

CURRICULUM VITAE

NAME: NIHAR RANJAN JANA

PRESENT ADDRESS:

School of Bioscience,
Indian Institute of Technology,
Kharagpur-721302

DATE OF BIRTH: 16-11-1965

NATIONALITY: Indian

PRESENT POSITION: Professor

EDUCATION

Ph.D.: Endocrinology, Visva-Bharati University, Shantiniketan, (1996).

M.Sc.: Physiology with specialization in Immunology and Microbiology, Calcutta University, First class (1989).

B.Sc. (H): Physiology, Calcutta University, First class (1987).

PROFESSIONAL APPOINTMENTS:

1. Scientist VII, National Brain Research Centre (November 2007-May 2018)
2. Scientist VI, National Brain Research Centre (November 2012-October 2017)
3. Scientist V, National Brain Research Centre (November 2007-October 2012)
4. Scientist IV, National Brain Research Centre (November 2004-October 2007)
5. Scientist III, National Brain Research Centre (November 2001-October 2004)
6. Worked as a post doctoral staff scientist at RIKEN Brain Science Institute, Saitama, Japan (January 1999 to October 2001).
7. Post doctoral experience at the Environmental Health Science Division, National Institute for Environmental Studies, Tsukuba, Japan (June 1997 to December 1998).

SIGNIFICANT FOREIGN ASSIGNMENTS

Worked as a visiting scientist at RIKEN Brain Science Institute, Japan (February-March, 2012, February-March, 2010, August-September, 2007; May-June, 2005; November to December, 2002; November 2001 to January 2002).

ACADEMIC ACHIEVEMENTS

Fellow of National Academy of Sciences, India. 2008.

TATA Innovation Fellowship (2014) of Department of Biotechnology, Govt. of India

Professor KT. Shetty Memorial award from Indian Academy of Neurosciences (2013).

VASVIK Industrial Award, 2012

National Bioscience Award for Career Development (2008) Department of Biotechnology, Govt. of India

STA postdoctoral fellowship award by Science and Technology Agency of Japan.

MEMBERSHIP/OTHER ACTIVITIES

Editorial Board member of PLOS One, Frontier of Molecular Neuroscience, Heliyon (Elsevier)

Ad hoc reviewer of Cancer Research, Journal of Neuroscience, Human Molecular Genetics, Journal of Neurochemistry, Journal of Biological Chemistry, Brain Research, Cellular and Molecular Neuroscience, BMC Developmental Biology, Neurobiology of Diseases, Neuroscience letters etc.

Life member of Indian society of Neurochemistry and Indian Academy of Neurosciences

Publications, Patents and Sponsored projects

Original papers

1. B.K. Singh, N. Vatsa, V.K. Nelson, V. Kumar, S.S. Kumar, S.C. Mandal, M. Pal and **N. R. Jana**. Azadiradione Restores Protein Quality Control and Ameliorates the Disease Pathogenesis in a Mouse Model of Huntington's Disease. **Molecular neurobiology** (doi.10.1007/s12035-017-0853-3), 2018.
2. S. Mandal, K. Debnath, **Nihar R. Jana*** and Nikhil R. Jana*. Trehalose-Functionalized Gold Nanoparticle for Inhibiting Intracellular Protein Aggregation. **Langmuir**, 33 (49), 13996-14003, 2017. *Corresponding authors.
3. P. Majumder, K. Roy, B. K. Singh, **N. R. Jana** and D. Mukhopadhyay. Cellular levels of Grb2 and cytoskeleton stability are correlated in a neurodegenerative scenario. **Disease models & mechanisms**, 10 (5), 655-669, 2017.
4. R. Kumar, D. K. Jangir, G. Verma, S. Shekhar, P. Hanpude, S. Kumar, R. Kumari, N. Singh, N. S. Bhavesh, **N. R. Jana** and T. K. Maiti. S-nitrosylation of UCHL1 induces its structural instability and promotes α -synuclein aggregation. **Scientific Reports** 7, 44558, 2017.
5. B.K. Singh, N. Vatsa, V. Kumar, S. Shekhar, A. Sharma and **N.R. Jana**. Ube3a deficiency inhibits amyloid plaque formation in APP^{swe}/PS1^{ΔE9} mouse model of Alzheimer's disease. **Human Molecular Genetics**, 26(20), 4042-4054, 2017.
6. K. Debnath, N Pradhan, B.K. Singh, **Nihar R. Jana*** and Nikhil R. Jana* Poly(trehalose) Nanoparticles prevent amyloid aggregation and suppress polyglutamine aggregation in a Huntington's disease model mouse. **ACS Applied Materials & Interfaces**, 9, 24126-24139, 2017. *Corresponding authors.
7. I. Jamal, V. Kumar, N. Vatsa, S. Shekhar, B.K. Singh, A. Sharma and **N.R. Jana**. Rescue of altered HDAC activity recovers behavioural abnormalities in a mouse model of Angelman syndrome. **Neurobiology of Diseases**, 105, 99-108, 2017.
8. N. Pradhan, S. Shekhar, **Nihar R. Jana*** and Nikhil R. Jana*. Sugar-terminated nanoparticle chaperones are 102–105 times better than molecular sugars in inhibiting protein aggregation and reducing amyloidogenic cytotoxicity. **ACS Applied Materials & Interfaces**, 9, 10554-10566, 2017. *Corresponding authors.
9. S. Shekhar, N. Vatsa, V. Kumar, B.K. Singh, I Jamal, A. Sharma and **N.R. Jana**. Topoisomerase inhibitor topotecan delays the disease progression in a mouse model of Huntington's disease. **Human Molecular Genetics**, 26, 420-429, 2017.
10. I. Jamal, V. Kumar, N. Vatsa, B.K. Singh, S. Shekhar, A. Sharma and **N.R. Jana**. Environmental enrichment improves behavioural abnormalities in a mouse model of Angelman syndrome. **Molecular Neurobiology**, 54, 5319-5326, 2017.
11. K. Debnath, S. Shekhar, V. Kumar, **Nihar R. Jana*** and Nikhil R. Jana*. Efficient inhibition of protein aggregation, disintegration of aggregates and lowering of cytotoxicity by green tea polyphenol-based self-assembled polymer nanoparticles. **ACS Applied Materials and Interfaces**. 10, 20309-20318, 2016. *Both are corresponding author.
12. V.K. Nelson, A. Ali, N. Dutta, S. Ghosh, M. Jana, A. ganguli, A. Komarav, S. Paul, V. Dwivedi, S. Chatterjee, **N.R. Jana**, S.C.Lakhotia, G.C. Chakraborti, A. Mishra, S.C. Mandal and M. Pal. Azadiradione ameliorates polyglutamine expansion disease in drosophila by potentiating DNA binding activity of heat shock factor 1. **Oncotarget**, 7, 78281-78296, 2016
13. M. Chakraborti, B. Paul, T. Nayak, A. Das, **N.R. Jana** and S. Bhutani. The E3 ligase Ube3a is required for learning in Drasophila melanogaster. **Biochemical and Biophysical Research Communications**. 462, 71-77, 2015.
14. S.K. Godavarthi, P. Dey, A. Sharma and **N. R. Jana**. Impaired adult hippocampal neurogenesis and its partial reversal by chronic treatment of fluoxetine in a mouse model of Angelman syndrome. **Biochemical and Biophysical Research Communications**. 464 (4), 1196-1201, 2015.
15. J. Chakraborty, U. Rajamma and **N.R. Jana**, K.P. Mohanakumar. Quercetin improves the activity of the ubiquitin-proteasomal system in 150Q mutated huntingtin-expressing cells but exerts detrimental effects on neuronal survivability. **Journal of Neuroscience Research**. 93 (10), 1581-1591, 2015.
16. E. Das, **N.R. Jana** and N. P. Bhattacharyya. Delayed Cell Cycle Progression in STHdhQ111/HdhQ111 Cells, a Cell Model for Huntington's Disease Mediated by microRNA-19a, microRNA-146a and microRNA-432 **MicroRNA** 4 (2), 86-100, 2015.

17. S.K. Godavarthi, A. Sharma and **N. R. Jana**. Reversal of reduced parvalbumin neurons in hippocampus and amygdala of Angelman syndrome model mice by chronic treatment of fluoxetine. **Journal of Neurochemistry**, 130, 444-454, 2014.
18. M. Maheshwari, S. Shekhar, B. K. Singh, I. Jamal, N. Vatsa, V. Kumar, A. Sharma and **N. R. Jana**. Deficiency of Ube3a in Huntington's disease mice brain increases aggregate load and accelerates disease pathology. **Human Molecular Genetics**, 23, 6235-6245, 2014
19. M. Maheshwari, S. Bhutani, A. Das, R. Mukherjee, A. Sharma, Y. Kino, N. Nukina and **N. R. Jana**. Dexamethasone induces heat shock response and slows down disease progression in mouse and fly models of Huntington's disease. **Human Molecular Genetics**, 23(10), 2737-2751, 2014.
20. S. Palmal, **N. R. Jana** and N. R. Jana. Inhibition of amyloid fibril growth by nanoparticle coated with histidine-based polymer. **Journal of Physical Chemistry C**, 118, 21630-21638, 2014.
21. S. Palmal, A.R. Maity, B.K. Singh, S. Basu **N.R. Jana** and N.R. Jana. Inhibition of amyloid fibril growth and dissolution of amyloid fibril by curcumin-gold nanoparticle. **Chemistry-a European Journal**, 20, 6184-6191, 2014.
22. S. Baksi, **N.R. Jana**, N.P. Bhattacharyya, and D. Mukhopadhyay. Grb2 is regulated by Foxd3 and has roles in preventing accumulation and aggregation of mutant huntingtin. **PLOS One**, 8(10), e76792, 2013.
23. E. Das, **N.R. Jana**, and N.P. Bhattacharyya. MicroRNA-124 targets CCNA2 and regulates cell cycle in STHdh(Q111)/Hdh(Q111) cells. **Biochemical and Biophysical Research Communications**, 437, 217-224, 2013.
24. Sharma, J., Mukherjee, D., Rao, S.N., Iyengar, S., Shankar, S. K., Satishchandra, P and **Jana, N.R.** Neuronatin mediated aberrant calcium signaling and endoplasmic reticulum stress underlie neuropathology in Lafora disease. **Journal of Biological Chemistry**, 288, 9482-9490, 2013.
25. A. Mishra, M. Maheshwari, D. Chhangani, N. Fujimori, F. Endo, A.P. Joshi, **N.R. Jana** and K. Yamanaka, E6-AP association promotes SOD1 aggregates degradation and suppresses toxicity. **Neurobiology of Aging**, 4, 1310, e11-23, 2013.
26. S. Bhutani, A. Das, M. Maheshwari, S.C. Lakhotia and **N.R. Jana**. Dysregulation of core components of SCF complex in polyglutamine disorders. **Cell Death and Disease**, 3, e428, 2012.
27. M. Maheshwari, A. Samanta, S.K. Godavarthi, R. Mukherjee and **N.R. Jana**. Dysfunction of the Ubiquitin Ligase Ube3a May Be Associated with Synaptic Pathophysiology in a Mouse Model of Huntington Disease. **Journal of Biological Chemistry**, 287, 29949-29957, 2012.
28. J. Sharma, S. Mulherkar, D. Mukherjee and **N.R. Jana**. Malin regulates Wnt signaling pathway through degradation of Dishevelled 2. **Journal of Biological Chemistry**, 287, 6830-6839, 2012.
29. S.K. Godavarthi, P. Dey, M. Maheshwari and **N.R. Jana**, Defective glucocorticoid hormone receptor signaling leads to increased stress and anxiety in a mouse model of Angelman syndrome. **Human Molecular Genetics**, 21: 1824-1834, 2012.
30. J. Sharma, S. N. Rao, S.K. Shankar, P. Satishchandra and **N.R. Jana**. Lafora disease ubiquitin ligase malin promotes proteasomal degradation of neuronatin and regulates glycogen synthesis. **Neurobiology of Disease**, 44: 133-141, 2011.
31. J. Ghose, M. Sinha, E. Das, N.R. **Jana** and N.P. Bhattacharyya, Regulation of miR-146a by RelA/NFkB and p53 in STHdh(Q111)/Hdh(Q111) cells, a cell model of Huntington's disease. **PloS One**, 6: e23837, 2011.
32. S.N. Rao, R. Maity, J. Sharma, P. Dey, S.K. Shankar, P. Satishchandra and **N. R. Jana**, Sequestration of chaperones and proteasome into Lafora bodies and proteasomal dysfunction induced by Lafora disease-associated mutations of malin. **Human Molecular Genetics**. 19:4726-4734, 2010.
33. S. Mulherkar and **N. R. Jana**. Loss of dopaminergic neurons and resulting behavioural deficit in mouse model of Angelman syndrome. **Neurobiology of Diseases**, 40:586-592, 2010.
34. S.N. Rao, J. Sharma, R. Maity and **N. R. Jana**. Co-chaperone CHIP stabilizes aggregate prone malin, an ubiquitin ligase mutated in Lafora disease. **Journal of Biological Chemistry**, 285, 1404-1413, 2010.
35. S. Mulherkar, J. Sharma and **N. R. Jana**. The ubiquitin ligase E6-AP promotes degradation of α -synuclein. **Journal of Neurochemistry**, 110, 1955-1964, 2009.
36. A. Mishra, S. K. Godavarthi and **N. R. Jana**. *UBE3A/E6-AP* regulates cell proliferation by promoting proteasomal degradation of p27. **Neurobiology of Diseases**, 36, 26-34, 2009.

37. A. Mishra, S. K. Godavarthi, M. Maheshwari, A. Goswami and **N. R. Jana**. The ubiquitin ligase E6-AP is induced and recruited to aggresomes in response to proteasome inhibition and may be involved in the ubiquitination of Hsp70 bound misfolded proteins. **Journal of Biological Chemistry**, 284, 10537-10545, 2009.
38. S. Godavarthi, D. Narender, A. Mishra, A. Goswami, S. Rao, N. Nukina and **N. R. Jana**. Induction of chemokines MCP-1 and KC in the mutant huntingtin expressing neuronal cells because of proteasomal dysfunction. **Journal of Neurochemistry**, 108, 787-795, 2009.
39. A. Mishra, P. Dikshit, S. Purkayastha, J. Sharma, N. Nukina and **N. R. Jana**. E6-AP promotes misfolded polyglutamine proteins for proteasomal degradation and suppresses polyglutamine protein aggregation and toxicity **Journal of Biological Chemistry**, 283, 7648-7656, 2008.
40. A. Mishra and **N. R. Jana**. Regulation of turnover of tumor suppressor p53 and cell growth by E6-AP, a ubiquitin protein ligase mutated in Angelman mental retardation syndrome. **Cellular and Molecular Life Science**, 65, 656-666, 2008.
41. P. Dikshit and **N. R. Jana**. The co-chaperone CHIP is induced in various stresses and confers protection to cells. **Biochemical and Biophysical Research Communications**, 357, 761-765, 2007.
42. A. Goswami, P. Dikshit, A. Mishra, N. Nukina and **N. R. Jana**. Expression of expanded polyglutamine proteins suppresses the activation of transcription factor NF-kB. **Journal of Biological Chemistry**, 281, 37017-37024, 2006.
43. P. Dikshit, M. chatterjee, A. Goswami, A. Mishra and **N. R. Jana**. Aspirin induces apoptosis through the inhibition of proteasome function. **Journal of Biological Chemistry**. 281, 29228-29235, 2006.
44. P. Dikshit, A. Goswami, A. Mishra, N. Nukina and **N. R. Jana**. Curcumin enhances the polyglutamine-expanded truncated N-terminal huntingtin-induced cell death by promoting proteasomal malfunction. **Biochemical and Biophysical Research Communications**. 342, 1323-1328, 2006.
45. A. Goswami, P. Dikshit, A. Mishra, S. Mulherkar, N. Nukina and **N. R. Jana**. Oxidative stress promotes mutant huntingtin aggregation and mutant huntingtin-dependent cell death by mimicking proteasomal malfunction. **Biochemical and Biophysical Research Communications**, 342, 184-190, 2006
46. P. Dikshit, A. Goswami A. Mishra, M. Chatterjee and **N. R. Jana**. Curcumin induces the stress response and down regulates NF-kB activation by directly inhibiting proteasomal function. **Neurotoxicity Research**, 9, 29-37, 2006.
47. **N. R. Jana**, P. Dikshit, A. Goswami, S. Kotliarova, S. Murata, K. Tanaka and N. Nukina. Co-chaperone CHIP associates with expanded polyglutamine protein and promotes their degradation by proteasomes. **Journal of Biological Chemistry**, 280, 11635-11640, 2005.
48. S. Kotliarova*, **N. R. Jana***, N. Sakamoto*, M. Kurosawa, H. Miyazaki, M. Nekooki, H. Doi, Y. Machida, H. K. Wong, T. Suzuki, C. Uchikawa, Y. Kotliarov, K. Uchida, Y. Nagao, K. Oyanagi, F. Oyama and N. Nukina. Decreased expression of hypothalamic neuropeptides in Huntington Disease transgenic mice with expanded polyglutamine-EGFP fluorescent aggregates. **Journal of Neurochemistry**, 93, 641-653, 2005 * Equal contribution.
49. U. Nagaoka, K. Kim, **N. R. Jana**, H. Doi, K. Mitsui, F. Oyama and N. Nukina. Increased expression of p62 in expanded polyglutamine-expressing cells and its association with polyglutamine inclusions. 2004. **Journal of Neurochemistry**, 91, 57-68, 2004.
50. **N. R. Jana**, P. Dikshit, A. Goswami and N. Nukina. Inhibition of proteasomal function by curcumin induces apoptosis through mitochondrial pathway. **Journal of Biological Chemistry**, 279, 11680-11685, 2004.
51. M. Tanaka, Y. Machida, S. Niu, T. Ikeda, **N. R. Jana**, H. Doi, M. Kurosawa, M. Nekooki and N. Nukina. Trehalose alleviates polyglutamine-mediated pathology in a transgenic mouse model of Huntington's disease. **Nature Medicine**, 10, 148-154, 2004.
52. E. A. Zemskov, **N. R. Jana**, M. Kurosawa, H. Miyazaki, N. Sakamoto, M. Nekooki and N. Nukina. Pro-apoptotic protein kinase C δ is associated with intranuclear inclusions in a transgenic model of Huntington's disease. **Journal of Neurochemistry**, 87, 395-406, 2003.
53. **N. R. Jana**, E. A. Zemskov, G. Wang and N. Nukina. Altered proteasomal function due to the expression of polyglutamine-expanded N-terminal huntingtin induces apoptosis by caspase activation through mitochondrial cytochrome c release. **Human Molecular Genetics**, 10, 1049-1059, 2001.
54. **N. R. Jana**, S. Sarkar, J. Yonemoto, C. Tohyama and H. Sone. Comparative effects of 2,3,7,8-tetrachlorodibenzo-*p*-dioxin on MCF-7, RL95-2 and LNCaP cells : Role of target steroid

hormones in cellular responsiveness to Cyp1A1 induction. **Molecular Cell Biology Research Communications**, **4**, 174-180, 2000.

55. **N. R. Jana**, M. Tanaka, G. Wang and N. Nukina. Polyglutamine length-dependent interaction of Hsp40 and Hsp70 family chaperones with truncated N-terminal huntingtin: Their role in suppression of aggregation and cellular toxicity. **Human Molecular Genetics**, **9**, 2009-2018, 2000.
56. E. Thavathiru*, **N. R. Jana*** and P. K. De. Abundant secretory lipocalins displaying male and lactation-specific expression in adult hamster submandibular gland: cDNA cloning and sex-hormone regulated expression. **European Journal of Biochemistry**, **266**, 467-476, 1999, *Equal contribution.
57. **N. R. Jana**, S. Sarkar, M. Ishizuka, J. Yonemoto, C. Tohyama and H. Sone. Role of estradiol receptor α on the differential expression of 2,3,7,8-tetrachlorodibenzo-*p*-dioxin inducible gene in human endometrial cancer cell RL95-2 and KLE. **Archives in Biochemistry and Biophysics**, **368**, 31-39, 1999.
58. **N. R. Jana**, S. Sarkar, M. Ishizuka, J. Yonemoto, C. Tohyama and H. Sone. Cross-talk between 2,3,7,8-tetrachlorodibenzo-*p*-dioxin and testosterone signal transduction pathways in LNCaP prostate cancer cells. **Biochemical and Biophysical Research Communications**, **256**, 462-468, 1999.
59. **N. R. Jana**, S. Sarkar, J. Yonemoto, C. Tohyama and H. Sone. Strain differences in cytochrome P4501A1 gene expression caused by 2,3,7,8-tetrachlorodibenzo-*p*-dioxin: role of the aryl hydrocarbon receptor and its nuclear translocator. **Biochemical and Biophysical Research Communications**, **248**, 554-558, 1998.
60. **N. R. Jana**, S. Halder and S. Bhattacharya. Thyroid hormone induces a 52kDa soluble protein in goat testis Leydig cell which stimulates androgen release. **Biochimica Biophysica Acta**, **1292 (2)**, 209-214, 1996.
61. **N. R. Jana** and S. Bhattacharya. Binding of thyroid hormone to the Leydig cell nuclei of goat testis induces the generation of a proteinaceous factor which stimulates androgen release. **Journal of Endocrinology**, **143**, 549-556, 1994.

Review articles:

1. A. Amanullah, A. Upadhyay, V. Joshi, R. Mishra, **N. R. Jana** and A. Mishra Progressing neurobiological strategies against proteostasis failure: Challenges in neurodegeneration. **Progress in Neurobiology**, **159**, 1-38, 2017.
2. D.J. Klionsky et al. Guidelines for the use and interpretation of assays for monitoring autophagy (3rd edition). **Autophagy**, **12**,1-222, 2016.
3. D. Chhangani, **N.R. Jana**, and A. Mishra. Misfolded Proteins Recognition Strategies of E3 Ubiquitin Ligases and Neurodegenerative Diseases. **Molecular Neurobiology**, **47**, 302-312. 2012.
4. **N. R. Jana**. (2012) Understanding the Pathogenesis of Angelman Syndrome through Animal Models. **Neural Plasticity**, 710943. 2012,
5. **N. R. Jana**. Protein homeostasis and aging: role of ubiquitin protein ligases. **Neurochemistry international**, **60**: 443-447, 2012.
6. **N. R. Jana**. Role of ubiquitin-proteasome system and autophagy in polyglutamine neurodegenerative diseases. **Future Neurology**, **5**, 105-112, 2010.
7. **N.R. Jana**. NSAIDs and apoptosis. **Cellular and Molecular Life Sciences**, **65**, 1295-1302, 2008.
8. P. Dikshit and **N.R.Jana**. Role of ubiquitin protein ligases in the pathogenesis of polyglutamine diseases. **Neurochemical Research**, **33**, 945-951, 2008.
9. **N. R. Jana** and N. Nukina. Recent advances in understanding the pathogenesis of polyglutamine diseases: involvement of molecular chaperones and ubiquitin-proteasome pathway. **Journal of Chemical Neuroanatomy**, **26**, 95-101, 2003.

Book Chapters:

1. V. Tripathi and **N.R.Jana**. Neuroinflammation in Huntington's and related neurodegenerative disorders. In "**Inflammation:the common link in brain pathologies ed. by NR Jana, A Basu and PN Tandon**)" 171-184, 2016.
2. A. Goswami and **N.R. Jana**. (2004) Mutation in Cu/Zn superoxide dismutase1 and familial amyotrophic lateral sclerosis. In "**Neurobiology research in India**".

3. **N.R.Jana.** (2004) Neurodegenerative diseases involving expanded CAG repeat. In *"Neurobiology research in India"*.
4. **N.R.Jana.** and Nukina, N. (2004) Assessment of impaired proteasomal function in a cellular model of polyglutamine diseases. In *"Triplet repeats protocol"* ed by G. Bates. Humana Press.
5. **N.R. Jana.** (2002) Recent advances in understanding and developing therapies for Alzheimer's disease. In *"Alzheimer's disease in India"* Published by Society for Gerontological Research.

Patent application

Nanoparticle formulation for complete inhibition of amyloid fibrillation and dissolution of amyloid fibril. Jointly with Indian Association for the Cultivation of Sciences, Kolkata. Indian patent application no: 201631028078 dated August 17, 2016.

Sponsored Research Grants

Sl No.	Title of Project	Funding Agency	Amount	Date of sanction and Duration
1	Molecular mechanism of the pathogenesis of neurodegenerative diseases involving CAG repeats	DBT	38.05 lakhs	11-11-2003 3 years
2	Molecular mechanism in understanding the pathogenesis of polyglutamine diseases	RIKEN BSI, JAPAN	40 lakhs Yen	March 2003 2 years
3	Understanding the functional role of E6-AP-a putative ubiquitin protein ligase implicated in Angelman mental retardation syndrome	DBT	41.89 lakhs	29-05-2007 3 years
4	Understanding the role of ubiquitin proteasome system dysfunction in the pathogenesis of Huntington's disease	DST-JSPS Under India-Japan Cooperative Science Program	2.3 lakhs	March, 2009 2+1 years
5	Study the defect in neurogenesis and initial synapse formation in mouse model of Angelman mental retardation syndrome	CSIR	17.17 lakhs	August 25, 2010 3 years
6	Understanding the physiological function of malin, a ubiquitin ligase mutated in Lafora's Progressive Myoclonus Epilepsy	DBT	42.11 lakhs	September 17, 2010 3 years
7	Study the neuroprotective role of ubiquitin ligase, E6-AP in the transgenic mice model of Huntington's disease	DBT National Bioscience Award Grant	9 lakhs	April 16, 2010 3 years
8	Ube3a as a therapeutic target of Huntington's disease	DBT-TATA Innovation Fellowship Grant	18 lakhs	April 2014 3 years
9	Development of a new screening platform for development of novel therapeutics to cure neuro-degenerative diseases.	DST-BRICS	39.6lakhs	January, 2018 3 years

Dr. Jana is the PI of all above grants.