Professor Amit Mishra
Principal Investigator-Cellular and Molecular Neurobiology
Indian Institute of Technology Jodhpur-(http://home.iitj.ac.in/~amit/)

Research Interest:

My principal examine awareness is **Neuronal Intelligence Against Proteome Complexity**". I am enthralled to search the role of E3 ubiquitin ligases and molecular chaperones implicated in aberrant polypeptides degradation linked with Ageing, Neurodegeneration and Cancer.

Academic Achievements:

Ph.D. in Neuroscience Thesis title Understanding the molecular function of E6-AP-a putative E3 ubiquitin ligase mutated in Angelman mental retardation syndrome. **National Brain Research Centre, India**

2013: Indian Society of Chemists and Biologists declared "Best PHD Thesis" - 2008 Award in Biological Sciences

Masters in Biotechnology: Honour's School of Biotechnology, DAVV, Indore, India

Bachelors in Science: First Division Agra College Agra

Academic Appointments:

2023 - Continue: Professor (Indian Institute of Technology Jodhpur)

2019-2023: Associate Professor (Indian Institute of Technology Jodhpur)

2011 and 2014: Visiting Professor (Riken Brain Science Institute, Japan)

2008-2010: Post-Doctoral Scientist (Max Planck Institute Cellular Biochemistry, Munich, Germany)

2003-2007: Ph.D. Scholar (National Brain Research Centre, India)

International and National Academic Credential Records:

Present: h-index: 31 i10-index: 69 Citations More than 15360

Total Impact Factor of Publications: 667.42

Average Impact Factor of each paper: 6.05

2000 B.S in Pharmaceutical, All India Rank **04**

2001 M.S. in Biotechnology, JNU Exam, All India Rank 34

2003 Council of Scientific and Industrial Research Test

2003 Graduate Aptitude Test in Engineering (GATE) Exam IIT, Score 99.05 percentile, All India Rank- 31

2007 Global selection for research program in RIKEN BRAIN SCIENCE INSTITUTE, Japan

2010 Candidature selected for prestigious Jacques Monod Conference, France

Achievements: Awards/Grants/Fellowships/Honors:

- National Academy of Medical Sciences India: Best Research (Dr. Bhargava) Biomedical Scientist Drug Development Award
- Best Biomedical Scientist Award: Translational Biomedical Research Society (TBRS), India
- Coveted Honour: Melpadom George A.V Jones Scientist Merit Award
- Selected "Executive Board Member Indian Academy of Neuroscience (IAN) India
- IIT Jodhpur Research Excellence Award: In presence of Principal Secretary Prime Minister of India
- Lady Tata Memorial Young Researcher Award (Under Top Three Finalists)
- Coveted Honour Malaviya Memorial Award-BIOTECH RESEARCH SOCIETY OF INDIA (BRSI)
- Board of Research in Nuclear Sciences (BRNS) Department of Atomic Energy Extra Mural Awarded
- Fellow of Royal Society of Biology, London, UK
- Indian Academy of Biomedical Sciences (IABS) eminent Shri Om Prakash Sharma Award, India
- National Academy of Medical Sciences India Distinguished Life Time Membership
- Prestigious Shakuntala Amir Chand Prize-Indian Council of Medical Research (ICMR) India
- The Young Investigator Travel Award 2017 from Japan Neuroscience Society (JNS), Japan
- Candidature selected: Member of Royal Society of Biology (RSB), London
- Coveted Innovative Young Researcher Award Society of Pharmaceutical Education Research India
- The New York Academy of Sciences selected as Bicentennial Ambassador on Board of NYAS
- Young Scientist Award in Biological Sciences of Indian Society of Chemists and Biologists India.
- Coveted Early Career Researcher Award Commonwealth Science ROYAL SOCIETY LONDON, UK
- Prof. Rita Mulhekar Award from Indian Society of Cell Biologists (ISCB), India

- Royal Society of Chemistry (RSC), London Selected as A Member of RSC, London
- Extra Mural Research Funding (Individual Centric) Awarded: Science and Engineering Research Board (SERB), DST India
- National Academy of Sciences India (NASI) Selected as a Member of NASI, India
- Young Scientist Award-National Academy of Biological Sciences (NABS), India
- Neurochemistry-Young Investigator Award from Asian-Pacific Society of Neurochemistry
- Fellow of The Royal Society of Medicine, London
- Bio Asia Young Innovation Award (Top 10 Entries from Asia)
- The New York Academy of Sciences (NYAS) Selected Profile as Potential Scientific Feature
- Prof. H.S. Srivastava Memorial Young Scientist Award, PHSS Foundation, India
- Founding Member of Indian National Young Academy of Science (INYAS)-INSA
- Young Genetics Researcher Award Presented by Nobel Laureate-Medicine (Prof. Harald Zur Hausen) and
- Prof. M.S. Swaminathan, Fellow Royal Society of London, UK
- Prof. Umakant Sinha Memorial Award-Indian Science Congress Association-Meritorious Research In New Biology
- Young Scientist Award Biotech Research Society India (BRSI), India
- Innovative Young Biotechnologist Award (IYBA)-Department of Biotechnology (DBT), India
- DST-SERB Fast Track Young Scientist Research Award (Not Availed)
- Indian National Science Academy (INSA)-Young Scientist Medal Award
- Ramalinganswami Fellowship Department of Biotechnology (DBT), India
- Indian Science Congress Association (ISCA)-Best Young Scientist Award (New Biology)
- INSA-Japan Society for The Promotion of Science (JSPS) International Fellowship
- Best PHD Thesis-2008 Award Biological Sciences-Indian Society of Chemists and Biologists
- BRNS-Bhabha Atomic Research Centre (BARC)-Young Scientist Research Award
- National Academy of Sciences, India (NASI)- Young Scientist Platinum Jubilee Award
- DST-Japan Society The Promotion of Science (JSPS) Fellowship, International-India And Japan
- NASI Scopus Young Scientist Award (Top Three Finalist)
- Max Planck Society Fellowship, Germany
- Riken Brain Science Institute Fellowship, Japan Summer Research Fellowship
- Best Presentation Award (Ist Prize) S. S. Parmar Foundation Prize, USA
- Council of Scientific and Industrial Research (CSIR), India Fellowship
- Graduate Aptitude Test in Engineering (GATE) Exam IIT, Score 99.05 Percentile, All India Rank-31
- Department of Biotechnology (DBT), Ministry of Science and Technology, India MS Fellowship

Editorial Manager Board (Members/Reviewer):

S.No.	International Journals	Impact Factors	Journal H-Index
1.	Biotechnology Advances	12.8	191
2.	Molecular Phylogenetics and Evolution	4.38	159
3.	Neuroscience	3.50	220
4.	Bioorganic and Medicinal Chemistry	2.80	161
5.	Biochemie	3.18	135
6.	Scientific Reports (Nature Publishing Group)	4.52	213
7.	Frontiers in Molecular Neuroscience	3.72	63
8.	Molecular and Cellular Neuroscience	3.73	136
9.	Bioorganic & Medicinal Chemistry	2.79	161
10.	European Journal of Biophysics	2.52	80
11.	Journal of Virological Methods	2.00	100
12.	Frontiers in Molecular Biosciences	4.18	37
13.	Frontiers in Bioscience	2.34	143
14.	European Journal of Medicinal Chemistry	4.81	76
15.	Progress in Neurobiology	11.60	212
16.	BBA-Gene Regulatory Mechanisms	4.59	114
17.	Pharmacological Research	5.59	132
18.	Biomedicine & Pharmacotherapy	3.74	92
19.	Medicinal Research Review	12.14	130
20.	Ageing Research Reviews	10.8	120

Scientific Grants Awarded:

- BRNS/BARC-Department of Atomic Energy (DAE) India research grant (2019)
- Department of Biotechnology India -IYBA Project (Ministry of Science and Technology) India
- Indian National Science Academy and the Japan Society for the Promotion of Science (JSPS)
- Department of Biotechnology, India -Ramalinganswami Project India
- DST Government of India and the Japan Society for the Promotion of Science (JSPS)
- BRNS/BARC-Department of Atomic Energy (DAE) India research grant (2013)
- DST-SERB Fast Track "Young Scientist Research Award (Not Availed): Sanctioned Strength
- IIT Jodhpur Project Approved by Director IITJ & External Experts (Not availed) Sanctioned
- Extra Mural Research Funding Individual Centric: (SERB), DST, Government of India (2016)

Membership and Recognitions:

The Biotech Research Society India (BRSI-Life Member) Indian Society of Chemists and Biologists (ISCB-Life Member) Indian Association for Cancer Research (IACR-Life Member) Society of Applied Biotechnology India (SAB-Life Member) Indian Science Congress Association (ISCA-Life Member) Indian Academy of Neuroscience (IAN-Life Member) National Academy of Biological Sciences (NABS-Life Member) National Academy of Medical Sciences India Indian Society of Cell Biology (ISCB-Life Member) Society of Pharmaceutical Education and Research (SPER-Life Member)

The American Society for Biochemistry and Molecular Biology (Member)

The New York Academy of Sciences (Member) International Brain Research Organization (IBRO-Member) Japan Neuroscience Society (JNS-Associate Member) National Academy of Sciences India (NASI-Member) Royal Society of Chemistry (RSC London-Member) Royal Society of Medicine (RSM London-Fellow) International Society for Neurochemistry (ISN-Member) The New York Academy of Sciences (Bicentennial Ambassador) Royal Society of Biology (RSB London-Member)

(NAMS-Life Member)

Royal Society of Biology (RSB-London-Fellow) Indian Biophysical Society (Life Member) Indian Immunology Society (Life Member) Transnational Biomedical Research Society (Life Member) Society of Biological Chemists (Life Member) Society for Free Radical Research India (Life Member)

Ph.D. Thesis Supervised by Amit Mishra:

S.NO.	Name of	Ph.D. Thesis Title	Solo Supervisor: Amit Mishra	Status
	Student			
1.	Dr. Ribhav	Rejuvenation Mechanisms of LRSAM1 E3 Ubiquitin Ligase Against Misfolded		Ph.D. Degree
	Mishra	Proteins Aggregation Linked Neurodegenerative Diseases		Awarded
2.	Dr. Ayeman	Proteasomal Dysfunctions Induced Anti-Proliferative Strategies of NSAIDs		Ph.D. Degree
	Amanullah	Engender Mitochondrial Abnormalities and Apoptosis		Awarded
3.	Dr. Arun Kumar	Innovative Harnessing of Molecular Protein Quality Control Strategies		Ph.D. Degree
	Upadhyay	Inhibits: Aberrant Protein Aggregation	Awarded	
4.	Dr. Vibhuti Joshi	Promising Molecular Modulations of E3 Ubiquitin Ligases Regulate Cellular		Ph.D. Degree
		Proliferation and Suppresses Misfolder	Awarded	
5.	Dr. Deepak	Role of MGRN1 E3 Ubiquitin Ligase in Protein Quality Control Mechanism		Ph.D. Degree
	Chhangani	and Polyglutamine Diseases		Awarded
6.	Mr. Ankur	Tentative Title: Understanding Proteome Based Pharmacological		Ph.D. Thesis
	Rakesh Dubey	Therapeutics Strategies: Can Repair De	efective Neurobiological Mechanisms?	Submitted
7.	Mr. Sumit Kinger	Tentative Title: How E3 Ubiquitin Ligase can provide neuroprotection against		Ph.D. in Progress
		unfolded protein responses		
8.	Mr. Prashant	Tentative Title: Molecular mechanism of Flavonoids against misfolded		Ph.D. in Progress
	Kumar	protein aggregation		
9.	Mr. Yuvraj	Tentative Title: How NSAIDs regulate I	mproper Cellular Proliferation Via	Ph.D. in Progress
	Anandrao Jagtap	Protein Quality Control Mechanism?		
10.	Mr. Akash	Tentative Title: How E3 Ubiquitin Ligas	e Selectively Clear Misfolded Proteins	Ph.D. in Progress
	Choudhary	Through Autophagy Pathway?		

^{*}Eleven Masters Students have completed their Master's Thesis under the supervision of Amit Mishra

Publications: All publications are in prestigious international journals

Present: h-index: 31 i10-index: 69 Citations More than 15360

Average Impact Factor of each paper: 6.05

Impact Factor: 7.66

Total Impact Factor of Publications: 667.42

1. Sumit Kinger, Ankur Rakesh Dubey, Prashant Kumar, Yuvraj Anandrao Jagtap, Akash Choudhary, Amit Kumar, Vijay Kumar Prajapathi, Rohan Dhiman and Amit Mishra* (2023) Molecular Chaperones' Potential against Defective Proteostasis of Amyotrophic Lateral Sclerosis DOI: Cells/doi.org/10.3390 Cells

Impact Factor: 5.78

2. Rani, Annu; Saini, Vaishali; Patra, Priyanka; Prashar, Tanish; Pandey, Rajan Kumar; Amit Mishra; Hem Chandra Jha Epigallocatechin Gallate: A multifaceted molecule for neurological disorders and neurotropic viral infections ACS Chemical Neuroscience

Impact Factor: 4.92

3. Satyendra Singh, Abhishek Rao, Anshuman Mishra, <u>Amit Mishra</u> and Vijay Kumar Prajapati (2023) Multifaceted mutational immunotherapeutic approach to design therapeutic mAbs to combat monkeypox disease via integrated screening algorithms and antibody engineering DOI: 10.1039/D3ME00059A

Molecular Systems Design & Engineering

Impact Factor: 7.37

4. B Barala, D Kashyapa, NVarshneya, T P Vermaa, A K Jainb, D Chatterjib, V Kumar, <u>Amit Mishra</u>, A Kumar, H C Jha (2023) Helicobacter pylori isolated from gastric juice have higher pathogenic potential than biopsy isolates DOI: 10.1016/j.gendis.2023.03.003

Genes & Diseases

Impact Factor: 6.08

5. Yuvraj Anandrao Jagtap, Prashant Kumar, Sumit Kinger, Ankur Rakesh Dubey, Akash Choudhary, Ravi Kumar Gutti, SARIKA SINGH, Hem Chandra Jha, Krishna Mohan Poluri and Amit Mishra* (2023) Disturb Mitochondrial Associated Proteostasis: Neurodegeneration & Imperfect Ageing DOI: 10.3389/fcell.2023.1146564

Frontiers in Cell and Development Biology

Impact Factor: 4.11

6. Ashish Kumar, Lincon naik, Salina Patel, Mousami Das, Dev Kiran Nayak, Abtar Mishra, <u>Amit Mishra</u>, Ramandeep singh, Asirbad Behura, Rohan Dhiman (2023) Ac-93253 inhibits intracellular growth of mycobacteria in human macropahages by inducing apoptosis in mitochondrial dependent manner

BBA General Subjects

Impact Factor: 8.94

7. Nupur Nagar, Harshi Saxena, Aakansha Pathak, <u>Amit Mishra</u>, Krishna Mohan Poluri (2023) Dissecting the structural mechanisms of protein-persistent organic pollutant (POP) interactions. DOI: 10.1016/j.chemosphere.2023.138877 **Chemosphere**

Impact Factor: 6.63

8. Assirbad Behura; Lincoln Naik; Salina Patel; Mousumi Das; Ashish Kumar; Abtar Mishra; Dev Kiran Nayak; Debraj Manna; Amit Mishra; Rohan Dhiman (2023) Involvement of epigenetics in affecting host immunity during SARS-CoV-2 infection DOI: DOI:10.1016/i.bbadis.2022.166634

BBA-Molecular Basis of Disease

Impact Factor: 5.68

9. Ankur Rakesh Dubey, Ribhav Mishra, Yuvraj Anandrao Jagtap, Sumit Kinger, Prashant Kumar, Rohan Dhiman, Somnath Ghosh, Sarika Singh, Amit Prasad, Nihar Ranjan Jana and <u>Amit Mishra</u>* (2023) Itraconazole Confers Cytoprotection Against Neurodegenerative Diseases Associated Abnormal Proteins Aggregation DOI: 10.1007/s12035-023-03230-0 **Molecular Neurobiology**

Impact Factor: 6.69

10. Satyendra Singh, Abhishek Rao, Ketan Kumar, <u>Amit Mishra</u>, Vijay Kumar Prajapati (2023) Translational vaccinomics and structural filtration algorithm to device multiepitope vaccine for catastrophic monkeypox virus

DOI: 10.1016/j.compbiomed.2022.106497

Computers in Biology and Medicine

Impact Factor: 4.03

11. Anjali Sangeeth, Mahesh Malleswarapu, <u>Amit Mishra</u>, and Ravi Kumar Gutti (2023) Non-coding RNĀs as Regulators of Cellular Metabolism during Hematopoiesis DOI: 10.1124/jpet.121.001120

Journal of Pharmacology and Experimental Therapeutics

Impact Factor: 7.23

12. Arun Upadhyay, Naveen Sundaria, Rohan Dhiman, Vijay Kumar Prajapati, Amit Prasad and Amit Mishra* (2022) Complex Inclusion Bodies and Defective Proteome Hubs in Neurodegenerative Diseases: New Clues, New Challenges. DOI: 10.1177/1073858421989582

The Neuroscientist

Impact Factor: 5.68

13. Ankur Rakesh Dubey, Som Mohanlal Patwa, Sumit Kinger, Yuvraj Anandrao Jagtap, Prashant Kumar1, Sarika Singh, Rohan Dhiman, Hem Chandra Jha and <u>Amit Mishra</u>* (2022) Improper Proteostasis: Can Serve as Biomarkers for Neurodegenerative Diseases? DOI: 10.1007/s12035-022-02775-w

Molecular Neurobiology

Impact Factor: 4.43

14. K, Amrutha, <u>Amit Mishra</u> and Sarika Singh (2022). Implications of intracellular protein degradation pathways in Parkinsons disease and therapeutics DOI: 10.1002/jnr.25101

Journal of Neuroscience Research

Impact Factor: 5.50

15. Ankur Rakesh Dubey, Ribhav Mishra, Naveen Sundaria, Yuvraj Anandrao Jagtap, Prashant Kumar, Sumit Kinger, Akash Choudhary, Hem Chandra Jha, Amit Prasad, Ravi Kumar Gutti and <u>Amit Mishra</u>* (2022) Resveratrol Promotes LRSAM1 E3 Ubiquitin Ligase-Dependent Degradation of Misfolded Proteins Linked with Neurodegeneration DOI: 10.33594/000000574

Cellular Physiology and Biochemistry

Impact Factor: 5.78

16. Indori Omkar, Jakhmola, Shweta; Pathak, Devesh; Tanwar, Manushree; Kandpal, Meenakshi; <u>Amit Mishra</u>; Kumar, Rajesh; Jha, Hem Chandra Jha (2022) A comparative account of biomolecular changes post Epstein Barr Virus infection of the neuronal and glial cells using Raman microspectroscopy DOI: 10.1021/acschemneuro.2c00081

ACS Chemical Neuroscience

Impact Factor: 6.50

17. Ayeman Amanullah, Arun Upadhyay, Rohan Dhiman, Sarika Singh, Amit Kumar, Dinesh Kumar Ahirwar, Ravi Kumar Gutti and Amit Mishra* (2022) Diclofenac-Based Novel Therapeutics Development & Challenges: Targets Cancer and Complex Diseases DOI: 10.3390/cancers14184385

Cancers

Impact Factor: 3.00

18. Satyendra Singh, Amit Mishra, Vijay Kumar Prajapti (2022) Designing of a bispecific antibody against SARS-CoV-2 spike glycoprotein targeting human entry receptors DPP4 and ACE2 DOI: 10.1016/j.humimm.2022.01.004

Human Immunology

Impact Factor: 3.73

19. Neha Jain, Md Fulbab Sk, <u>Amit Mishra</u> and Amit Kumar (2022) Identification of novel efflux pump inhibitors for Neisseria gonorrhoeae via multiple ligand-based pharmacophores, e-pharmacophore, molecular docking, density functional theory, and molecular dynamics approaches. DOI: 10.1016/j.compbiolchem.2022.107682

Computational Biology and Chemistry

Impact Factor: 3.36

20. Satyendra Singh, Ketan Kumar, Mamta Panda, Aryan Srivastava, Amit Mishra and Vijay Kumar Prajapati (2022) High throughput virtual screening of small-molecule inhibitors targeting immune cell checkpoints to discover new immunotherapeutics for human diseases. DOI: 10.1007/s11030-022-10452-2

Molecular Diversity

Impact Factor: 3.50

21. Anjali Sangeeth, Mahesh Malleswarapu, Amit Mishra and Ravi Kumar Gutti (2022) Long Non-coding RNA Therapeutics: Recent Advances and Challenges DOI: 10.2174/1389450123666220919122520 IF 3.50

Current Drugs Targets

Impact Factor: 6.51

22. (Selected for Cover Page Story) Prashant Kumar, Yuvraj Anandrao Jagtap, Som Mohanlal Patwa, Sumit Kinger, Ankur Rakesh Dubey, Vijay Kumar Prajapati, Rohan Dhiman, Krishna Mohan Poluri, and <u>Amit Mishra*</u> (2021) Autophagy Based Cellular Physiological Strategies Target Oncogenic Progression. DOI: 10.1002/jcp.30567

Journal of Cellular Physiology

Impact Factor: 5.71

23. Assirbad Behura, Mousumi Das, Ashish Kumar, Lincoln Naik, Abtar Mishra, Debraj Manna, Salina Patel, <u>Amit Mishra</u>, Ramandeep Singh and Rohan Dhiman (2021) ESAT-6 impedes IL-18 mediated phagosome lysosome fusion via microRNA-30a upon Calcimycin treatment in mycobacteria infected macrophages DOI: 10.1016/j.intmp.2021.108319

International Immunopharmacology

Impact Factor: 5.50

24. Ankur Rakesh Dubey, Amit Prasad, Krishna Mohan Poluri, Amit Kumar, Awanish Kumar, **Amit Mishra*** (2021) Proteome Linked Biochemical Targets: Can Repair Defective Cellular Physiological Mechanisms? DOI: 10.33594/000000350

Cellular Physiology and Biochemistry

Impact Factor: 5.68

25. Rimanpreet Kaur, Naina Arora, Suraj R Rawat, Anand Kumar Keshri, Shubha Rani Sharma, <u>Amit Mishra</u>, Gagandeep Singh and Amit Prasad (2021) Vaccine for a neglected tropical disease Taenia solium cysticercosis: fight for eradication against all odds. DOI: 10.1080/14760584.2021.1967750

Experts Review of Vaccines

Impact Factor: 5.68

26. Ribhav Mishra, Anurag Bansal and <u>Amit Mishra</u>* (2021) LISTERIN E3 Ubiquitin Ligase and Ribosome-Associated Quality-Control (RQC) Mechanism DOI: 0.1007/s12035-021-02564-x

Molecular Neurobiology

Impact Factor: 5.19

27. Abtar Mishra, Assirbad Behura, Ashish Kumar, Lincoln Naik, Ashapoorna Swain, Mousumi Das, Suman Sudha Sarangi, Puja Dokania, Vijaya R. Dirisala, Sujit K. Bhutia, <u>Amit Mishra</u>, Ramandeep Singh, Rohan Dhiman (2021) P2X7 receptor in multifaceted cellular signalling and its relevance as a potential therapeutic target in different diseases. DOI: 10.1016/j.ejphar.2021.174235 **European Journal of Pharmacology**

Impact Factor: 4.42

28. Ankur Rakesh Dubey, Yuvraj Anandrao Jagtap, Prashant Kumar, Som Mohanlal Patwa, Sumit Kinger, Amit Kumar, Sarika Singh, Amit Prasad, Nihar Ranjan Jana and <u>Amit Mishra</u>* (2021) Biochemical Strategies of E3 Ubiquitin Ligases Target Viruses in Critical Diseases. DOI: 10.1002/jcb.30143

Journal of Cellular Biochemistry

Impact Factor: 4.09

29. Parul Gupta, Shubhangini Tiwari, Abhishek Singh, Amit Pal, <u>Amit Mishra</u>, Sarika Singh (2021) Rivastigmine attenuates the Alzheimer's disease related protein degradation and apoptotic neuronal death signaling. DOI: 10.1042/BCJ20200754 **Biochemical Journal**

Impact Factor: 6.98

30. Arun Upadhyay, Ayeman Amanullah, Vibhuti Joshi, Rohan Dhiman, Vijay Kumar Prajapti, Krishna Mohan Poluri and Amit Mishra* (2021) Ibuprofen-Based Advanced Therapeutics: Breaking the Inflammatory link in Cancer, Neurodegeneration, and Diseases. DOI: 10.1080/03602532.2021.1903488

Drug Metabolism Reviews

Impact Factor: 3.47

31. Shweta Jakhmola; Arun Upadhyay; Khushboo Jain; <u>Amit Mishra</u> and Hem Chandra Jha (2021) Herpesviruses and the hidden links to Multiple Sclerosis neuropathology. DOI: 10.1016/j.jneuroim.2021.577636

Journal of Neuroimmunology

Impact Factor: 5.49

32. Naveen Sundaria, Arun Upadhyay, Amit Prasad, Vijay Kumar Prajapati, Krishna Mohan Poluri and Amit Mishra* (2021) Neurodegeneration & Imperfect Ageing: Technological Limitations and Challenges? DOI: 10.1016/j.mad.2021.111574

Mechanisms of Ageing and Development

Impact Factor: 5.68

33. Rimanpreet Kaur, Naina Arora, Suraj Singh Rawat, Anand Kumar Keshri, Neha Singh, Sumit Kumar Show, Pramod Kumar, Amit Mishra and Amit Prasad (2021) Immunoinformatics driven construction of multi-epitope vaccine candidate against *Ascaris lumbricoides* using its entire immunogenic epitopes. DOI: 10.1080/14760584.2021.1974298

Experts Review of Vaccines

Impact Factor: 5.57

34. Ashish Singh, Arun Kumar Yadawa, Swati Chaturvedi, M.Wahajuddin, <u>Amit Mishra</u> and Sarika Singh (2021) Mechanism for anti Parkinsonian effect of resveratrol: involvement of transporters, synaptic proteins, dendrite arborization, biochemical alterations. ER stress and apoptosis DOI: 10.1016/i.fct.2021.112433

Food Chemical and Toxicology

Impact Factor: 5.50

35. Ankur Rakesh Dubey, Sumit Kinger, Yuvraj Anandrao Jagtap, Som Mohanlal Patwa, Prashant Kumar, Sarika Singh, Amit Kumar, Awanish Kumar and <u>Amit Mishra</u>* (2021) Proteasome Based Molecular Strategies Against Improper Cellular Proliferation DOI: 10.33594/00000439

Cellular Physiology and Biochemistry

Impact Factor: 13.39

36. D.J. Klionsky*, <u>Amit Mishra</u> et al. Guidelines for the use and interpretation of assays for monitoring autophagy (2021) DOI: 10.1080/15548627.2020.1797280

Autophagy

Impact Factor: 12.38

37. (Selected for Cover Page Story) Vibhuti Joshi, Arun Upadhyay, Vijay Kumar Prajapati and <u>Amit Mishra</u>* (2020) How Autophagy Can Restore Proteostasis Defects in Multiple Diseases? DOI: 10.1002/med.21662

Medicinal Research Reviews

Impact Factor: 4.11

38. Abtar Mishra; Assirbad Behura; Ashish Kumar; Abhirupa Ghosh; Lincoln Naik; Shradha Mawatwal; Subhashree S Mohanty; Amit Mishra; Sudipto Saha; Sujit K Bhutia; Ramandeep Singh; Rohan Dhiman (2020) Soybean lectin induces autophagy through P2RX7 dependent activation of NF-KD-ROS pathway to kill intracellcular mycobacteria. DOI: 10.1016/j.bbagen.2020.129806 BBA General Subjects

Impact Factor: 4.85

39. Ribhav Mishra, Vibhuti Joshi, Arun Upadhyay, Ayeman Amanullah, Ankur Rakesh Dubey, Sarika Singh, Vikash Kumar Dubey, Krishana Mohan Poluri, Nihar Ranjan Jana and <u>Amit Mishra</u>* (2020) LRSAM1 E3 Ubiquitin Ligase Promotes Proteasomal Clearance of E6-AP Protein. DOI: 10.1016/j.cellsig.2020.109836

Cellular Signalling

Impact Factor: 8.02

40. Sharanya Sarkar, Khushboo Gulati, <u>Amit Mishra</u> and Krishna Mohan Poluri (2020) Protein Nanocomposites: Special interfernces to lysozyme based materials. DOI: 10.1016/j.ijbiomac.2020.02.179

International Journal of Biologicals Macromolecules

Impact Factor: **5.65**

41. Ribhav Mishra, Ayeman Amanullah, Arun Upadhyay, Rohan Dhiman, Ankur Rakesh Dubey, Sarika Singh, Amit Prasad and Amit Mishra* (2020) Ubiquitin Ligase LRSAM1 Suppresses Neurodegenerative Diseases Linked Aberrant Proteins Induced Cell Death. DOI: 10.1016/j.biocel.2020.105697

International Journal of Biochemistry & Cell Biology

Impact Factor: 5.68

42. Rimanpreet Kaur, Naina Arora, Majeed Abdulwahid Jamakhani, Shelvia Malik, Pramod Kumar, Farhan Anjum, Shweta Tripathi, **Amit Mishra** and Amit Prasad (2020) Development of multi-epitope chimeric vaccine against Taenia solium by exploring its proteome: an insilico approach. DOI: 10.1080/14760584.2019.1711057

Experts Review of Vaccines

Impact Factor: 8.02

43. Nidhi Gupta, Hansa Regar, Vijay Kumar Verma, Dhaneswar Prusty, <u>Amit Mishra</u>, Vijay Kumar Prajapati (2020) Receptorligand based molecular interaction to discover adjuvant for immune cell TLRs to develop next-generation vaccine. DOI: 10.1016/j.ijbiomac.2020.02.297

International Journal of Biologicals Macromolecules

Impact Factor: 5.15

44. Arun Kumar Verma, Eshan Khan, Subodh Kumar Mishra, <u>Amit Mishra</u>, Nicolas Charlet-Berguer and Amit Kumar (2020) Curcumin regulates the r(CGG)exp RNA hairpin structure and ameliorate defects in fragile X-associated tremor ataxia syndrome. DOI: 10.3389/fnins.2020.00295

Frontiers in Neuroscience

Impact Factor: 8.02

45. Nidhi Joshi, Nupur Nagar, Khushboo Gulati, Krishnakant Gangele, <u>Amit Mishra</u>, Dinesh Kumar, Krishna Mohan Poluri* (2020) Dissecting the differential structural and dynamics features of CCL2 chemokine orthologs.

DOI: 10.1016/j.ijbiomac.2020.04.067

International Journal of Biologicals Macromolecules

Impact Factor: 4.37

46. Nirali Pandya, Eshan Khan, Neha Jain, Lakshiminarayana Satham, Rahul Singh, Ravindra D Makde, <u>Amit Mishra</u> and Amit Kumar (2020) Curcumin analogs exhibit anti-cancer activity by selectively targeting G-quadruplex forming c-myc promoter sequence DOI: 10.1016/j.biochi.2020.11.006

Biochimie

Impact Factor: 6.31

47. Naina Arora, Rimanpreet Kaur, Suraj Singh Rawat, Ankur Kumar, Aloukick Kumar Singh, Shweta Tripathi, <u>Amit Mishra</u>, Gagandeep Singh, Amit Prasad (2020) Evaluation of Taenia solium cyst fluid-based enzyme linked immunoelectro transfer blot for Neurocysticercosis diagnosis in urban and highly endemic rural population of North India. DOI: 10.1016/j.cca.2020.05.006

Clinica Chimica Acta

Impact Factor: 4.99

48. Eshan Khan, Subdoh Kumar Mishra, Ribhav Mishra, <u>Amit Mishra</u> and Amit Kumar (2019) Discovery of a potent small molecule inhibiting Huntington's disease pathogenesis via targeting CAG repeat RNA and Poly Q protein. DOI: 10.1038/s41598-019-53410-z

Scientific Reports

Impact Factor: 7.57

49. Kohei Nishino, Seiji Watanabe, Jin Shijie, Yuri Murata, Kotaro Oiwa, Okiru Komine, Fumito, Hitomi Tsuiji, Manabu Abe, Kenji Sakimura, <u>Amit Mishra</u>, and Koji Yamanaka. (2019) Mice deficient in the C-terminal domain of TAR DNA- binding protein 43 develop age-dependent motor dysfunction associated with impaired Notch1—Akt signaling pathway. DOI: 10.1186/s40478-019-0776-5.

Acta Neuropathologica Communications

Impact Factor: 38.63

50. Assirbad Behura, Abtar Mishra, Shradha Mawatwal, Ashish Kumar, <u>Amit Mishra</u>, Ramandeep Singh and Rohan Dhiman (2019) ESAT-6 dependent microRNA-30a-3p induction perverts Calcimycin-induced autophagy and enhances intracellular mycobacterial survival in macrophages. DOI: 10.1186/s40478-019-0776-5

Journal of Infection

Impact Factor: 4.29

51. Sonam Gupta, Joyshree Biswas, Parul Gupta, Abhishek Singh, Shubhangini Tiwari, <u>Amit Mishra</u> and Sarika Singh (2019) Salubrinal attenuates nitric oxide mediated PERK: IRE1 Alpha:ATF-6 signaling and DNA damage in neuronal cells. DOI: 10.106/j.neuint.2019.104581

Neurochemistry International

Impact Factor: 6.07

52. Naina Arora, Rimanpreet Kaur, Farhan Anjum, Shweta Tripathi, <u>Amit Mishra</u>, Rajiv Kumar and Amit Prasad (2019) Neglected Agent Eminent Disease: Linking Human Helminthic Infection, Inflammation, and Malignancy. https://doi.org/10.3389/fcimb.2019.00402

Frontiers in Cellular and Infection Microbiology

Impact Factor: 5.23

53. Nidhi Gupta, Nazia Khatoon, <u>Amit Mishra</u>, Vijay Kumar Verma and Vijay Kumar Prajapati (2019). Structural vaccinology approach to investigate the virulent and secretory proteins of Bacillus anthracis for devising Anthrax next-generation vaccine. DOI: 10.1080/07391102.2019.1688197

Journal of Biomolecular Structure and Dynamics

Impact Factor: 4.62

54. Krishanakant Gangele, Minal Jamsandekar, <u>Amit Mishra</u>, Krishna Mohan Poluri (2019) Unraveling the evolutionary origin of ELR motif using FISH CXC Chemokine CXCL8. Fish and Shellfish Immunology DOI: 10.1016/j.fsi.2019.07.034 Fish and Shellfish Immunology

Impact Factor: 6.51

55. Vibhuti Joshi, Ribhav Mishra, Arun Upadhyay, Ayeman Amanullah, Krishna Mohan Poluri, Sarika Singh, Amit Kumar and Amit Mishra* (2019) Polyphenolic Flavonoid (Myricetin) Upregulated Proteasomal Degradation Mechanisms: Eliminates Neurodegenerative Proteins Aggregation. DOI: 10.1002/jcp.28695

Journal of Cellular Physiology

Impact Factor: 4.37

56. Eshan Khan, Soumen Biswas, Subodh Kumar Mishra, Ribhav Mishra, Sampak Samanta, <u>Amit Mishra</u>, Arpita Tawani and Amit Kumar (2019) Rationally Designed Small Molecules Targeting Toxic CAG Repeat RNA That Causes Huntington's Disease and Spinocerebellar Ataxia (SCA's) DOI: 10.1016/j.biochi.2019.05.001

Biochimie

Impact Factor: 5.57

57. Abtar Mishra, Assirbad Behuria, Shradha Mawatwal, Ashish Kumar, Lincoln Naik, Subhashree Subhasmita Mohanty, Debraj Manna, Puja Dokania, <u>Amit Mishra</u>, Samir K Patra and Rohan Dhiman (2019) Structure-function and application of plant lectins in disease biology and immunity. DOI:10.1016/j.fct.2019.110827

Food and Chemical Toxicology

Impact Factor: 9.20

58. Ribhav Mishra, Arun Upadhyay, Vijay Kumar Prajapati, Rohan Dhiman, Krishna Mohan Poluri, Nihar Ranjan Jana and **Amit Mishra*** (2019) LRSAM1 E3 Ubiquitin Ligase: Molecular Neurobiological Perspectives Linked With Brain Diseases. DOI: 10.1007/s00018-019-03055-y

Cellular and Molecular Life Sciences

Impact Factor: 4.39

59. Parul Gupta, Abhishek Singh, Shubhangini Tiwari, <u>Amit Mishra</u>, Rakesh Maurya and Sarika Singh (2019) Ulmosides A: Flavonoid 6-C-glycosides from Ulmus wallichiana attenautes lipopolysacchrides induced oxidative stress, apoptosis and neuronal death DOI:10.1016/j.neuro.2019.02.017

NeuroToxicology

Impact Factor: 14.35

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Impact Factor: 4.99

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Scientific Reports

Impact Factor: 3.57

62. Sharanya Sarkar, Khushboo Gulati, Manikyaprabhu Kairamkonda, <u>Amit Mishra</u> and Krishna Mohan Poluri (2018) Elucidating protein-protein interactions through computational approaches and designing small molecule inhibitors against them for various diseases. DOI: 10.2174/1568026618666181025114903

Current Topics in Medicinal Chemistry

Impact Factor: 4.46

63. Subodh Kumar Mishra, Neha Jain, Uma Shankar, Arpita Tawani, <u>Amit Mishra</u> and Amit Kumar (2018) SMMDB: a webaccessible database for small molecule modulators and their targets involved in neurological diseases DOI:10.1093/database/bay082

<u>Database</u>

Impact Factor: 5.68

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Journal of Cellular Physiology

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Impact Factor: 4.42

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Journal of Cellular Biochemistry

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Journal of Cellular Physiology

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70. Vibhuti Joshi, Arun Upadhyay, Ayeman Amanullah, Ribhav Mishra and <u>Amit Mishra</u>* (2018) Predicting E3 Ubiquitin Ligases As Possible Promising Biomarkers For Brain Tumors. DOI:10.1007/978-981-13-5877-7 4).

Springer Nature

Impact Factor: 12.38

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Medicinal Research Review

Impact Factor: 4.39

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Infection Genetics and Evolution

Impact Factor: 10.88

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Progress in Neurobiology

Impact Factor: 4.63

74. Eshan Khan, Arpita Tawani, Subodh Mishra, Arun Verma, Mohit Kumar, Arun Upadhyay, Rajat Sandhir, <u>Amit Mishra</u> and Amit Kumar (2017) Myricetin reduces toxic level of CAG repeats RNA in Huntington's Disease (HD) and Spino Cerebellar Ataxia (SCAs). DOI: 10.1021/acschembio.7b00699.

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Impact Factor: 6.26

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Frontiers in Molecular Neuroscience

Impact Factor: 6.51

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Journal of Cellular Physiology

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Molecular Neurobiology

Impact Factor: 6.14

79. Vibhuti Joshi, Arun Upadhyay, Amit Kumar and <u>Amit Mishra</u>* (2017) Gp78 E3 Ubiquitin Ligase: Essential Functions and Contributions In Proteostasis. DOI:10.3389/fncel.2017.00259

Frontiers in Cellular Neuroscience

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Journal of Cellular Biochemistry

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81. Naina Aroara, Shweta Tripathi, Pranjal Kumar, Prosanjit Mondal, <u>Amit Mishra</u> and Amit Prasad. Recent (2017) Advancements and New Perspectives in Animal Models for Neurocysticercosis Pathogenesis. DOI: 10.1007/s12035-016-0373-6

Parasite Immunology

Impact Factor: 6.06

82. Naina Arora, Shweta Tripathi, Aloukick Kumar Singh, Prosanjit Mondal <u>Amit Mishra</u>, Amit Prasad (2017) Micromanagment of Immune System: Role of miRNAs in Helminthic Infections. DOI:10.3389/fmicb.2017.00586

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Scientific Reports

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Frontiers in Molecular Neuroscience

Impact Factor: 4.99

85. Subodh Kumar Mishra, Arpita Tawani, <u>Amit Mishra</u> and Amit Kumar (2016) G4IPDB: A database for quadruplex structure forming nucleic acid interacting proteins. DOI: 10.1038/srep38144

Scientific Reports

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Molecular Neurobiology

Impact Factor: 7.04

87. Deepak Chhangani, Fumito Endo, Ayeman Amanullah, Arun Upadhyay, Seiji Watanabe; Ribhav Mishra, Koji Yamanaka* and <u>Amit Mishra</u>* (2016) Mahogunin ring finger 1 confers cytoprotection against mutant SOD1 aggresomes and defective in an ALS mouse model. DOI: 10.1016/j.bbadis.2014.04.014

Neurobiology of Disease

Impact Factor: 6.14

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Frontiers in Cellular Neuroscience

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89. S. Harinipriya, Aarat Kalra, <u>Amit Mishra</u> (2016) Physiochemical Characterization of tubulin from Arachis hypogaea. DOI: 10.1016/j.synthmet.2016.04.021

Synthetic Metals

90. Inflammation: The Common Link In Brain Pathologies: Arun Upadhyay, Ayeman Amanullah, Vibhuti Joshi, Ribhav Mishra and Amit Mishra* (2016) Molecular and Cellular Insights: Neuroinflammation and Amyotrophic Lateral Sclerosis (In Press). DOI: 10.1007/978-981-10-1711-7_8

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Impact Factor: 4.99

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BBA-Molecular Basis of Disease

Impact Factor: 5.68

95. Deepak Chhangani, Sachin Chinchwadkar and <u>Amit Mishra</u>* (2014) Autophagy coupling interplay: Can improve cellular repair & aging? DOI: 10.1007/s12035-013-8599-z

Molecular Neurobiology

Impact Factor: 4.99

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Impact Factor: **5.68**

98. (Cover Page Story) Deepak Chhangani., Nihar Ranjan Jana; <u>Amit Mishra</u>* (2013) Misfolded Proteins Recognition Strategies of E3 Ubiquitin Ligases and Neurodegenerative Diseases. DOI: 10.1007/s12035-012-8351-0

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Neurobiology of Aging

Impact Factor: 5.68

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Molecular Neurobiology

Impact Factor: 7.04

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Neurobiology of Disease

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102. <u>Amit Mishra</u>, Swetha Kameshwari, Megha Maheshwari, Anand Goswami and Nihar Ranjan Jana. (2009) 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. DOI: 10.1074/jbc.M806804200

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103. Swetha K. Godavarthi, Doronala Narender, <u>Amit Mishra</u>, Anand Goswami, Sudheendra Rao, Nobuyuki Nukina and Nihar Ranjan Jana. (2009) Induction of chemokines, MCP-1 and KC in the mutant huntingtin expressing neuronal cells due to proteasomal dysfunction. DOI: 10.1111/j.1471-4159.2008.05823.x.

Journal of Neurochemistry

Impact Factor: 5.48

104. Amit Mishra, Priyanka Dikshit., Sudarshana Purkayastha., Jaiprakash Sharma., Nobuyuki Nukina and Nihar Ranjan Jana (2008) E6-AP promotes misfolded polyglutamine proteins for proteasomal degradation and suppresses polyglutamine protein aggregation and toxicity. DOI: 10.1111/j.1471-4159.2008.05823.x

Journal of Biological Chemistry

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105. <u>Amit Mishra</u> and Nihar Ranjan Jana (2008) Regulation of turnover of tumor suppressor p53 and cell growth by E6-AP, a ubiquitin protein ligase mutated in Angelman mental retardation syndrome. DOI: 10.1007/s00018-007-7476-1

Cellular and Molecular Life Sciences

Impact Factor: 5.48

106. Anand Goswami, Priyanka Dikshit, <u>Amit Mishra</u>, Nobuyuki Nukina and Nihar Ranjan Jana. (2006) Expression of expanded polyglutamine proteins suppresses the activation of transcription factor NFkappaB. DOI: 10.1074/jbc.M608095200 **Journal of Biological Chemistry**

Impact Factor: 5.48

107. Priyanka Dikshit, Chatterjee Mou, Anand Goswami, <u>Amit Mishra</u> and Nihar Ranjan Jana (2006) Aspirin induces apoptosis through the inhibition of proteasome function. DOI: 10.1074/jbc.M602629200

Journal of Biological Chemistry

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Biochemical and Biophysical Research Communication

Impact Factor: 3.32

109. Anand Goswami., Priyanka Dikshit, <u>Amit Mishra</u>, Shalaka Mulherkar., Nobuyuki Nukina and Nihar Ranjan Jana. (2006) Oxidative stress promotes mutant huntingtin aggregation and mutant huntingtin-dependent cell death by mimicking proteasomal malfunction. DOI: 10.1016/j.bbrc.2006.01.136

Biochemical and Biophysical Research Communication

Impact Factor: 3.97

110. Priyanka Dikshit, Anand Goswami, <u>Amit Mishra</u>, Chatterjee Mou and Nihar Ranjan Jana. (2006) Curcumin induces stress response, neurite outgrowth and prevent NF-KB activation by inhibiting the proteasome function. DOI: 10.1007/BF03033305 **Neurotoxicity Research**

111. Assirbad Behura, Mousumi Das, Ashish Kumar, Lincoln Naik, Salina Patel, Dev Kiran Nayak, Abtar Mishra, Rohan Dhiman Mycobacterial biofilm: Structure and its functional relevance in the pathogenesis (2022) (Elsevier Book Chapter) DOI: 10.1016/B978-0-323-99977-9.00018-1

Understanding Microbial Biofilm

Present: h-index: 31 i10-index: 69 Citations More than 15360 Average Impact Factor of each paper: 6.05

Total Impact Factor of Publications: 667.42

Patent:

Microparticles derived miR-125b role in infections during Thrombotic disorders: Anjali Sangeeth, Mahesh Malleswarapu, Amit Mishra, and Ravi Kumar Gutti* (Patent: Submitted-Under review)

Teaching Experience: Twelve Years (2010···Continue)

B.Tech Courses

- 1. Introduction to Biology
- 2. Undergraduate Biology Lab
- 3. Neuroscience
- 4. Cellular and Molecular Biology
- 5. Advance Biosciences
- 6. Neuroengineering System
- M.Tech and Ph.D. Courses
- 1. Ph.D. Bioscience Lab rotation
- 2. Neuroscience
- 3. Advance Biosciences
- 4. Physiology and Neuroscience
- 5. Advance Genetic Engineering

- 7. Cell and Molecular Biology
- 8. Introduction to Cognitive Science
- 9. Neuroscience
- 10. Introduction to Bioengineering
- 11. Animal Biotechnology
- 12. Concepts & Dynamics: Molecular Cell Biology
- 6. Neuroengineering System
- 7. Cellular and Molecular Biology
- 8. Advance Genetic Engineering
- 9. Fundamentals of Neuroscience

<u>Presently Total External Funding Secured by Amit Mishra in IIT Jodhpur = Near About 200.40 Lakhs</u>

S. No-Title of the projects	Role in Project	Funding agency	Record in IIT Jodhpur
01-Project Title: How leucine rich repeat and sterile alpha motif containing 11 Gene Regulates Cellular Protein Quality Control Functions? Implications In Neurodegeneration And Ageing Project Number: EMR/2016/000716	Principal Investigator- Amit Mishra Co- Investigator- Prof. Meenu Chhabra	Science and Engineering Research Board (SERB), Department of Science and Technology, Government of India. Fund: INR 23.10 Lakhs	IITJ R&D project number: EMR/2016/000716 Duration: 03 Years 2016-2019 Present status: Completed
02 -Project Title: How AMFR gene regulates cell division and cancer after stress exposure? Project Number: 2013/37B/15/BRNS	Principal Investigator- Amit Mishra Co- Investigator- Prof. R.N. Sharan	Board of research in nuclear sciences (BRNS)/Bhabha Atomic Research Centre (BARC) Fund: INR 23.90 Lakhs	IITJ R&D project number: BRNS/BISS/2013026 Duration: 03 Years 2013-2016 Present status: Completed
03-Project Title: Understanding the molecular function of MGRN1 in Chaperone Mediated Autophagy Project Number: BT/06/IYBA/2012	Principal Investigator- Amit Mishra	Department of Biotechnology (DBT), Ministry of Science and Technology India under (IYBA Scheme) Fund: INR 41.19 Lakhs	IITJ R&D project number: DBT/BISS/2013007 Duration: 03 Years Present status: Completed
04- Complexity of protein misfolding and aggregation: Identification, assessment and characterization of cellular factors involve in proteotoxicity-SERB/LS-316/2013	Principal Investigator- Amit Mishra	Science and Engineering Research Board (SERB), Department of Science and Technology, Government of India-Project Awarded Fund: INR 23 Lakhs	R&D project number: SERB/LS-316/2013 Duration: 03 Years Present status: Sanctioned (N/A)
05 -Project Title: Emergence of Unifying Early Protein Quality Control Signalling Pathways in Aggregation Mediated Cellular Proteotoxicity Project Number: IA/INSA-JSPS Project/2013-2016	Principal Investigator- Amit Mishra Collaborator- Prof. Koji Yamanaka	Indian National Science Academy (INSA)-Japan Society for the Promotion of Science (JSPS) international fellowship Fund: Entire Bilateral Travel Support	IITJ R&D project number: Document submitted in IITJ Duration: 03 Years 2013-2016 Present status: Completed
06 -Understanding the Molecular Function of Protein Quality Control Mechanism	Principal Investigator- Amit Mishra	Indian Institute of Technology (Start Up Grant)-External Review Defended and Project Awarded	IITJ R&D project number: Document submitted in IITJ Duration: 03 Years 2013-2016 Present status: Sanctioned (N/A)
07 -Project Title: Identification, assessment and characterization of E3 Ubiquitin ligases and molecular chaperones implicated in Neurodegenerative diseases Project Number: DST/INT/JSPS/P-118/11	Principal Investigator- Amit Mishra Collaborator- Prof. Koji Yamanaka	Department of Science and Technology (DST) - Japan Society for the Promotion of Science (JSPS) Fund: INR 05.50 Lakhs	IITJ R&D project number: SPO-DST-BIS-MPDC- 20110006 Duration: 02 Years 2011-2013 Present status: Completed
08 -Project Title: Identification, assessment and characterization of E3 ubiquitin ligases implicated in neurodegenerative diseases Project Number: BT/RLF/Re-entry/11/2010	Principal Investigator- Amit Mishra Co- Investigator- None	Ramalinganswami fellowship Scheme Department of Biotechnology (DBT), Ministry of Science and Technology India Fund: INR 74.50 Lakhs Or 113117 US (\$)	IITJ R&D project number: DBT/BISS/20130006 Duration: 05 Years 2011-2016 Present status: Completed
09- Project Title: Understanding The Molecular Specific Scales of Tumor Suppressor Gene 101 (tsg101) encoded LRSAM1 E3 Ubiquitin Ligase In The Elimination of Polyglutamine Proteins Project Number: 201812HLC01RP0 5527-BRNS	Principal Investigator- Amit Mishra Collaborator- Prof. Somnath Ghosh	Board of research in nuclear sciences (BRNS)/Bhabha Atomic Research Centre (BARC) Fund: INR 26.34 Lakhs	R&D project number: 201812HLC01RP0 5527-BRNS Duration: 03 Years 2019-2022 Present status: Running

Invited International Presentations:

Amit Mishra* Neuronal Protection Strategies: Molecular Architects Misfolded Proteins Accumulation Japan Neuroscience Society (JNS), Annual Meeting, Japan 2017

Amit Mishra* Neurobiological Protective Strategies Against Neurodegeneration and Ageing Society for Neuroscience (SFN)-International Symposium On Neurodegenerative Diseases 2017.

Amit Mishra* Quality Control E3 Ubiquitin Ligases Reduces The Aggregation And Cytotoxicity Of Misfolded Proteins: Enhancement in Neurodegeneration and Ageing Asian-Pacific Society for Neuroscience (APSN), Kuala Lumpur 2016

Deepak Chhangani, Fumito Endo, Ayeman Amanullah, Arun Upadhyay, Seiji Watanabe, Ribhav Mishra, Koji Yamanka* and **Amit Mishra*** Mahogunin ring finger 1 confers cytoprotection against mutant SOD1 and defective in ALS mice International Symposium ALS/MND meeting in Orlando, Florida, USA 2015.

Deepak Chhangani, Koji Yamanaka, **Amit Mishra*** Mahogunin ring finger 1, ubiquitin-protein ligase confers neuroprotection against misfolded protein aggregation and toxicity International Symposium on ALS/MND, Brussels, Belgium 2014.

Amit Mishra*, Megha Maheshwari; Deepak Chhangani, Noriko Fujimori Tonou, Fumito Endo, Ajay P Joshi, Nihar R Jana and Koji Yamanaka* (2013) E6-AP association promotes SOD1 aggresomes degradation and suppresses toxicity. Society for Neuroscience (SFN) USA 2013

Amit Mishra* Protein quality control mechanism is neurodevelopmental disorders and cancer. Riken Brain Science Institute, Japan 2011

Amit Mishra* and Nihar Ranjan Jana. Role of E6-AP acting as a E3 ubiquitin ligase in molecular pathogenesis mechanism of neurodevelopmental disorder and neurodegenerative diseases. Max Planck Institute, Department Cellular Biochemistry, Martinsried, Germany 2008

Amit Mishra, Yamashita Hirofumi, Yamanaka Koji and Nihar Ranjan Jana E6-AP an Ubiquitin Ligase Associates with Mutated Superoxide Dismutase (SOD1) and Promotes Their Degradation by Proteasomes pathway. Riken Brain Science Institute, Japan 2007

Amit Mishra and Nihar Ranjan Jana. Angelman ubiquitin ligase promotes ubiquitin-mediated degradation of tumor suppressor p53 in the neuronal cells. Riken Brain Science Institute, Japan 2007

Invited National Presentations:

Amit Mishra* Complex Defective Neuronal Pools: Molecular Abnormalities of Neurodegeneration & Ageing" TBRS 2020

Amit Mishra* How the depletion of proteome complexity leads to neurodegeneration and imperfect ageing. International Conference on Biotechnology for Sustainable Agriculture, Environment and Health BSAEH-2020-21

Amit Mishra* How Artificial Intelligence can be helpful to better understand neurodegeneration RAIMA-2020-21

Amit Mishra* How proteasome modulations approaches can induce apoptosis to regulate improper cellular proliferation and complex disorders. Carcinogenesis 2019, India.

Amit Mishra* How defective proteome complexity contributes in neurodegeneration and imperfect ageing? BITS Pilani, India

Amit Mishra* Imbalance Cellular Homeostasis and Molecular Defects of Protein Quality Control Mechanism Linked with Neurodegenerative Diseases. Indian Academy of Biomedical Sciences (IABS 2019), India.

Vibhuti Joshi and **Amit Mishra*** Small Natural Molecules: Possible future Therapeutic Targets for Neurodegenerative Diseases and Uncontrolled Cellular Proliferation VI Rajasthan Science Congress, India 2018

Amit Mishra* Rejuvenation Neurobiological Mechanisms Against Neurodegeneration and Ageing International Brain Research Organization (IBRO)-APRC School in Neuroscience, India 2017

Amit Mishra* Proteostasis Restoring Factors: Molecular Strategies Against Neurodegeneration and Ageing ISCB 2017

Amit Mishra* Multi-Level Regulation Over Stree-Driveless Misfolding of Proteins: Threaten Proteostasis a Turning Point In Neurodegeneration And Ageing Indian Society of Cell Biology (ISCB Annual Meeting) 2016

Amit Mishra* Understanding the Pathomechanism of Cellular Quality Control Machinery in Misfolded Proteins Aggregation: Implications in Neurodegeneration and Ageing. National Brain Research Centre India (IAN Meeting)

Amit Mishra* How to Hunt Misfolded Proteins For Intracellular Elimination: A Cellular Protein Quality Control Defense Mechanism Against Neurodegeneration And Ageing. University of Barodra, India 2016

Amit Mishra* BioAsia Drug Discovery and Innovation Programme 2016

Amit Mishra* Cellular Quality Control Mechanism: A Cellular Service Alleviates Neurodegeneration and Ageing International Conference on Ubiquitin and Ubiquitin like Modifications: Mechanisms and Implications for Human Diseases (NCBS-TIFR) 2016

Amit Mishra* Ageing and Neurodegeneration: Unsolved Puzzle of Cellular Quality Control Mechanism

Amit Mishra* Professor H. S. Srivastava Memorial Young Scientist Award Lecture: PHSS meeting. 2015

Amit Mishra* Prof. Umakant Sinha Memorial Award Lecture in Indian Science Congress Association (ISCA) meting. 2015

Amit Mishra* Clearance of misfolded proteins implications in Aging and Neurodegenerative Diseases. IGC, India 2015

Amit Mishra* Cellular Protein Quality Control Mechanism and Implications in Diseases. Indo-Japan Bilateral BICON, India 2014

Amit Mishra* Cellular Mechanisms Implicated in Biologically-Inspired Systems. Hindustan Aeronautics Limited (HAL), India 2013

Administrative Experience: 2010...Continue

Convener of International work Biologically Inspired System Science Conference: 2012 **Coordinator** of Department Biologically Inspired System Science-Centre of Excellence 2013

Special Invitee Member Senate IIT Jodhpur 2013

Coordinator Sports Committee 2010-2012

Chairman Chemical purchase/Consumables Purchase Committee 2012

Coordinator WAVES-Student activity) 2012 Member Institute Transport Committee 2012

Member Council of Warden (CoW) committee 2010-2012

Convener Convocation Degree Generation and Validation Committee 2013

Coordinator of Ph.D. Selection Committee IIT Jodhpur 2011 **Coordinator** of M. Tech Selection Committee IIT Jodhpur 2011

Coordinator Varchas-Student activity 2010-2011 Member of Innovation and Incubation Centre 2012

Special Invitee: Hindustan Aeronautic Limited (HAL), IIM executives and officers of HAL, Bangalore, India Committee Expert Member: National Fellowships for Students Interested in Research Careers 2017 Chairman of Ph.D. Selection Committee (Department of Bioscience & Bioengineering) 2017 IIT Jodhpur Convener of Ph.D. Selection Committee (Department of Bioscience & Bioengineering) 2018 IIT Jodhpur Convener of M.Tech. Selection Committee (Department of Bioscience & Bioengineering) 2018 IIT Jodhpur

Chairman of Permanent Campus Services of Indian Institute of Technology Jodhpur 2019-2021 **Coordinator** of M. Tech Program in Department of Bioscience & Bioengineering 2020-2021 **External Grant Expert:** BIRAC Gandhian Young Technological Innovation Award Grant 2019-2020

External International Grant Expert: Chargée de mission Plan Inserm - Département de l'Evaluation et du Suivi des

Programmes (DESP), Paris, France 2019-2020

External Invited Expert: IIT GATE- Biomedical Engineering Exam 2019-2020

External Expert: Bio concurrence School of Biotechnology, Rajiv Gandhi Proudyogiki Vishwavidyalaya 2020

Member Institute Academic Programs Time Table Committee Member 2019-2020 Department of Bioscience & Bioengineering UG Class Representative 2019-2020

Chairman: Procurement Finalization Committee (PFC-MCS)

Member: Indian Prime Minister Research Fellowship Committee IIT Jodhpur 2020-2023

Member: Department of Bioscience & Bioengineering Lab Development Committee 2019-2020

Member: Faculty Short Listing Recruitment Committee Member IIT Jodhpur 2019-2021 **Selection Committee Member** for Project Staff for external projects 2019-2020

External Ph.D. Thesis Examiner: JNU, SRM, IIT Roorkee, RGCB, NIMHANS, BITS Pilani, Central University of Hyderabad,

Allahabad University and other Universities

External Expert: Skill Vigyan Programme In Partnership with Department of Biotechnology, Ministry of Science and Technology India 2020

Expert Committee Member: Union Public Service Commission (UPSC), India

Collaborations:

- Riken Brain Science Institute, Japan
- Institute of Environmental Medicine, Nagoya University, Japan
- National Brain Research Centre, India
- ICGEB, India
- Indian Institute of Technology Mandi
- Indian Institute of Technology Indore
- Juntendo University Graduate School of Medicine, Japan
- Indian Institute of Technology Roorkee
- Central Drug Research Institute (CDRI) India

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