
Goutam Chandra, Ph. D.

Personal Information

Born on 3rd January 1976, Indian, Male, Married.

Present position and contact details

Senior Scientist,
Center for Development and Aging Research (CDAR)
Inter-University Center for Biomedical Research & Super Specialty Hospital (IUCBR&SSH)
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Education

1994-1998	**B.S.** in ***Pharmaceutical Technology***, Department of Pharmaceutical Technology, Jadavpur University, Kolkata, India
1998-2000	**M.S.** in ***Pharmaceutical Technology***, Department of Pharmaceutical Technology, Jadavpur University, Kolkata, India
2002-2008	**Ph.D**. in ***Neuropharmacology*** from Indian Institute of Chemical Biology, Jadavpur University, Kolkata, India
2009-2010	Course on ***'Principles of Clinical Pharmacology'*** at the National Institutes of Health (NIH) Clinical Center, Bethesda, MD, USA.

Professional Experience

2017	**Senior Scientist**, CDAR, IUCBR&SSH, Kottayam, Kerala, India
2015-2016	**Postdoctoral Research Fellow**, Department of Genetic Medicine, Children's National Medical Center (CNMC), Washington DC, USA
2014-2015	**Postdoctoral Fellow**, Department of Neurological Sciences, Rush University Medical Center (RUMC), Chicago, IL, USA
2009-2013	**Visiting Fellow**, PDEGEN, Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD), NIH, Bethesda, MD.
2000-2002	**Assistant Professor** in Himalayan Pharmacy Institute, North Bengal University, India
1998	**Market Research Executive** in Blackstone Market Facts India Ltd, Kolkata, India (for one month)**.**
1997	**Trainee** in East India Pharmaceuticals, Kolkata, India (for one month).

Administrative Experience

- Served as Course Coordinator, Paper-setter, Examiner and various other student activities during my tenure as an Assistant professor in Himalayan Pharmacy Institute, Sikkim (during 2000-2002).
- Mentored a number of Summer Interns and Junior Graduate Students at IICB, NIH, RUMC and CNMC who are working on various research projects (2002-2016).

Fellowships/Scholarships

2015 **Postdoctoral Fellowship** from CNMC, Washington DC, USA.
2014 **Postdoctoral Fellowship** from Rush University, Chicago, USA.
2008 **Visiting Fellowship** from *Eunice Kennedy Shriver* National Institute of Child Health and Human Development, NIH, USA.
2006 **Senior Research Fellowship** from CSIR, Govt. of India
2004 **IBRO Fellowship** for attending the IBRO Summer School held in Hong Kong
2002 **Senior Research Fellowship** from Indian Council of Medical Research, Govt. of India
1998 **Scholarship** from **University Grants Commission**, Govt. of India during post-graduation (1998-2000)
1991 **National Scholarship** Award for holding 104th rank in the Secondary (School leaving) Examination in West Bengal, India.

Honors/Awards

2013 **FARE** (Fellows Award for Research Excellence) **Award** by National Institutes of Health, Bethesda, MD, USA
2011 **FARE Award** by National Institutes of Health, Bethesda, MD, USA
2008 **Prof. Ch. R. K. Murthy memorial prize** for Best Poster presentation in the annual meeting of Society for Neurochemistry (India) at Amritsar, India.
2006 Travel Award for attending Japan Neuroscience Society (JNS) Meeting held on July, 2006 in Kyoto, Japan
2006 Travel Award for attending the 7th Biennial meeting of Asian-Pacific Society for Neurochemistry (APSN 2006) held in Singapore during July 2006
2004 Travel Award for attending the 6th Biennial meeting of Asian-Pacific Society for Neurochemistry (APSN), Hong Kong in Feb 2004
2003 Selected for Travel Award for attending the meeting of International Society for Neurochemistry (ISN), Hong Kong in Aug 2003, which got cancelled due to SARS attack
2000 **UNIVERSITY GOLD MEDAL** for standing first class, first rank in the M. Pharm. Final Examinations from Jadavpur University, India
1998 Qualified the Graduate Aptitude Test for Engineering (GATE) conducted by Indian Institute of Technology, Govt. of India (with 94.60 percentile)
1998 **EMAMI AWARD** for securing highest percentile score in All India GATE - 1998 Examination in West Bengal, India

List of publications

21. **Chandra G**, Roy A, Rangasamy SB, Pahan K. Induction of Adaptive Immunity Leads to Nigrostriatal Disease Progression in MPTP Mouse Model of Parkinson's Disease. ***J Immunol***. 2017, pii: 1700149. doi: 10.4049/jimmunol.1700149.
20. Bagh M, Peng S, **Chandra G,** Zhang Z, Singh SP, Pattabiraman N, Liu A and Mukherjee A. Misrouting of v-ATPase subunit V0a1 dysregulates lysosomal acidification in a neurodegenerative lysosomal storage disease model. ***Nat Commun*.** 8, 2017, 14612.
19. **Chandra G**, Rangasamy SB, Roy A, Kordower JH and Pahan K. Neutralization of Rantes and Eotaxin prevents the loss of dopaminergic neurons in a mouse model of Parkinson's Disease. ***J Biol Chem*.** 291, 2016, 15267-81.
18. Peng S, Xu J, Pelkey KA, **Chandra G**, Zhang Z, Bagh MB, Yuan X, Wu LG, Mcbain CJ and Mukherjee AB. Suppression of agrin-22 production and synaptic dysfunction in Cln1-/- mice. ***Ann Clin Transl Neurol.*** 2, 2015, 1085-104.
17. **Chandra G**, Bagh MB, Peng S, Saha A, Sarkar C, Moralle M, Zhang Z and Mukherjee AB. Cln1 gene disruption in mice reveals a common pathogenic link between two of the most lethal childhood neurodegenerative lysosomal storage disorders. ***Hum Mol Genet.*** 24, 2015, 5416-32.
16. Levin SW, Baker EH, Zein WM, Zhang Z, Quezado ZMN, Miao N, Gropman A, Griffin KJ, Bianconi S, **Chandra G**, Khan OI, Caruso RC, Liu A and Mukherjee AB. A Bench-to-Bedside clinical trial using a combination of Cystagon and Mucomyst for patients with INCL. ***Lancet Neurol.*** 13, 2014, 777-87.
15. Sarkar C***, Chandra G*,** Peng S, Zhang Z, Liu A and Mukherjee AB. Neuroprotection and lifespan extension in Ppt1(-/-) mice by NtBuHA: therapeutic implications for INCL. ***Nat Neurosci***. 16, 2013, 1608-17. (* equally contributed).
14. Kong E, Peng S, **Chandra G**, Sarkar C, Zhang Z, Bagh MB and Mukherjee AB. Dynamic palmitoylation links cytosol-membrane shuttling of acyl-protein thioesterase-1 and acyl-protein thioesterase-2 with that of proto-oncogene H-Ras product and growth associated protein-43. ***J Biol Chem***. 288, 2013, 9112-25.
13. Saha A, Sarkar C, Singh SP, Zhang Z, Munasinghe J, Peng S, **Chandra G**, Kong E and Mukherjee AB. The blood-brain barrier is disrupted in a mouse model of infantile neuronal ceroid lipofuscinosis: amelioration by resveratrol. ***Hum Mol Genet***. 21, 2012, 2233-44.
12. Wei H, Zhang Z, Saha A, Peng S, **Chandra G**, Quezado Z and Mukherjee AB. Disruption of adaptive energy metabolism and elevated ribosomal p-S6K1 levels contribute to INCL pathogenesis: partial rescue by resveratrol. ***Hum. Mol. Genet***. 20, 2010, 1111-21.
11. Saha A, Lee YC, Zhang Z, **Chandra G**, Su SB and Mukherjee AB. Lack of an endogenous anti-inflammatory protein in mice enhances colonization of B16F10 melanoma cell in the lungs. ***J. Biol. Chem***. 285, 2010, 10822-10831.
10. Senthilkumar KS, Saravanan KS, **Chandra G**, Sindhu KM, Jayakrishnan A and Mohanakumar KP. Unilateral implantation of dopamine loaded biodegradable hydrogel in the striatum attenuates motor abnormalities in the 6-hydroxydopamine model of hemi-parkinsonism. ***Behav. Brain Res***. 184, 2007, 11-18.
9. Dhara K, Karan S, Ratha J, Roy P, **Chandra G**, Manassero M, Mallik B and Banerjee P. Two-dimensional coordination compound: A zinc ion-selective luminescent probe for biological applications. ***Chem. Asian J***. 2, 2007, 1091-1100.

8. Banerjee R, Sreetama S, Saravanan KS, **Chandra G**, Nath De S and Mohanakumar KP. Intrastriatal infusion of the Parkinsonian neurotoxin, MPP^+ induces damage of striatal cell nuclei in Sprague-Dawley rats. ***J Chem Neuroanat.*** 32, 2006, 90-100.
7. **Chandra G,** Gangopadhyay PK, Senthil Kumar KS and Mohanakumar KP. Acute intranigral homocysteine administration produces stereotypic behavioural changes and striatal dopamine depletion in Sprague-Dawley rats. ***Brain Res.*** 1075, 2006, 81-92.
6. **Chandra G**, Pal S and Gangopadhyay PK. Cystathionine beta-synthase T833C/844ins68 polymorphism and stroke. ***Neurol India***, 54, 2006, 446.
5. Haobam R, Sindhu KM, **Chandra G** and Mohanakumar KP. Swim test as a function of motor impairment in MPTP model of Parkinson's disease: a comparative study in two mouse strains. ***Behav Brain Res.*** 163, 2005, 159-167.
4. Samantaray S, **Chandra G** and Mohanakumar KP. Calcium channel agonist (±) Bay K8644, causes a transient increase in striatal monoamine oxidase activity in Balb/c mice. ***Neurosci Lett.*** 342, 2003, 73-76.
3. Ganguly M, Manna A, **Chandra G**, Ghosh D, Ghosh LK and Gupta BK. *Andrographis paniculata*: A promising herbal plant. ***Ind J Pharm Edu***. 35, 2001, 63-64.
2. Manna A, **Chandra G**, Gupta K, Ganguly M, Ghosh LK and Gupta BK. Liposomes: Future of Tissue Targeted Drug Delivery – An Overview. ***Ind J Pharm Edu.*** 33, 1999, 208-210.
1. Manna A, **Chandra G**, Ganguly M, Gupta K, Ghosh LK and Gupta BK. Antibody Mediated Site Specific Drug Targeting In: Cancer Chemotherapy. ***The Eastern Pharmacist.*** 42, 1999, 33-36.

Abstracts Published in Peer Reviewed Journals:

6. Bagh M, **Chandra G,** Peng S, Zhang Z and Mukherjee A. A lysosomal targeting defect of V0a1 suppresses V-ATPase activity elevating lysosomal pH in Ppt1-/- mice: amelioration by NtBuHA. ***The FASEB J.*** 29(1), 2015, S570.6**.**
5**.** Mohanakumar KP, **Chandra G**, Navneet A, Sreetama S, and Busselberg D. Evidence for the involvement of calpain-mediated, AMPA receptor regulated excitotoxic neuronal death in β-N-oxalyl amino-L-alanine-induced spastic paraplegia in rats. **Society for Neuroscience meeting** abstract**,** 2011, 54.04, Z19.
4. **Chandra G** and Mohanakumar KP. Homocysteine and Parkinson's disease: Effects of acute intranigral administration on dopaminergic system. ***Neurosci. Res***., 55(S1), 2006, S202.
3. **Chandra G**, Senthilkumar KS, Gangopadhyay PK and Mohanakumar KP. Behavioral alterations and dopaminergic deficit following acute intranigral homocysteine administration in rodents: relevance to Parkinson's disease. ***J. Neurochem*.**, 98(S1), 2006, 116.
2. **Chandra G**, Sindhu KM, Busselberg D and Mohanakumar KP. Neurolathyrism toxin affects voltage gated calcium channels in dorsal root ganglia neurons. ***J. Neurochem***., 88(S1), 2004, 42.
1. **Chandra G**, Busselberg D and Mohanakumar KP. The parkinsonian neurotoxin, 1-methyl-4-phenylpyridinium (MPP^+), affects voltage activated calcium channels in DRG neurons. ***J. Neurochem***., 87(S1), 2003, 104.

Patent

1. Mohanakumar KP, **Chandra G**, Haobam R and Selley ML. Irsogladine for treatment of Parkinson's disease (U.S. Patent filed on August 29, 2007 as U.S. Application Serial No.

60/968,726 for inventing certain new and useful improvement in “treatment of Brain Disorders”).

Membership of Professional Societies

1. International Society for Chemical Biology
2. Society for Neuroscience
3. American Society for Biochemistry and Molecular Biology
4. International Society for Neurochemistry
5. International Brain Research Organization
6. Asia-Pacific Society for Neurochemistry
7. Japan Neuroscience Society
8. Indian Pharmaceutical Association.
9. Society of Biological Chemists (India)
10. Indian Academy of Neuroscience

Ad-hoc manuscript reviewer

- Plos one
- Journal of Neuroimmune pharmacology
- Journal of Autoimmune diseases
- Experimental Neurology
- International Journal of Drug Development & Research
- Journal of Neurology & Neuroscience
- Medical & Clinical Reviews
- Achieves of Medicine
- Translational Biomedicine
- Clinical psychiatry
- Journal of applied biology and pharmaceutical technology

References

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4. Dr. Kalipada Pahan

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