad R, Husain N, and **Ganesh S** (2011) Association of ADAM33 gene polymorphisms with asthma and its severity in Indian adult population. ***Journal of Genetics,*** 90 (2): 265-273.

57. Siwach P, Parihar R, Sengupta S, and **Ganesh S*** (2011) Proline repeat, in cis and trans-positions, confer protection against the toxicity of misfolded proteins in a mammalian cellular model. ***Neuroscience Research*** 70 (2001) 435-441.

58. Sengupta S, Badwar I, Upadhyay M, Singh S and **Ganesh S*** (2011) Malin and laforin are essential components of a protein complex that protects cells from the thermal stress. ***Journal of Cell Science*** 124 (13): 2277-2286.

59. Awasthi S, Tripathi P, **Ganesh S,** and Husain N (2011) Association of ADAM33 gene polymorphisms with asthma in Indian children. ***Journal of Human Genetics,*** 56 (3), 188–195.

60. **Ganesh S*** (2010). Juvenile myoclonic epilepsy: *EFHC1* at the cross-roads? ***Annals of Neurosciences*** 17 (2): 57-59. [Editorial Comment]

61. Puri R and **Ganesh S*** (2010) Laforin in autophagy: a possible link between carbohydrate and protein in Lafora disease? ***Autophagy*** 6 (8): 1229-1231. [Commentary Article]

62. Mittal S, and **Ganesh S*** (2010) Protein quality control mechanisms and neurological disorders: checks, balances and deadlocks. ***Neuroscience Research*** 68 (3): 159-166. [Invited Review Appeared on Cover Page]

63. Puri R, Suzuki T, Yamakawa K, and **Ganesh S*** (2009) Hyperphosphorylation and aggregation of tau in laforin deficient mice, an animal model for Lafora disease. ***Journal of Biological Chemistry*** 284 (34) 22657–22663.

64. Sengupta S, Parihar R, and **Ganesh S*** (2009) Satellite III non-coding RNAs show distinct and stress-specific patterns of induction. ***Biochemical and Biophysical Research Communications*** 382 (1) 102-107.

65. Singh S, and **Ganesh S*** (2009) Lafora progressive myoclonus epilepsy: A meta-analysis of reported mutations in the first decade following the discovery of EPM2A and NHLRC1 genes. ***Human Mutation*** 30 (5):715-723.

66. Siwach P, Sengupta S, Parihar R, and **Ganesh S*** (2009) Spatial positions of homopolymeric repeats in the human proteome and their effect on cellular toxicity. ***Biochemical and Biophysical Research Communications*** 380 (2) 382-386.

67. Banerjee I, Pandey U, Hasan OMT, Parihar R, Tripathi V, and **Ganesh S*** (2009) Association between inflammatory gene polymorphisms and coronary artery disease in an Indian population. ***Journal of Thrombosis and Thrombolysis*** 27 (1): 88-94.

68. Garyali P, Siwach P, Singh PK, Puri R, Mittal S, Sengupta S, and **Ganesh S*** (2009) The laforin-malin complex suppress the cellular toxicity of misfolded proteins by promoting their degradation through the ubiquitin-proteasome system. ***Human Molecular Genetics*** 18(4):688-700.

69. Gour N, Purohit CS, Verma S, Puri R, **Ganesh S** (2009) Mannosylated self-assembled structures for molecular confinement and gene delivery

applications. ***Biochemical and Biophysical Research Communications*** 378 (3), 503-506.

70. Dubey D and **Ganesh S*** (2008) Modulation of functional properties of laforin phosphatase by alternative splicing reveals a novel mechanism for the EPM2A gene in Lafora progressive myoclonus epilepsy. ***Human Molecular Genetics*** 17 (19), 3010-3020.
71. Sengupta S and **Ganesh S** (2008) Noncoding RNAs in polyglutamine disorders: friend or foe? ***Journal of Biosciences*** 33 (2), 303-306. [Commentary Article]
72. Singh S, Satishchandra P, Shankar SK, and **Ganesh S*** (2008) Lafora disease in Indian population: EPM2A and NHLRC1 gene mutations and their impact on subcellular localization of laforin and malin. ***Human Mutation*** 29 (6), E1-E12.
73. Siwach P, and **Ganesh S*** (2008) Tandem repeats in human disorders: mechanism and evolution. ***Frontiers in Biosciences***, 13, 4467-4484 [*Invited review article*].
74. Banerjee I, Gupta V, Ahmed T, Faizaan M, Agarwal P, and **Ganesh S*** (2008) Inflammatory system gene polymorphism and the risk of stroke: a case-control study in an Indian population. ***Brain Research Bulletin***. 75, 158-165.
75. Mittal S, Dubey D, Yamakawa K, and **Ganesh S*** (2007) Lafora disease proteins, malin and laforin, are recruited to aggresomes in response to proteasomal impairment. ***Human Molecular Genetics*** 16, 753-762. [Cover Page article]
76. Banerjee I, Gupta V, and **Ganesh S*** (2007) Association of gene polymorphism with genetic susceptibility to stroke in Asian populations: a meta-analysis. ***Journal of Human Genetics*** 52 (3): 205-219.
77. Singh S, Sethi I, Francheschetti S, Riggio C, Avanzini G, Yamakawa K, Delgado-Escueta AV, and **Ganesh S*** (2006) Novel *NHLRC1* mutations and genotype-phenotype correlations in patients with Lafora's progressive myoclonus epilepsy. ***Journal of Medical Genetics*** 43, e48.
78. Siwach P, Pophaly SD, and **Ganesh S*** (2006) Genomic and evolutionary insights into genes encoding proteins with single amino acid repeats. ***Molecular Biology and Evolution*** 23, 1357-1369.
79. **Ganesh S***, Puri R, Singh S, Mittal S, and Dubey D (2006) Recent advances in the molecular basis of Lafora's progressive myoclonus epilepsy. ***Journal of Human Genetics*** 51, 1-8. [*Invited review article*]
80. **Ganesh S*** and Singh S (2005) Neuronal survival in epilepsy: to die or not to die? ***Journal of Biosciences*** 30, 561-565. [Commentary Article]
81. **Ganesh S*,** Tsurutani N, Amano K, Mittal S, Uchikawa C, Delgado-Escueta AV, and Yamakawa K (2005) Transcriptional profiling of a mouse model for Lafora disease reveals dysregulation of genes involved in the expression and modification of proteins. ***Neuroscience Letters*** 387, 62-67.
82. Singh S, Suzuki T, Uchiyama A, Kumada S, Moriyama N, Hirose S, Takahashi Y, Inoue Y, Kimura K, Sawaishi S, Yamakawa K, and **Ganesh S**. (2005) Mutations in the *NHLRC1* gene are the common cause for Lafora

disease in the Japanese population. ***Journal of Human Genetics*** 50, 347-352.

83. Suzuki T, Delgado-Escueta AV, Aguan K, Alonso ME, Shi J, Hara Y, Nishida M, Numata T, Medina MT, Takeuchi T, Morita R, Bai D, **Ganesh S**, Sugimoto Y, Inazawa J, Bailey JN, Ochoa A, Jara-Prado A, Rasmussen A, Ramos-Peek J, Cordova S, Rubio-Donnadieu F, Inoue Y, Osawa M, Kaneko S, Oguni H, Mori Y, Yamakawa K (2004) Mutations in EFHC1 cause juvenile myoclonic epilepsy**.** ***Nature Genetics*** 36, 842-849.
84. **Ganesh S*,** Tsurutani N, Suzuki T, Hoshii Y, Ishihara T, Deldago-Escueta AV, and Yamakawa K (2004) The carbohydrate-binding domain of Lafora disease protein targets Lafora polyglucosan bodies. ***Biochemical and Biophysical Research Communications*** 31, 1101-1109.
85. Delgado-Escueta AV, Perez-Gosiengfiao KB, Bai D, Bailey J, Medina MT, Morita R, Suzuki T, **Ganesh S**, Sugimoto Y, Yamakawa K, Ochao A, Jara Prado A, Rasmusse A, Ramos-Peek J, Cordava S, Rubio-Donnadieu F and Alonso ME (2003) Recent developments in the quest for myoclonic epilepsy genes. ***Epilepsia*** 44, 13-26. [Invited Review Article]
86. **Ganesh S*,** Tsurutani N, Suzuki T, Ueda K, Agarwala KL, Osada H, Delgado-Escueta AV, and Yamakawa K (2003) The Lafora disease gene product laforin interacts with HIRIP5, a phylogenetically conserved protein containing a NifU-like domain. ***Human Molecular Genetics*** 12, 2359-2368.
87. Sreenivasulu K, **Ganesh S**, RamanR (2002) Evolutionarily conserved DMRT1 encodes alternatively spliced transcripts and shows dimorphic expression during gonadal differentiation in the lizard, Calotes versicolor. ***Mechanism of Development*** 119S, S55-S64.

Publications during doctoral and postdoctoral trainings (1995-2002)

88. **Ganesh S**, Delgado-Escueta AV, Suzuki T, Francheschetti S, Riggio C, Avanzini G, Rabinowicz A, Bohlega S, Bailey J, Alonso ME, Rasmussen A, Ochoa A, Prado AJ, Medina MT, and Yamakawa K (2002) Genotype-phenotype correlations for *EPM2A* mutations in Lafora's progressive myoclonus epilepsy: Exon 1 mutations associate with an early onset cognitive deficit subphenotype. ***Human Molecular Genetics,*** 11: 1263-1271.
89. **Ganesh S**, Delgado-Escueta AV, Avila MR, Sakamoto T, Machado-Salas J, Hoshii Y, Akagi T, Suzuki T, Amano K, Agarwala KL, Hasegawa Y, Ishihara T, Hashikawa T, Itohara S, Cornford EM, Niki H, Yamakawa K. (2002) Targeted disruption of *Epm2a* gene causes formation of Lafora inclusion bodies, neurodegeneration, ataxia, myoclonus epilepsy and impaired behavioral response in mice. ***Human Molecular Genetics,*** 11: 1251-1262.
90. **Ganesh S**, Suzuki T, and Yamakawa K. (2002) Alternate splicing modulates subcellular localization of laforin. ***Biochemical and Biophysical Research Communications.*** 291: 1134-1137.
91. **Ganesh S**, Shoda K, Amano K, Uchiyama A, Kumuda S, Moriyama N, Hirose S and Yamakawa K (2001) Mutation screening for Japanese Lafora's disease patients: identification of novel sequence variants in the coding and upstream regulatory regions of the EPM2A gene. ***Molecular and Cellular***

Probes. 15: 281-289.

92. Agarwala KL, **Ganesh S**, Suzuki T, Akagi T, Kaneko K, Yamaguchi K and Yamakawa K (2001) Dscam is associated with axonal and dendritic features of neuronal cells. ***Journal of Neuroscience Research***. 66: 337-346

93. Suzuki T, **Ganesh S**, Agarwala KL, Morita R, Sugimoto Y, Inazawa J, Delgado-Escueta AV, and Yamakawa K (2001) A novel gene in the chromosomal region for juvenile myoclonus epilepsy on 6p12 encodes a brain specific lysosomal membrane protein. ***Biochemical and Biophysical Research Communications.*** 288: 626-636.

94. Delgado-Escueta AV, **Ganesh S**, and Yamakawa K. (2001) Advances in the genetics of progressive myoclonus epilepsy. ***American Journal of Medical Genetics (Seminars in Medical Genetics).*** 106:129-138.

95. Agarwala KL, **Ganesh S**, Tsustumi, Y, Suzuki T, Amano K, and Yamakawa K (2001) Cloning and functional characterization of DSCAML1, a novel DSCAM-related cell adhesion molecule that mediates homophilic intercellular adhesion. ***Biochemical and Biophysical Research Communications.*** 285 (3), 760-772.

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97. Agarwala KL, **Ganesh S**, Amano K, Suzuki T, and Yamakawa K (2001) DSCAM, a highly conserved gene in mammals, expressed in differentiating mouse brain. ***Biochemical and Biophysical Research Communications.*** 281 (3): 697-705.

98. **Ganesh S**, Agarwala KL, Ueda K, Akagi T, Shoda K, Usui T, Hashikawa T, Osada H, Delgado-Escueta AV, and Yamakawa K (2000). Laforin, defective in the progressive myoclonus epilepsy of Lafora type, is a dual specificity phosphatase associated with polyribosomes. ***Human Molecular Genetics*** 9 (15): 2251-2261

99. **Ganesh S**, Amano K, and Yamakawa K (2000) Assignment of GRM1 gene coding for metabotropic glutamate receptor 1 to human chromosome band 6q24 by in situ hybridization. ***Cytogenetics & Cell Genetics*** 88 (3-4) 314-315.

100. Choudhary B, **Ganesh S**, and Raman R (2000) Evolutionary conservation of the gene CvSox9, in the lizard Calotes versicolor, and its expression during gonadal differentiation. ***Development, Genes and Evolution*** 210 (5): 250–257.

101. Saleem Q, **Ganesh S**, Vijaykumar M, Reddy YCJ, Brahmachari SK and Jain S (2000). Association analysis of 5-HT transporter gene in bipolar disorder in the Indian population. ***American Journal of Medical Genetics*** 96:170–172.

102. **Ganesh S**, Amano K, Delgado-Escueta AV, and Yamakawa K (1999) Isolation and characterization of mouse homologue for human epilepsy gene, EPM2A. ***Biochemical and Biophysical Research Communications***. 257 (1) 24-28.

103. **Ganesh S**, Choudhary B and Raman R (1999) Temporal differences between testis and ovary determinations with possible involvement of testosterone and aromatase in gonadal differentiation in TSD lacking lizard, Calotes versicolor. ***Journal of Experimental Zoology*** 283 (6) 600-7.

104. **Ganesh S**, Choudhary B and Raman R (1998) A zinc finger domain gene in the lizard, Calotes versicolor, shows extensive homology with the mammalian ZFX and is expressed embryonically. ***Cytogenetics & Cell Genetics*** 80 (1-4) 89-93.

105. **Ganesh S**, Mohanty J and Raman R (1997): Male biased distribution of the human Y chromosomal genes, SRY and ZFY, in the lizard Calotes versicolor which lacks sex chromosomes and temperature dependent sex determination. ***Chromosome Research*** 5: 1-7.

106. **Ganesh S** and Raman R (1997): CvSox4, the lizard homologue of human SOX4 gene, shows remarkable conservation among the amniotes. ***Gene*** 196 (1997) 287-290.

107. **Ganesh S** (1997): Sex and the single X. ***Current Science*****,** 72 (1) 11-12.

108. **Ganesh S**, and Raman R (1995): Sex reversal by testosterone and not by estradiol or temperature in Calotes versicolor, the lizard lacking sex chromosomes. ***Journal of Experimental Zoology***, 271 (1) 139-144.

NOTABLE INVITED TALKS (SINCE JOINING THE IIT K)

1. *PME gene in neuroinflammation and brain ageing*, invited talk delivered at the **IBRO-APRC Associate School on "Biophysical to Molecular Techniques: An interface in Neurobiology Research"**, organized by IGNTU, Amarkantak (23rd to 27th August, 2021).
2. *The Science of Communicating Science*, invited talk delivered at the **Enkindle - an International Colloquium on Microbes, Environment and Science communication**, organized by the Department of Microbiology, Gargi College, University of Delhi (26th to 27th February, 2021).
3. *Secret to Success*, Plenary talk delivered at the **Winter Symposium of Life Sciences**, organized by J.C. Bose University of Science and Technology (YMCA), Faridabad (22nd February, 2021).
4. *PME genes, neuroinflammation, and epilepsy*, Invited talk delivered at the **Biannual Lafora disease workshop - 2020**, organized by the University of Kentucky College of Medicine, Kentucky, USA (29th October, 2020).
5. *Dendritic abnormalities and cognitive abilities: functional link for an inherited neurodegenerative disorder,* Invited talk delivered at the **45th Annual Meeting of the Indian Society of Human Genetics**, organized by Sri Ramachandra University, Chennai (13-15th February, 2020).
6. *Glycogen in neuronal life and death*, Invited talk delivered at the **Indo-US Workshop on "Health Diversity and Disparities"**, organized by the Centre for Cellular and Molecular Biology (CSIR), Hyderabad and sponsored by the Indo-US Science and Technology Forum (IUSSTF) (16 – 18 January 2020).

7. *From carbohydrate to cognition: lessons learned from a rare form of neurodegenerative disorder* - **Prof J Das Memorial Award Lecture, 2019, delivered at the XLIII All India Cell Biology Conferenc**e, an annual meeting of the Indian Society of Cell Biologist, held at IISER Mohali (19-21st December 2019).
8. *Genetics of neurodegeneration: from genotype to phenotype*, Invited talk delivered at the **Indian Academy of Science sponsored workshop on "Genetics and Evolution: Intertwined Strands",** organized by the Ashoka University, Sonepat (30th Sept and 1st Oct 2019).
9. *Lafora disease: from genetics to treatment*: Invited talk delivered at the Annual Meeting of the **Indian Society of Human Genetics**, organized by NIBMG and Kalayni University, Kalyani (31 January to 1st February 2019)
10. *Dendritic abnormalities might underlie intellectual disability in Lafora disease*: Invited talk delivered at the **Biennial meeting of the Indian Society of Developmental Biologists (InSDB)**, organized by Indian Institute of Technology, Kanpur (December 11-15, 2018)
11. *Lafora disease: from genetics to treatment*: Invited talk delivered at the **Indo-Israel Workshop on Recent Advances in Molecular Genetics with new Biomedical Insights**, organized by Indian National Science Academy, New Delhi (February 12-13, 2018)
12. *Lafora disease: link between glycogen metabolism and neurodegeneration*: **Cellular Process in Homeostasis, Regeneration, and Disease** - a satellite meeting to the International Congress of Cell Biology, organized by IISER Thiruvananthapuram (February 2-3, 2018)
13. *Glycogen synthase protects neurons under physiological stress by activating autophagy and increasing neuronal glycogen levels*: **Invited talk delivered at the International Congress of Cell Biology 2018** (a tripartite meeting joint organized by the AISCB, IFCB and APOCB), locally organized by CCMB Hyderabad, held at Hyderabad (Jan 27-31, 2018)
14. *Human genetics: from Genotype to Phenotype:* Invited lecture delivered at the **Science Conclave** organized by the D S Kothari Centre for Research and Innovation in Science Education, Miranda House, University of Delhi (January 10-12, 2018)
15. *Complexities in monogenic disorders*: Invited talk delivered at the **Workshop on Human Genetics**, organized at VES College, Mumbai, by the Lady Tata Memorial Tryst (January15-17, 2018)
16. *Molecular Players in Neurodegenerative Pathways*: Invited talk delivered in the **Newton-Bhabha Fund Researcher Link Workshop on Peptides, Proteins and Metals in Disease and Therapy,** held at IIT Kanpur (November 6-8, 2017).
17. *Role of Human Satellite-III Non-Coding RNA in Cellular Stress Response*: Invited talk delivered at the **9th RNA Group Meeting 2017**, held at Banaras Hindu University, Varanasi (October 26-28, 2017).
18. *Neuroprotective mechanisms of Amalaki rasayan – an Ayurvedic medicine: a study on a genetic mouse model of neurodegenerative disorder*: Invited talk delivered at **8th International Conference and Exhibition on Natural & Alternative Medicine,** held at Dubai (September 25-27, 2017).

19. *Lafora disease: from genetics to treatment*: Invited talk delivered at the **42nd Annual Meeting of the Indian Society of Human Genetics**, jointly organized by the IISc, JNCASR and CHG Bangalore, and held at IISc Bangalore (March 2-4, 2017).
20. *Lafora body disease: Genetics and Future treatment*: Invited talk delivered at the **3rd T.S. Srinivasan-NIMHANS Knowledge Conclave 2017**, organized by NIMHANS, Bangalore (December 24-25, 2016).
21. *Commonalities in neurodegenerative pathways: lessons from Lafora disease*: Invited talk delivered at the **National Research Scholars Meet in Life Sciences 2016**, organized by the Advanced Centre for Treatment, Research and Education in Cancer (ACTREC), Mumbai (December 15-16, 2016).
22. *Commonalities in neurodegenerative pathways: lessons from Lafora disease*: Invited talk delivered at the **International Conference on Genes, Neurodevelopment and Neurodegeneration**, organized by the Centre for Human Genetics, Bangalore (August 26, 2016).
23. Mitochondrial abnormalities in Lafora disease model mice: Invited talk delivered at the **Biannual International Lafora Workshop**, at the Stanford Consortium, University of California at San Diego, La Jolla, USA (June 23-24, 2016).
24. *Mitochondrial homeostasis and neurodegeneration: Insight from Lafora disease:* Invited talk delivered at the **International Symposium of Trends in Cell and Molecular Biology**, at BITS Goa Campus, Goa (December 19-21, 2015).
25. *Mitochondrial homeostasis and neurodegeneration: Insight from Lafora disease*: Invited talk delivered at the **International Conference on Neurodegenerative Diseases: Pathogenesis to Therapy**, organized by the Centre for Brain Research, Indian Institute of Science, Bangalore (November 16-18, 2015).
26. *KT Shetty Memorial Oration Award Lecture*, **Annual Meeting of Indian Academy of Neuroscience,** Chandigarh (October 31 to November 2, 2015).
27. *Mitochondrial homeostasis and neurodegeneration: Insight from Lafora disease*: Invited talk, delivered at the **IBRO/APRC School 2015 on Mitochondria and Neurodegeneration,** Chandigarh (October 26-30, 2015)
28. *Molecular basis of epilepsy: beyond ion channels*: Invited talk delivered at the **Annual Meeting of the Indian Academy of Neurology**, Agra (October 1-3, 2015).
29. *Challenges in genetic diagnosis of monogenic disorders: Promises, challenges, and pitfalls:* Invited talk delivered at "**National Conference on Biotechnology in Human Welfare: New vista"**, organized by BS Purvanchal University, Jaunpur (March 21-22, 2015).
30. *Molecular pathways to neurodegeneration*: **Annual Day Lecture**, Lucknow Biotech Park, Lucknow (December 22, 2014).

31. *Molecular pathways to neurodegeneration - lessons from Lafora disease*: Invited talk delivered at the symposium, "**BIOWORLD 2014: Proteins Structure and Function**", organized by IIT Delhi (December 12-14, 2014).
32. *Activation of HIPK2–p53 signaling pathway and mitochondrial fragmentation underlie cell death phenotype in Lafora disease*: Invited talk delivered at the **XXXVIII All India Cell Biology Conference and International Symposium on "Cellular Response to Drugs"**, organized by Central Drug Research Institute, Lucknow (December 10-12, 2014).
33. Invited speaker for the 1st annual Lafora Disease Workshop held at the Sanford Consortium for Regenerative Medicine in La Jolla, California, USA (June 12-13, 2014) (could not attend due to visa issue).
34. *Mitochondrial abnormalities in Lafora progressive: cause or consequence*: Invited talk delivered in the 4th annual conference of the society for mitochondrial research and medicine "**Mitochondrial Biology: from molecules to disease**", organized by NIMHANS, Bangalore (December 3-4, 2014).
35. *Misregulated RNA processing in Neurodegenerative disorders:* Invites t: alk delivered in the **International Conference Karyotype to Genotype**, organized by Banaras Hindu University, Varanasi (December 8-10. 2014).
36. *Misregulated RNA processing in Neurodegenerative disorders:* 82nd **Annual Meeting of Society of Biological Chemists (India),** organized by the Central University of Hyderabad, Hyderabad, (December 2-5, 2013).
37. *Polyglucosan bodies in Lafora disease: what do we learn from animal models?* Invited talk delivered in the **International Symposium on Developmental and Complex Disorders and 38th Annual Conference of the Indian Society of Human Genetics**, organized by Banaras Hindu University, Varanasi (December 9-11, 2012)
38. *Molecular Pathology of Lafora Disease*: **Award lecture delivered at the Central Drug Research Institute, Lucknow** (September 25, 2012).
39. *Cause and consequence of polyglucosan bodies in Lafora neurodegeneratrive disorder*: Invited talk delivered at the **National Symposium on Frontiers in Neurosciences and Genetics**, organized by the Manovikas Biomedical Research and Diagnostic Centre, Kolkata. (December 23, 2011)
40. *Polyglucosan body in neurodegenerative disorders and in aged brain: friend or foe?* Invited talk delivered in the **Indo-US Bilateral Symposium on Aging and Age-related Diseases**, held at the National Institute of Immunology, Delhi (March 34, 2011)
41. *Defects in proteolytic process underlie neuropathology in Lafora disease:* Invited talk in the **79th Annual Meeting of the Society of Biological Chemists (India),** organized by the Indian Institute of Science, Bangalore (December 13-15, 2010).
42. *Laforin-malin act as suppressors of misfolded protein accumulation*: Invited talk delivered in the **International Symposium on Progressive Myoclonus Epilepsies in the New Millennium**, Organized by Mariani Foundation, Venice, Italy (April 28, to May 2, 2010).

43. *Molecular Basis of Locus Heterogeneity in Lafora Progressive Myoclonus Epilepsy:* Invited talk delivered in the **International Conference on the Role of Genetics in Clinical Practice**, organized by the Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow (March 6 to 8, 2010).
44. *Impact of alternative mRNA splicing in the etiology of Lafora progressive myoclonus epilepsy:* Invited talk delivered in the **International Conference on Genetic and Molecular Diagnosis in Modern Medicine and Biology**, organized by the Yenepoya University, Mangalore (February 27, to March 2, 2010).
45. *Defects in proteolytic pathways underlie neuropathology in Lafora disease*: Invited talk delivered in the **NeuroUpdate 2010**, organized jointly by the Calcutta National Medical College and the Indian Institute of Chemical Biology, Kolkata (February 14, 2010).
46. *Genetic diagnosis in monogenic disorders: promises, challenges and pitfalls*: Invited talk delivered in the **International Symposium on Molecular Pathology and Applied Genomics,** organized by SRL, Global Knowledge Forum, Super Religare Laboratories Limited, Mumbai (November 6 and 7, 2009).
47. *Discovery of Novel Modulators of Neurotoxicity as Potential Therapeutic Interventions in Neurodegenerative Disorders*: Invited talk delivered in the **Translational Health Research: Pathways to Discovery**, organized by the King George Medical University, Lucknow, (April 28-29, 2009)
48. *The laforin-malin complex suppresses cellular toxicity of misfolded proteins by promoting their degradation through ubiquitin-proteasome system*: Invited talk delivered in the **BSI Invited Seminars & Forums**, organized by the RIKEN Brain Science Institute, Wako-shi, Japan (December 11, 2008).
49. *Role of SatIII transcripts in general stress response*. Invited talk delivered in the **HUGO 13th Human Genome Meeting**, held at International Convention Centre, Hyderabad (October 1, 2008).
50. *Genetic diagnosis in Lafora disease: promises, challenges and pitfalls*: Invited talk delivered in the **International Conference on Genetic and Molecular Diagnosis in Modern Medicine**, organized by Kamineni Educational Society, Hyderabad (January 7-9, 2008).
51. *Ubiquitin proteasome dysfunction in Lafora disease*: Invited talk delivered in the **BSI Invited Seminars & Forums**, organized by the RIKEN Brain Science Institute, Wako-shi, Japan (December 19, 2007).
52. *Advances in molecular genetics of neurological disorders*: **Distinguished Seminar Series**, organized by the Department of Biotechnology, Alagappa University, Karaikudi (July 14, 2007).
53. *Lafora disease: a tale of two proteins*: Invited talk delivered in the **EMBO International Workshop on Developmental Mechanisms and Disease Models**, organized be the Indian Institute of Technology, Kanpur (December 16-20, 2006).
54. *Molecular basis for clinical heterogeneity in Lafora's progressive myoclonus epilepsy:* Invited talk delivered in the **Indo-US Symposium on**

Genetic Disorders, organized by Banaras Hindu University, Varanasi (October 29-31, 2006).

55. *Clinical, genetic and allelic heterogeneity in Lafora's progressive myoclonus epilepsy*: Invited talk delivered in the **XXIX All India Cell Biology Conference and Symposium**, organized by the Industrial Toxicology Research Institute, Lucknow (January 18-20, 2006)
56. *Lafora's progressive myoclonus epilepsy: What do we learn from a mouse mode*l: Invited talk delivered in the **74th AGBM of the Society of Biological Chemists (India**), organized by the Central Drug Research Institute, Lucknow (November 7-10, 2005).
57. *The relevance of alternative RNA splicing in human genetic disorders: Insight from Lafora disease*: Invited talk delivered in the "**Indo-Brazil-South Africa Trilateral Workshop on Functional Genomics, Life Science, GM Food and Agriculture**", organized by the Institute of Genomics and Integrative Biology, New Delhi (July 18-19, 2005).
58. *Lafora disease: from genetics to pathogenesis:* Invited talk delivered in the mini-symposium "**Molecular Genetics: Current Developments and Future Trends**", organized by the Department of Zoology of Banaras Hindu University, Varanasi (March 29, 2005)
59. *Genes and Genomes: Impact on Medicine and Society:* Invited talk delivered in the lecture series named "**harnessing health technology in resolving emerging challenges**", organized by the Kanpur chapter of the Indian Science Congress, DAV College, Kanpur (18 - 19, February, 2005).
60. *Molecular Pathology of Lafora's Progressive Myoclonus Epilepsy*: Invited talk delivered in the "**6th National Congress on Pediatric Critical Care**", organized by the Intensive Care Chapter of Indian Academy of Paediatrics, Kanpur branch. CSJM University, Kanpur (30 and 31st October, 2004).
61. *Genetics of Epilepsy – Impact on clinical management*: Invited talk delivered in the "**Intensive National Program on Epilepsy**", organized by the Department of Neurology, G.B. Pant Hospital and Maulana Azad Medical College, New Delhi (29th February, 2004).
62. *Concepts of Human Genetics*: Invited talk delivered in the "**Short term workshop in genetics and molecular biology**", Indian Institute of Technology, Kanpur (18th to 25th October, 2003).
63. *From Genes to Genome*: Invited talk delivered in the "**Short term Course in Computational Neuroscience**", Indian Institute of Technology, Kanpur (7 to 18th July, 2003).
64. *Genetics of Lafora's epilepsy*: Invited talk delivered in the two-day workshop on **"Emerging Trends in Basic Neuroscience for Clinicians**", All India Institute of Medical Sciences, Ansari Nagar, New Delhi (26 – 27th August, 2002)

Graduated students:

PhD students [Graduated students]:

1. Shweta Singh (2008): Surgical Consultant, Avacare Australia

2. Pratibha Siwach (2008): Regulatory Affairs & Labelling Specialist at Johnvince Foods, Canada
3. Shuchi Mittal (2009): Senior Scientist at Bristol Myers Squibb, USA
4. Deepti Dubey (2010): Scientific Officer at TESS Research Foundation, USA
5. Rajat Puri (2011): Senior Research Fellow, National Institutes of Health, Baltimore, USA.
6. Sachin Awasthi (2012) Associate Professor, Dept. of Orthopedics, Dr Ram Manohar Lohia Institute of Medical Sciences, Lucknow
7. Pankaj Kumar Singh (2013): Postdoctoral Associate at Lewis Katz School of Medicine, USA
8. Sweta Singh (2013): Project Leader, Clinical Data Management, IQVIA, France
9. Rashmi Parihar (2014): Research Establishment Officer, IIT Kanpur
10. Mamta Upadhyay (2016): Global Scientific Advisor, Novo Nordisk, Bengaluru.
11. Navodita Jain (2016): Senior Research Investigator, Syngene International Limited, Bengaluru
12. Anshika Goenka (2017): Postdoctoral Fellow, Northwestern University, USA
13. Anupama Rai (2017): Postdoctoral Fellow, Yael School of Medicine, Yale University, USA
14. Komal Taneja (2019): Assistant Professor, J.C. Bose University of Science and Technology, Faridabad.
15. Saloni Agarwal (2020): Postdoctoral Fellow at IIT Kanpur
16. Priyanka Sinha (2020): Postdoctoral Fellow, Massachusetts General Hospital, Harvard Medical School, USA
17. Bhupender Verma (2021) Postdoctoral Fellow, Massachusetts Eye and Ear, Harvard Medical School, USA

PhD students [currently under supervision]

Akansha Onkar | MonicaShukla | Nilashma Laha | Jyoti Mishra

M.Tech Students [Graduated students]

1. Ira Sethi [2004]: Current affiliation not known
2. Mohammad Faizaan [2005]: Assistant Professor, University of Copenhagen, Norway
3. Saurabh D. Phophaly [2005]: Postdoctoral Fellow, LMU Biozentrum, Germany
4. Veena Gupta [2006]: Medical Advisor, Pfizer India Ltd, New Delhi
5. Indranil Banerjee [2007]: Assistant Professor, IISER Mohali
6. Punitee Garyali [2008]: Application Scientist, SciGenom, Hyderabad
7. Ishima Badhwar [2009]: Senior Client Engagement Manager, RELX Group, Gurgaon
8. Loka Ram Prasad [2009]: PhD student, CCMB, Hyderabad
9. Girish Chandra Mohanta [2010]: Scientist, Central Scientific Instruments Organization, Chandigarh
10. Apratim Tripathi [2011]: Director & Co-Founder, Hydrovation Technologies, Ahmedbad
11. Varun Pahwa [2012]: Current affiliation not known

12. Maanya Gaur [2012]: PhD student, IITB-Monash University joint program
13. Aditi Gupta [2016]: Scientist, Intas Pharmaceuticals Ltd, Ahmedabad

Postdoctoral Fellows (past members):

1. Sonali Sengupta [2009]: Associate Professor, Vellore Institute of Technology, Vellore.
2. Hina Sultana [2012]: Postdoctoral Fellow, National Institutes of Health, Baltimore, USA
3. Amit Kumar [2013] Instructor, Burke Medical Research Institute, New York, USA
4. Manindra Nath Tiwari [2014] Postdoctoral Fellow, Hebrew University, Jerusalem, Israel
5. Surabhi Bajpai [2015] Assistant Professor, Banasthali Vidyapith, Banasthali
6. Anupama Rai [2018]: Postdoctoral Fellow, Yale University, USA
7. Priyanka Kumari [2018]: Postdoctoral Fellow, University of Iowa, USA
8. Rashmi Parihar [2019]: Research Establishment Officer, IIT Kanpur
9. Shweta Bhat [2019]: Research Establishment Officer, IIT Kanpur
10. Suman Mishra [2020]: Demonstrator, PGI Chandigarh
11. Piyali Misra [2020]: Postdoc, University of Chicago, USA
12. Deepashree S [2021]: Project Executive Officer, IIT Kanpur

Postdoctoral Fellows (currently in the group):

1. Deepti Chug
2. Saloni Agarwal