PROF. PRAVIR KUMAR, PhD

(Dr. phil. nat.; Frankfurt am Main, Germany)
PROFESSOR (Tenured)
Dean of International Affairs at DTU
Head, Department of Biotechnology at DTU
Former Dean, of Alumni Affairs at DTU

PERSONAL INFORMATION:

Professor-**08 years**, **Associate Professor- 07 years**; **Administrative experience**: **10 years**; **Research experience**-**20 years**, **Teaching experience**: **15 years**
M.Sc.: Banaras Hindu University (**BHU**), Varanasi
PhD (Germany): J. W. Goethe University, Frankfurt am Main, (Germany), 2004; Major: *Cardiovascular Physiology and Functional Genomics*
Postdoctoral research associate fellowship/Junior faculty (USA): St. Caritas Elizabeth Medical Centre and Tufts University school of Medicine, Boston, Massachusetts, (USA); *Major: Molecular Neuroscience and Functional Genomics*
Work devoted (in %): Administration: **60**; Research: **20**; Teaching: **20**

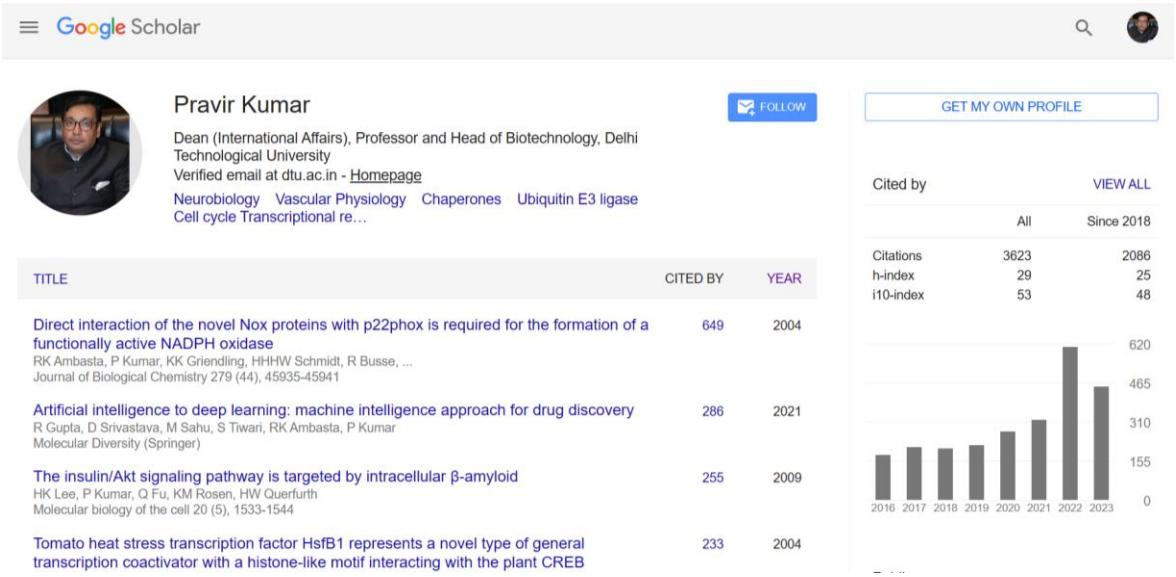
ADMINISTRATIVE EXPERIENCE: (MORE THAN 10 YEARS)

Dean (Sep 2022-present), International affairs, Delhi Technological University (NCT Government of Delhi), **Chair/HoD (Jan 2021-present)**, Department of Biotechnology, Delhi Technological University (NCT Government of Delhi), **Former Dean (Jan 2018-March 2020)**, Alumni affairs Delhi Technological University (NCT Government of Delhi); **Chairman (2019-present),** Departmental Research Committee, DTU; **Chairman (Jan 2021-present),** Board of Studies, DTU; **National Expert member (2019-2022)** Soldiers health and drug discover (SHDD), Defense Research and Development Organization, **Ministry of Defense, Government of India**; **National Expert member** United States India Educational Foundation (USIEF)- **Fulbright programme**; **National Expert member (2022-present)**-Toxicology and Pharmacology Division, Indian Council of Medical Research (ICMR), **Ministry of Health, Government of India**; **National Expert member (2022-present)**-International Fellowship Division, Indian Council of Medical Research (ICMR), **Ministry of Health, Government of India**; **Chairman (2021-present)**-Departmental purchase committee, DTU; **Core member** Joint admission committee, DTU; **Assistant Director**- Centre for Medical Engineering at Vellore Institute of Technology (VIT), Vellore; **Advisor**- Confidential work of GoI, Selection panel in Assistant Professor and Professor (Confidential)

RESEARCH EXPERIENCE: (MORE THAN 20 YEARS)

Major: Neurobiology and molecular medicine

Number of peer reviewed publications: **99** (Cumulative impact factor 425 approx.); Conference paper and proceedings: **150**; h-index:**29**; i-10index: **53**; Citations: **3623**; PhD students guided: **10** awarded; 10 (ongoing); MS and BS level students guided: more than **100**



20 years of rich experience in the mammalian physiology and molecular medicine including drug screening and discovery, characterization and implementation of drugs, full proficiency in dealing with human samples (biopsy and autopsy), primary cell culture, various cell lines and therapeutics. Full command on genomics, proteomics and molecular biology tools; **PhD** (2004): coronary artery disease gene regulation (Genomics), Frankfurt am Main, Germany; **Postdoctoral experience (2004-2007)**: in Neurobiology, Tufts University School of Medicine (TUSM), Boston USA; **Research instructor/Adjunct research instructor (2008-2016)** in Neurobiology at TUSM, (USA). Published several manuscripts in high impact and very reputed journals from India and established one centre and two laboratories with vibrant minds. My future plan is to establish a centre for neurodegenerative disorders and diagnostic (CNDD), to study the lethality of various neuro degenerative disorders and brain tumors with treatment strategies, drug screening and lead molecule identification. Further establishment of a cohesive liasioning between hospital and academia (Bench to bedside).

TEACHING EXPERIENCE: (MORE THAN 15 YEARS)

Taught BS, MS and PhD students, **PhD students guided**: **10** awarded; 12 (ongoing); MS and BS level: more than 90

Curriculum moderator: Course designed for Bachelor of Technology (B.Tech) of Biotechnology; **Curriculum Designer**: M.Tech Biomedical Engineering; Course content designer, Signal Transduction

Teaching Philosophy: "Good teacher teaches, and great teacher inspires"

I am committed to an interdisciplinary approach to research and teaching, and all my courses are structured accordingly. Rather than simply lecturing to a class, I strive to cultivate an interactive environment in which students can express themselves freely while learning to engage with the past in meaningful ways. My experience in universities (VIT and DTU) takes great pride in its training of young scholars, and I feel that it is my responsibility to uphold these standards and to encourage and challenge students to work up to their potential, in hopes that their experiences in my classes will teach them far more than the history of biological sciences. I encourage students to work hard, understand concepts and deliver presentations.

I am preparing classes well in advance so that information flow in a streamline manner to their brains. My classes are flooded with intermittent assessments, discussion, tutorials, quiz, and higher-order thinking questions and of course troubleshooting (if any). My teaching methodology included, regular lecture on smart board, PPT presentation, video demonstration. Developed different courses such as signal transduction, molecular medicine, Medical biotechnology, Molecular Neurobiology and many more

REVIEWING AND EDITORIAL ASSIGNMENTS

EDITORAL BOARD MEMBERS (10)

Editor, Scientific Reports (Nature Publication house); Associate Editor, Journal of Alzheimer's Disease (2014- July 2020; IOS press); **Review Editor**, Frontier Drug discovery, **Editor**, International Journal of Neurology Research; **Editor,** International Journal of Hematology Research; **Editor,** Journal of Clinical Trials and Patenting; **Associate Editor**, American Journal of Research Communication; **Associate Editor**, Advances in Obesity, Weight Management & Control; **Editor,** International Journal of Advanced Biotechnology and Bioinformatics; **Academic Editor**, International journal of Bioinformatics; **Editor,** SOJ Biotechnology

INVITED REVIEWER

ELSEVIER (15)

Ageing Research Reviews, Biomaterial Acta, Pharmacology & Therapeutics, Advanced Drug Delivery Reviews, Journal of Nutritional Biochemistry; BBA-Molecular Basis of disease; Brain Research; Life Sciences; Behaviour Brain Research; Environmental Research; Neurochemistry International; Brain, Behaviour and Immunity; Multiple Sclerosis and Related Disorders; Informatics in medicine unlocked, Computers in Biology and Medicine

SPRINGER (06)

Cellular and Molecular Life Science; Cellular and Molecular Neuroscience; Journal of Genetics; Translational Neurodegeneration (BMC/Springer); Molecular Brain, Molecular Diversity

OXFORD, CELL, ACS, BMC, WILEY, TRANSACTION, BENTHAM AND OTHERS (23)

Briefing in Bioinformatics (Oxford), iScience (Cell press), Journal of Agricultural and Food Chemistry (ACS publication); PlosOne; Neural Regeneration Research; DARU journal of Pharmaceutical Sciences (BMC journal); Current Medicinal Chemistry (Bentham); Bentham Direct; Current Computer-Aided Drug Design (Bentham); Cellular Physiology and Biochemistry (KARGER); Journal of Young Pharmacy; ` Oncotarget; Indian Journal of Medical Research; Annals of Clinical and Translational Neurology (Wiley); ChemMedChem (Wiley); Journal of Neurochemistry (Wiley), Motor Neuron Disorders (MND), United Kingdom; Biochemical Society Transaction; Science Progress (SAGE), Frontiers in Ageing Neuroscience; Expert review of Proteomics (Taylor and Francis); Cell Biology International (Wiley); Journal of clinical medicine (MDPI)

HONORARY MEMBER

1. Member Toxicology and Pharmacology Division, Indian Council of Medical Research (ICMR), **Ministry of Health, Government of India**
2. Member-International Fellowship Division, Indian Council of Medical Research (ICMR), **Ministry of Health, Government of India**
3. **Specialist panel**, Soldier Health & Drug Development (SH&DD) Panel, DRDO Ministry of Defense, Government of India (2018-2021)
4. **Member**, National selection committee USIEF-Fulbright program
5. **Executive committee member**, National Research Development Corporation (NRDC), Ministry of Science and Technology, Government of India
6. Adhoc **Grant Reviewer**, SERB-DST Board, Government of India
7. Adhoc **Grant Reviewer**, Department of Biotechnology, Government of India
8. **Faculty expert**, e-PG Pathshala (an initaitive of UGC and MHRD, Government of India)
   P-04. Genetic Engineering and recombinant DNA technology: (36 Modules)
   Online course development; https://epgp.inflibnet.ac.in/; Please select module 3; 11; 22; 23; 24; 26.

STATS:

Publications: 99; Book chapter: 10; Conference and proceedings: 84; Invited talks: 42; PhD guided: 10 (Degree awarded); M.Tech./M.Sc theses supervised: >50; B.Tech theses supervised: 20; Citation: 3614; h-index: 29; i10-index: 63; Cumulative Impact factor: 435 (approx.)
Publications: Corresponding author: **43;** First author**: 09**; Co-author**: 18; Book Chapters: 09; Conference and proceedings: (Total= 80) First author: 08; Co-author: 25; Corresponding author: 55; Grant reviewed: >300; Manuscript reviewed: >250**

RESEARCH FOCUS:

1. To investigate the role of medicinal plant extract in the reversal of many neurodegenerative disorders and examine their role on signalling pathways.
2. To determine the role between Type III diabetes (Alzheimer's disease) and interlinked mechanism through insulin resistance in neuronal damage.

3. To elucidate the mechanism of HSPs action together with CHIP in attenuation of toxic Aβ peptide: The outcome of this project gives us an idea about the co-operative action of molecular chaperones and ubiquitin E3 ligase in the defibrillation of $A\beta_{1-42}$ in vivo condition. Furthermore, how misfolded or aggregated proteins are rescued by chaperones by changing oligomeric or fibrillar architectures to non-toxic monomers? In Kumar et al, 2007, 2012 we have shown that molecular chaperone and E3 ligase CHIP is attenuating the toxic effect of $A\beta_{1-42}$ fibril and oligomers but how it is helpful to disrupt the plaque is still unsettled and requires a comprehensive investigation.
4. To establish the involvement of Parkin and CHIP in crosstalk between AD and PD at Aβ level, C-terminus Hsp70 interacting protein is a bifunctional protein and acts as a connecting link between molecular chaperone and ubiquitin-proteasome system. We have shown in cultured neurons that CHIP and Parkin is significantly attenuating the toxic effect of $A\beta_{1-42}$ and inhibit the cell death and apoptosis (Kumar et al, 2007 HMG, Veereshwarayya et al., 2006 JBC; Rosen and Kumar et al, 2010). Hence this project will tell us the co-operative action of ubiquitin E3 ligases CHIP and Parkin in Aβ clearance.
5. To dissect the role of post-mitotic cell division and activation of apoptotic pathway in aged neurons and muscles (Kwon et al, 2014 HMG)**.** Post mitotic cell divisions are lethal for aged neurons and muscles. We have shown that upon $A\beta_{1-42}$ insult in muscles (in case of inclusion body myositis) and neurons (in case of AD and PD), different cyclins are re-expressed and obviously cells are forced to enter the apoptotic pathway. This project will give us an idea about signaling mechanism behind cyclins re-expression and triggering the apoptotic pathways in AD, PD and IBM.
6. To investigate the role of E3 ligase and molecular chaperones on muscle and neurons under extreme hypoxia: We are using acute and chronic hypoxic mice models that mimic the high-altitude condition where partial pressure of O_2 drops down significantly from 21% to 8% and disturbs the physiological homeostasis. This unbalanced physiological condition causes various health problems, including high-altitude headache (HAH), acute mountain sickness (AMS), high-altitude cerebral oedema (HACE) and cerebral cellular hypoxia. Moreover, lack of oxygen slows the reflex action, weakness of muscle and cognitive impairments. This project will tell us how different genes are activated and ubiquitinated under hypoxic conditions and what could be a possible rescue mechanism mediated by molecular chaperones and ubiquitin E3 ligase.

EMPLOYMENT, TRAINING AND EDUCATION

INSTITUTION AND LOCATION	POSITION or DEGREE RECEIVED	YEAR(s)	FIELD OF STUDY
Delhi Technological University (Formerly Delhi College of Engineering)	**PROFESSOR**	July 2015-present	Neurobiology and Molecular Medicine
Delhi Technological University (Formerly Delhi College of Engineering)	**DEAN (INTERNATIONAL AFFAIRS)**	Jan 2021-present	Senior level administration and policy making at Department and University level
Delhi Technological University (Formerly Delhi College of Engineering)	**HEAD OF THE DEPARTMENT**	Jan 2021-present	Senior level administration and policy making at Department and University level

Delhi Technological University (Formerly Delhi College of Engineering)	**DEAN** (ALUMNI AFFAIRS)	Jan 2018-March 2020	Senior level administration and policy making at university level
Delhi Technological University (Formerly Delhi College of Engineering)	Associate Professor	July 2012-July 2015	Neurobiology and Molecular Medicine
Adjunct Faculty, Tufts University School of Medicine, Boston, MA USA	Adjunct research instructor	August 2009-Jun 2016	Neurobiology and Molecular Medicine
VIT University, Vellore TamilNadu	Assistant Director, Centre for Medical Engineering	Jan 2011-July 2012	Neurobiology and Molecular Medicine
VIT University, Vellore TamilNadu	Associate Professor	Jan 2009-July 2012	Neurobiology and Molecular Medicine
VIT University, Vellore TamilNadu	Assistant Professor	Nov 2008-2009	Neurobiology and Molecular Medicine
Tufts University School of Medicine Boston MA	Research Instructor in the Faculty of Medicine	2007-2008	Medicine/Neurobiology Supervisor: Henry W. Querfurth Chief: Allan H. Ropper
Tufts University School of Medicine Boston MA	Senior Research associate and Postdoctoral Fellow	2004-2007	Medicine/Neurobiology Supervisor: Henry W Querfurth Chief: Allan H. Ropper
J. W. Goethe University Frankfurt/Main, Germany	Ph.D. BAT II/2 position	2001-2004	Medicine/ Cardiology Mentors: Rudi Busse and Ingrid Fleming
J. W. Goethe University Frankfurt/Main, Germany	Diploma with Thesis	1999 - 2001	Molecular and Cell Biology Mentor: Lutz Nover
Banaras Hindu University Varanasi, India	MS	1997-1999	Zoology, with specializations in Molecular, Applied, and Clinical Genetics

PhD THESIS GUIDED (SINGLE SUPERVISION,*: CO-SUPERVISION)

Name	Title	Degree awarded
Kushi Anand	Characterization and screening of biomolecules for cancer therapy (single supervision)	Awarded, June, **2013** (Currently working as DBT Welcome early fellow at IISc, Bengaluru)
Sonia Angeline	Rotenone induced Parkinson's disease model and differential expression of molecular chaperones (single supervision)	Awarded, June, **2013** (Currently working as an Assistant Professor at Bengaluru)
Aditi Sarkar	Neuroprotective effect of bio molecules (Naringenin and Quercetin)	Awarded, August **2013** (Currently working as a Director, in Genomic, Dubai)

	under hypoxic stress conditions (single supervision)	
Renu Sharma	Cyclin, HSPs and E3 ligase activity in cell cycle deregulation and neuro-muscular degeneration (single supervision)	Awarded, December, **2017** (Currently working as a Scientist in a Pharma company, Bengaluru)
Saurabh Kumar Jha	Therapeutic action and signaling mechanism of biomolecules in neurodegenerative disorders (single supervision)	Awarded, December, **2017** (Currently working as an Assistant Professor at Sharda University, Noida, UP)
Niraj Kumar Jha	Organs damage under hypoxic stress condition and their therapeutics approaches (single supervision)	Awarded, December, **2017** (Currently working as an Assistant Professor at Sharda University, Noida, UP)
Dhiraj Kumar	Characterization, investigation and clearance mechanism of neurotoxic proteins in AD and PD (single supervision)	Awarded, December, **2019** (Currently working as a postdoctoral fellow at National Institute of Eye, NIH, Bethesda, USA)
Pooja Shrivastava (*)	Design, synthesis and characterization of novel heterocyclic ligands for biomedical imaging (joint supervision)	Awarded, December, **2019** (Currently working as Scientist D at Institute of Nuclear Medicine and Sciences, INMAS, Delhi)
Rohan Gupta	Acetylation mechanism and HDAC's enzymes in neurodegenerative diseases	Provisional degree awarded (2023)
Dia Advani	Intrinsic mechanism of anti-cancer drugs in neurodegenerative disorders	Provisional degree awarded (2023)
Smita Kumari (DBT-JRF)	Modulating tumor microenvironment using combinatorial therapy	**PhD thesis submission**
Rahul Tripathi (DBT-SRF)	Deciphering mechanism of Alzheimer's and Parkinson's disease using network biology and functional genomics approach	**Ongoing (2019-)**
Sudhanshu Sharma (DST-INSPIRE Fellow)	Collaborative action of molecular chaperones, ubiquitin E3 ligase and signalling molecules in the reversal of glioblastoma and other brain tumors	**Ongoing (2020-)**
Sonika Kag (*) CSIR JRF	Sustainable production of industrially important chemicals from Agro-industrial	**Ongoing (2021-)**

Neha Kukreti (*)	Implementation of stubble waste for biotransformation to industrially important chemicals	**Ongoing (2021-)**
Mehar Sahu	Proteinopathies, proteotoxicity and protein triaging in neuro-degenerative disorders	**Ongoing (2022-)**
Neetu Rani- CSIR fellow	Therapeutic implications of ubiquitin proteasome system in neuro-degenerative diseases	**Ongoing (2022-)**

KEY RESEARCH FINDINGS

1. Key lysine residues in the Aβ ubiquitination (Kumar and Kumar, Journal of Alzheimer's disease, 2019 and Interdisciplinary Sciences: Computational Life Science, 2019; Kumar and Kumar, Neuropeptide, 2019; Ageing research Review, 2020)
2. Cell cycle re-entry and cell division dysfunctioning in Alzheimer's Disease (AD), Inclusion Body Myositis (IBM) and Polymyositis patients (PM), Kwon and Kumar et al., Human Molecular Genetics, 2014; Sharma et al., BBA Molecular Basis of Disease, 2017)
3. Sesamol has neuroprotective capacity to reverse the symptoms of Parkinson's Disease (Angeline et al., 2012 & 2013, Neuroscience; Sarkar et al., 2012 Brain Research)
4. Flavonoids can rescue the hypoxia induced neurodegeneration (Sarkar et al., 2012 Brain Research)
5. Heat shock proteins mediated attenuation of toxic $A\beta_{1-42}$ level in the brain (Kumar et al., Human Molecular Genetics 2007).
6. Ubiquitin E3 ligase CHIP and Parkin assisted $A\beta_{1-42}$ clearance (Kumar et al., Journal of Neurochemistry 2012; Rosen et al., Journal of Neuroscience Research 2010)
7. Cell cycle re-entry and cell division dysfunctioning in Alzheimer's Disease (AD), Inclusion Body Myositis (IBM) and Polymyositis patients (PM), Kwon and Kumar et al., Human Molecular Genetics 2014)
8. Direct interaction of the novel Nox proteins with p22phox for the formation of a functionally active NADPH oxidase (Ambasta et al., 2004 Journal of Biological Chemistry)

RESEARCH, TEACHING AND ADMINISTRATIVE EXPERIENCE

2015-present	**Professor**	Department of Biotechnology, Delhi Technological University (Delhi College of Engineering), Delhi
09/2022-present	**Dean**	International affairs at DTU
2021-present	**Head (HoD)**	Department of Biotechnology
01/2018- March 2020	**Dean**	Alumni affairs, DTU
2019-present	Chairman	Department Research Committee chairman, DTU
2012-2015	Associate Professor	Department of Biotechnology, Delhi Technological University (Delhi College of Engineering), Delhi
2009 -2016	Adjunct Faculty	Tufts Univ. School of Medicine, Boston, USA
2009 -2012	Associate Professor	School of Biosciences and Technology (SBST), VIT University, Vellore, India

2011-2012	Assistant Director	Centre for Medical Engineering, VIT, Vellore
2008-2009	Assistant Professor	School of Biosciences and Technology (SBST), VIT University, Vellore, India
2007-2008	Research Instructor	Department of Neurobiology, Tufts Univ. School of Medicine and Caritas St. Elizabeth's Medical Center, Boston, USA
2006-2007	Senior Research Associate	Department of Neurobiology, Tufts Univ. School of Medicine and Caritas St. Elizabeth's Medical Center, Boston, USA
2004-2006	Postdoctoral Fellow	Department of Neurobiology, Tufts Univ. School of Medicine and Caritas St. Elizabeth's Medical Center, Boston, USA
2001 2004	PhD Student	Institute for Cardiovascular Physiology, Faculty of Medicine, Goethe-University, Frankfurt am Main, Germany
1999-2001	Diploma thesis student	Department of Molecular and Cellular Biology, Faculty of Biology, Goethe-University, Frankfurt am Main, Germany
1997 - 1999	MS student (zoology)	Dept. of Zoology, Banaras Hindu University, Varanasi, India (Specialization: Molecular Biology and Clinical genetics).

Honors

2009 -	2012	LSRB-Defense Research and Development Organization grant: "Functional Role of Heat Shock Proteins and Ubiquitin E3 Ligase under Hypoxic Stress Conditions" LSRB-200/EPB/2009 (Role: Principal investigator) recipient PROJECT COMPLETED
2004	PhD Thesis defence	"Sequencing and functional analysis of CYP2C promoter isolated from porcine coronary artery endothelial cells", Institute for cardiovascular Physiology, Goethe University, Frankfurt, Germany. Guides Late Prof. Dr. Rudi Busse and Prof. Dr. Ingrid Fleming
2001	Diploma Thesis defence	"Characterization of C-terminal domain of Heat Shock Transcription factor B1 (Hsf B1)", Department of molecular and cellular biology, Goethe University, Frankfurt, Germany. Guide: Prof. Dr. Lutz Nover

ADMINISTRATIVE ASSIGNMENTS

1. Dean- International affairs (September 2022- present)-Managing around 600 international students from 50 countries. Their activities, liasioning between university and The Indian council of Cultural Relationship (ICCR), DASA admission, EdSIL (Ministry of Education) and Study in India (SII), Ministry of external affairs, interaction and visit to Embassies, Collaboration, and partnership between DTU and international universities, manpower (Students and faculty) exchange, liasioning with Foreigners regional registration officers (FRRO) to facilitate visa extension for overseas students.
2. Head of the Department/Chair (Biotechnology)- (January 2021-present)
3. Dean- Alumni affairs (January 2018- March 2020); Liasioning between alumni and DTU, active role in fund raising, within a year Rs 7 crores (given or pledged) fund has been raised for infrastructure development and fellowship endowment. Creation of many alumni databases (around 4000 plus one-to-one interactions with alumni); organization of Homecoming meet for Golden (1969) and Diamond (1959) Jubilee batches. Close interaction with alumni association and DTU, MoU between

University of Georgia Athens USA and DTU, revived the previous MoU between University of Houston Texas USA and University of South Florida, USA).

4. Chairman, Department Research Committee (DRC, Biotechnology)- 2019 December
5. Chairman, Department Board of Study (BOS, Biotechnology)- 2021 January
6. Chairman, Department Purchase committee (DPC, Biotechnology)- 2021 January
7. Member selection committee: Assistant professor (Biotechnology)- contractual and regular-2014
8. Vice Chairman and admission officer in B.Tech and core committee member of Joint Admission Committee 2014 (JAC 2014, 2015), DTU
9. Course coordinator and B. Tech. Biotechnology curriculum moderator 2015
10. Hostel Warden, Sir C. V. Raman Hostel, DTU (Jan 2015-March 2015)
11. PhD coordinator 2014-15 of Department of Biotechnology, DTU
12. HOD in-charge, Department of Biotechnology (December 2013, 2014), DTU
13. Departmental Research Committee (DRC) member, Department of Biotechnology, DTU
14. Departmental Purchase Committee (DPC) member, Department of Biotechnology, DTU
15. Examination and practical superintendent (2014), Department of Biotechnology, DTU
16. TEQIP-II coordinator, Department of Biotechnology, DTU
17. M.Tech. and PhD coordinator (2013-14), Department of Biotechnology, DTU
18. M.Tech. program coordinator, Biomedical Engineering, Department of Biotechnology, DTU
19. Time table coordinator (2013-14), Department of Biotechnology, DTU
20. Core committee member, Culture council, Delhi Technological University, DTU
21. Anti-ragging squad committee member, Delhi Technological University, DTU
22. Assistant Director, Centre for Medical Engineering, VIT University Vellore (January 2011-June 2012)
23. Research Program Coordinator, School of biosciences and Technology, VIT University (April 2010-2011)

PEER REVIEWED PUBLICATIONS [My NCBI]

Cumulative impact factor of all publications = **450** (approx.); h-index: **29**; i-10:**53**
Cumulative citation index = **3623**
[*: Corresponding author]

2023

1. Rohan Gupta, Dia Advani, Divya Yadav, Rashmi K Ambasta, Pravir Kumar* (2023), Dissecting the relationship between neuropsychiatric and neurodegenerative disorders, **Molecular Neurobiology**. Accepted **IF: 5.1** (Springer) [*: Corresponding author] DOI: 10.1007/s12035-023-03502-9.

2. Rohan Gupta, Smita Kumari, Anusha Senapati, Rashmi K. Ambasta, Pravir Kumar* (2023), New era of Artificial intelligence and machine learning -based detection, diagnosis and therapeutics in Parkinson's disease, **Ageing Research Reviews,** 90 (2023) 102013 **IF: 13.1** (Elsevier) [*: Corresponding author] https://doi.org/10.1016/j.arr.2023.102013

3. Smita Kumari, Pravir Kumar* (2023), Identification and characterization of putative biomarkers and therapeutic axis in Glioblastoma multiforme microenvironment, **Frontiers in Cell and Developmental Biology**; **IF: 5.5** Volume 11 - 2023 | doi: 10.3389/fcell.2023.1236271 [*: Corresponding author]

4. Nancy Sanjay Gupta, Pravir Kumar* (2023) Perspective of artificial intelligence in healthcare data management: A journey towards precision medicine **Computers in Biology and Medicine** (Elsevier), 162 (2023), 107051 **IF: 7.7** https://doi.org/10.1016/j.compbiomed.2023.107051 [*: Corresponding author]

5. Smita Kumari, Rohan Gupta, Rashmi Kumar Ambasta, Pravir Kumar* (2023), Multiple therapeutic approaches of glioblastoma multiforme: From terminal to therapy, Biochimica et Biophysica Acta, (BBA) Review on Cancer 1878(4):188913. (Elsevier), **IF: 11.2 BBA- Reviews on Cancer** (Elsevier) https://doi.org/10.1016/j.bbcan.2023.188913 [*: Corresponding author]

6. Smita Kumari, Pravir Kumar* (2023), Designing and computational analysis of MMP9 inhibitor in hypoxia induced Glioblastoma multiforme, **ACS Omega** (ACS), 2023, 8, 11, 10565–10590 2023 **IF: 4.13** [*: Corresponding author]

7. Rohan Gupta, Smita Kumari, Rahul Tripathi, Rashmi K. Ambasta, Pravir Kumar* (2023) Unwinding the modalities of necrosome activation and necroptosis machinery in neurological diseases, **Ageing Research Reviews,** 86(2023)108155, **IF: 13.1** (Elsevier), https://doi.org/10.1016/j.arr.2023.101855 [*: Corresponding author]

8. Sudhanshu Sharma, Pravir Kumar* (2023), Decoding the Role of MDM2 as a Potential Ubiquitin E3 Ligase and Identifying the Therapeutic Efficiency of Alkaloids against MDM2 in Combating Glioblastoma, **ACS Omega** (ACS), (DOI: 10.1021/acsomega.1c05827), 2023, 8, 5, 5072–5087. **IF: 4.13** [*: Corresponding author]

9. Khyati Joshi, Pravir Kumar, Rashmi Kataria (2023), Microbial carotenoid production and their potential applications as antioxidants: A current update, **Process Biochemistry** (Elsevier), https://doi.org/10.1016/j.procbio.2023.0; 128, (2023),190-205 **IF: 4.4**

10. Neha Kukreti, Sonika Kag, Pravir Kumar, Rashmi Kataria (2023), Potential of waste stream in conversion into sustainable metabolites: An overview and update, **Bioresource Technology Reports** (Elsevier), Volume 22,101502 https://doi.org/10.1016/j.biteb.2023.101502

2022

11. Mehar Sahu, Rahul Tripathi, Niraj Kumar Jha, Saurabh Kumar Jha, Rashmi K Ambasta, Pravir Kumar (2022), Cross talk mechanism of disturbed sleep patterns in neurological and psychological disorders, Volume 140, September 2022, 104767 https://doi.org/10.1016/j.neubiorev.2022.104767 **Neuroscience and Biobehavioural Reviews (Elsevier) IF: 8.2** (Elsevier), [*: Corresponding author]

12. Pratik Chakraborty; Sabya Sachi Das; Abhijit Dey; Apala Chakraborty; Chiranjib Bhattacharyya; Ramesh Kandimalla; Biswajit Mukherjee, Ph.D; Abilash Valsala Gopalakrishnan; Sandeep Kumar Singh, Ph.D; Shubham Kant; Parma Nand; Shreesh Ojha, Ph.D; Pravir Kumar, Ph.D; Niraj Kumar Jha; Saikat Dewanjee (2022), Quantum Dots: the Cutting-Edge Nanotheranostics in Brain Cancer Management, Volume 350, October 2022, Pages 698-715 **Journal of Controlled Release (Elsevier) IF: 10.8**

13. Dia Advani, Pravir Kumar (2022), Deciphering the molecular mechanism and crosstalk between Parkinson's disease and breast cancer through multi-omics and drug repurposing approach, **Neuropeptides (Elsevier)** Volume 96, December 2022, 102283 (https://doi.org/10.1016/j.npep.2022.102283 **IF: 2.9** [*: Corresponding author]

14. Shanu Bhardwaj, Kavindra Kumar Kesari, Mahesh Rachamalla, Shalini Mani, Ghulam Md Ashraf, Saurabh Kumar Jha, Pravir Kumar, Rashmi K Ambasta, Harish Dureja, Hari Prasad Devkota, Gaurav Gupta, Dinesh Kumar Chellappan, Sachin Kumar Singh, Kamal Dua, Janne Ruokolainen, Mohammad Amjad Kamal, Shreesh Ojha, Niraj Kumar Jha, (2021) CRISPR-Cas9 gene editing: New hope for Alzheimer's disease therapeutics, SI: Trends in Management of Dementia and Frailty, 2022 Sep;40:207-221 **Journal of Advanced Research,** (Elsevier), https://doi.org/10.1016/j.jare.2021.07.001, **IF: 10.7**

15. Divya Yadav and Pravir Kumar* (2022), Restoration and targeting of aberrant neurotransmitters in Parkinson's disease therapeutics, **Neurochemistry International**, **(Elsevier)** Volume 156, June 2022, 105327 **IF: 4.2**, https://doi.org/10.1016/j.neuint.2022.105327 [*: Corresponding author]

16. Rohan Gupta, Mehar Sahu, Rahul Tripathi, Rashmi K. Ambasta, Pravir Kumar (2022) Protein S-sulfhydration: Unraveling the prospective of hydrogen sulfide in the brain, vasculature and neurological manifestations, **Ageing Research Reviews,** Volume 76, April 2022, 101579; **IF: 13.1** (Elsevier), https://doi.org/10.1016/j.arr.2022.101579 [*: Corresponding author]

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BOOK CHAPTERS

1. Dia Advani, Sudhanshu Sharma, Rahul Tripathi, Rohan Gupta, Asmita Jaiswal, Rashmi K Ambasta, Pravir Kumar*, (2021) Mitochondrial dysfunction in metabolic disorders, **Mitochondrial Dysfunction and Nanotherapeutics** (Elsevier) 978-0-323-85666-9 B978-0-323-85666-9.00015-2

2. RohanGupta, Rashmi K.Ambasta, PravirKumar (2021), Mitochondrial dysfunction and autophagy inneurodegeneration; **Mitochondrial Dysfunction and Nanotherapeutics** (Elsevier) 978-0-323-85666-9 B978-0-323-85666-9.00019-X

3. Rohan Gupta, Rashmi K Ambasta, Pravir Kumar*, (2020) Mitochondrial dysfunction and autophagy in neurodegeneration, Mitochondrial Protection for Health and Aging (Chapter 13), Elsevier – Invited
4. Sudhanshu Sharma, Rahul Tripathi, Dia Advani, Rohan Gupta, Rashmi K Ambasta, Pravir Kumar*, (2020) Mitochondrial metabolism in neurological disorders, Mitochondria in Neurological Disorders (Chapter 9) Elsevier- Invited
5. Pravir Kumar*, Rashmi K Ambasta, Aditi Sarkar, Abhidha Kohli and Kushi Anand, (2012) Combinatorial effect of heat Shock protein and ubiquitin proteasome system in neuro-oncology Signaling, Gene Regulation and Cancer, 287-316 (*corresponding author) (Signaling, gene regulation and cancer, Nova Science Publishers, New York, USA; INVITED: ISBN: 978-1-61942-088-5; https://www.novapublishers.com/catalog/product_info.php?products_id=30124)

6. Pravir Kumar*, Rashmi K Ambasta, M. Sonia Angeline Inbakumari and Mandar Bhattacharya, (2012) Post-mitotic expression of cyclins in neuro-oncogenesis: a fatal journey by cells Signaling, Gene Regulation and Cancer, 255 - 286 (*corresponding author)
7. Rashmi K Ambasta, Pravir Kumar*, Archita Sharma and Esther Priyadarshini S. (2012) Notch Signalling regulates cancer stem cells and tumour angiogenesis, Signaling, Gene Regulation and Cancer, 223 - 254 (*co-corresponding author).
8. Rashmi K. Ambasta, Dhiraj Kumar, Piyush Sawhney, Rajat Gupta, Parul Yadav, Pooja Pabari and Pravir Kumar*(2016) Epigenesis in Colorectal Cancer: A lethal change in the cell, Epigenetic Advancements in Cancer, Edited by Manoj Mishra, Kumar Bishnupuri, 12/2015: chapter Book Chapter; Springer International publishing AG DOI: 10.1007/978-3-319-24951-3 http://www.springer.com/in/book/9783319249490
9. Ankit Tripathi, Renu Sharma, Noopur Kejriwal, Rashmi K Ambasta and Pravir Kumar*(2016), Epigenetic post transcriptional mutation in neuro-oncology, Epigenetic Advancements in Cancer, Edited by Manoj Mishra, Kumar Bishnupuri, 12/2015: chapter Book Chapter; Springer International publishing AG. DOI: 10.1007/978-3-319-24951-3 http://www.springer.com/in/book/9783319249490
10. Niraj Kumar Jha, Saurabh Kumar Jha, Satyaprakash, Rohan Kar, Deepak Rathore, Rashmi K Ambasta and Pravir Kumar*(2016) Epigenetics and angiogenesis in cancer, Epigenetic Advancements in Cancer, Edited by Manoj Mishra, Kumar Bishnupuri, 12/2015: chapter Book Chapter; Springer International publishing AG. DOI: 10.1007/978-3-319-24951-3 http://www.springer.com/in/book/9783319249490

IEEE FULL LENGTH CONFERENCE PAPERS

2023

1. Shubham Kumar Shrivastav, Pravir Kumar; Histone Deacetylase 6 as a putative target in Alzheimer's disease therapeutics **(Best paper award);** IEEE ICASIS-2023
2. Shubham Kumar Shrivastav, Pravir Kumar; Drug repurposing approach to identify PARK7 inhibitors in Parkinson's Disease **(Best paper award);** IEEE Bangalore Humanitarian Technology Conference-202
3. Smita Kumari, Pravir Kumar, Identification of Novel Drug Combination in Glioblastoma Multiforme Therapeutics Through Drug Repurposing, 06/2023 IEEE-2023 International Conference on Emerging Techniques in Computational Intelligence (ICETCI)
4. Nancy Sanjay Gupta, Pravir Kumar; TDP-43 Inhibitors in Amyotrophic Lateral Sclerosis: An Application of Drug Repurposing Approach Using FDA Approved Drugs; IEEE-2nd International Conference on Computational Intelligence and Sustainable Engineering Solution (CISES-2023)
5. Nancy Sanjay Gupta, Pravir Kumar; DNMT1 inhibitors in Alzheimer's Disease: A drug repurposing approach through FDA-approved drugs; IEEE BANGLORE HUMANITARIAN TECHNOLOGY CONFERENCE B-HTC 2023
6. Murali Mohan Mishra, Pravir Kumar; Crocin: A potent secondary metabolite as BACE1 inhibitor in Alzheimer's Disease; IEEE - ICACCS 2023
7. Murali Mohan Mishra, Pravir Kumar; Identification and Screening of Novel ACE Inhibitors Using Computational Approach; IEEE-ICCT 2023
8. Harsha Jha, Pravir Kumar; Comparative Analysis of Novel Biomarkers For Neurodegenrative Disease;4th International Conference On Emerging Trends in Multi-Disciplinary Research (ETMDR-2023)
9. Harsha Jha, Pravir Kumar; Analysing the mechanism of extracellular vesicles and its potential as a biomarker for neurodegenerative disorders, IEEE ICAECIS-2023
10. Neha Nagvanshi, Pravir Kumar; Repurposing of anti-viral compounds against HDAC6 in Alzheimer's therapeutics; IEEE-2nd International Conference on Computational Intelligence and Sustainable Engineering Solution (CISES-2023)
11. Twinkle Yadav, Pravir Kumar; Repurposing breast cancer medications for sleep and neurodevelopmental disorders; IEEE BANGLORE HUMANITARIAN TECHNOLOGY CONFERENCE (B-HTC 2023)
12. Shallu Chauhan, Pravir Kumar; A Prediction of Pecilocin as A Potential Therapeutic Regime in Countering Glioblastoma Using Computational Approach; IEEE BANGLORE HUMANITARIAN TECHNOLOGY CONFERENCE (B-HTC 2023)
13. Tanya Kalra, Pravir Kumar; Identification of novel therapeutic compounds against Diabetic nephropathy: A drug repurposing approach; IEEE BANGLORE HUMANITARIAN TECHNOLOGY CONFERENCE (B-HTC 2023)
14. Shanu Bhardwaj, Pravir Kumar; Targeting GSK-3β for the Modulation of Wnt Signaling Pathway in Alzheimer's Disease: A Drug Repurposing Approach; IEEE BANGLORE HUMANITARIAN TECHNOLOGY CONFERENCE (B-HTC 2023)
15. Kumud Kaul, Pravir Kumar; Fate of Jeratinine E as a potential compound to target NNMT protein in countering Parkinson's disease; IEEE -(ICSTSN 2023)
16. Sanya Madan, Pravir Kumar; STILBOSTEMIN C as a potential candidate for therapeutic targeting of RAB3B protein in countering AD; IEEE-Information system and computer network (ISCON-2023)
17. Dia Advani, Pravir Kumar (2022) Computational Analysis of Natural Compounds as Cyclin Dependent Kinase-5 Inhibitors for Alzheimer's and Parkinson's Disease 2022 IEEE Global Conference on Computing, Power DOI: 10.1109/GlobConPT57482.2022.9938169

18. Manu Gangyan, Pravir Kumar, VEGF and Its Role in the Treatment of Diabetes and Alzhiemer's Disease, IEEE International Conference on Image Information Processing (ICIIP-2021) November 28, 2021 (full length paper) DOI: 10.1109/ICIIP53038.2021.9702619

19. Divya Yadav, Pravir Kumar, Parkinson's Disease: An overview and role of glutamate and its receptors, IEEE Information System and Computer Network (ISCON- 2021) conference 22-23 October 2021 (full length paper) DOI: 10.1109/ISCON52037.2021.9702338

20. Yami Garg, Pravir Kumar, Regulation of Hypoxia Inducible Factor via Histone Deacetylase 3 Inhibitor Valproic Acid IEEE Information System and Computer Network (ISCON- 2021) conference 22-23 October 2021 (full length paper), DOI: 10.1109/ISCON52037.2021.9702407

21. Harshita Goswami, Pravir Kumar, Is Artificial Intelligence a Helping Hand for The Future of Neurosurgery? IEEE Information System and Computer Network (ISCON- 2021) 22-23 October 2021 (full length paper), DOI: 10.1109/ISCON52037.2021.9702473

22. Animan Tripathi, Pravir Kumar, Identification of Putative LRRK2 Inhibitors in the Pathogenesis of Parkinson's Disease: A Drug-repurposing Approach, IEEE Information System and Computer Network (ISCON- 2021) conference (full length paper) DOI: 10.1109/ISCON52037.2021.9702406

23. Navneet and Pravir Kumar, Putative micro-RNAs in the pathogenesis of Alzheimer's diseases, IEEE 2022 8thInternational Conference on Advanced Computing and Communication Systems (ICACCS) 25th–26thMarch 2022 Technically Sponsored by IEEE and IEEE Madras Section (full length paper). DOI: 10.1109/ICACCS54159.2022.9785308

24. Mayank Sagar and Pravir Kumar, Crosstalk Between Ubiquitination and Acetylation in the Parkinson's Disease, IEEE 2022 8thInternational Conference on Advanced Computing and Communication Systems (ICACCS) 25th– 26thMarch 2022 Technically Sponsored by IEEE and IEEE Madras Section (full length paper). DOI: 10.1109/ICACCS54159.2022.9785234

INVITED PRESENTATIONS

1. Pravir Kumar (**2023**) Neurological complications and its reversal mechanism in hypoxia-induced mice model, Department of Science and Technology, Govt. of India initiated Synergistic Training Program utilizing the Scientific and Technological infrastructure STUTI: 30.01.2023-05.02.2023; Department of Toxicology, School of Chemical Life Sciences.

2. Pravir Kumar (**2022**) Ubiquitin proteasome system and PTMs in neuronal disorders Department of Science and Technology, Govt. of India initiated Synergistic Training Program utilizing the Scientific and Technological infrastructure STUTI (a two-fold program), 20th – 26th December, 2022 in Dept. of Toxicology, Jamia Hamdard University

3. Pravir Kumar (**2022**) Consequences of altered level of cell cycle proteins in post mitotic divided neurons and muscles University of Hyderabad is jointly organizing the International Brain Research Organization (IBRO) – APRC Associated sponsored School along with the Society for Neurochemistry, India (SNCI). Understanding pathophysiology of Pain and cognition using animal experiments from 12th to 16th December 2022.

4. Pravir Kumar (2022), Progression and drug treatment for the reversal of neurodegenerative disorders Synergistic Training program Utilizing the Scientific and Technological Infrastructure (STUTI) Program, Department of Applied Physics, Delhi Technological University, 16.11.2022-22.11.2022

5. Pravir Kumar (2022) Glimpses of Cell Culture Work: Standard Operating Procedures and Limitations Synergistic Training programme Utilizing the Scientific and TechnologicalInfrastructure (STUTI) Program, Department of Toxicology, SAS, VIT, Vellore on 13.10.2022

6. Pravir Kumar (**2022**) Protein misfolding, aggregation in neurodegenerative disorders and its reversal through biomolecules, Recent trends in Brain research: Unlocking the mysteries IBRO symposium in collaboration with IAN Delhi Chapter at Department of physiology and promotive health, Institute of Home Economics, University of Delhi, India 22-23.03.2022

7. Pravir Kumar (**2022**), Proteinopathy and UPS machinery in neurodegenerative disorders: biomolecules mediated therapeutics, SNCI chapter meeting, Neurochemical Legacy of Neurological, Disorders: Brainstorming of Novel Approaches 09.03.2022, Jamia Hamdard University

8. Pravir Kumar (**2022**) Synergistic Training program Utilizing the Scientific and Technological Infrastructure (STUTI) Program" DST STUTI programme

9. Pravir Kumar (**2021**), Ubiquitination and PTM in AD and other NDDs IBRO-APRC Associate School on "Biophysical to Molecular Techniques: An interface in Neurobiology Research" (December 08-13, 2021) 35th SNCI National Workshop on "Advanced Research Techniques for Cellular and Molecular Systems in Neuroscience" (09.12.2021), at Jamia Hamdard University, Delhi, India.
10. Pravir Kumar (**2021**), Ubiquitination and PTM in AD and other NDDs IBRO-APRC Associate School on "Biophysical to Molecular Techniques: An interface in Neurobiology Research"(August 23-27, 2021) Department of Zoology Indira Gandhi National Tribal University, Amarkantak (MP), India.
11. Pravir Kumar (**2021**), Artificial intelligence and machine learning in drug designing and medicine", July 30-31, 2020), two-day webinar on "Drug discovery and development with Machine learning and Artificial intelligence" National Institute of Pharmaceutical Education and Research (NIPER), Kolkata
12. Pravir Kumar (**2020**), Post translational modifications in Neurological disorders, 34th annual conference on SNCI, December 11-13, 2020), University of Hyderabad [**Speaker and Session co-chair**]
13. Pravir Kumar (**2019**), Physiological stressors and pharmacological intervention in neurodegenerative disorders ", 3rd National conference on Biotechnology and Bioengineering, Innovation and advancement for sustainable future, November 07-09, 2019),
14. Pravir Kumar (**2019**), Ubiquitination mechanism in Alzheimer's and other neurodegenerative disorders, International Conference on " Frontiers in Neuroscience and Neurochemistry: Dynamic Challenges and Approaches, 33rd Annual Meeting of Society for Neurochemistry (SNCI-ACNN, Jamia Hamdard, October 10-13, 2019), [**Conference speaker and SESSION CHAIRED**]
15. Pravir Kumar (**2019**), Ubiquitin E3 ligases, stress proteins, biomolecules and Neurodegenerative disorders, Department of Biomedical Engineering, University of South Florida, USA 05th March 2019
16. Pravir Kumar (**2019**), Physiological and pharmacological stimulus in the Neurodegenerative disorders, Department of biomedical engineering, Cullen College of Engineering, University of Houston, Texas, USA, 04th March 2019
17. Pravir Kumar (**2018**), Ubiquitin proteasome system in neurodegenerative disorders, International conference on emerging researches in bioscience (ICERB), Guru Ghasidas Vishwavidyalaya, koni, Bilaspur (CG) India October 28-30, 2018
18. Pravir Kumar (**2018**), Characterization and mechanistic role of biomoleucles in the reversal of stress induced neurodegeneration Informatics tools in Drug discovery and Drug delivery (ITDDD-2018)-1st to 4th November
19. Pravir Kumar (**2018**), TEQIP-III sponsored short-term training programme on Health, Human values, ethics and Empowerment programme on Recent Developments in translational medicine (RDTM-2018) April 13-18, 2018 at Delhi Technological University (DTU) India

20. Pravir Kumar (**2018**), TEQIP-III sponsored one-week Faculty Development programme on Recent Developments in translational medicine (RDTM-2018) March 12-16, 2018 at Delhi Technological University (DTU) India
21. Pravir Kumar (**2017**), World Neurocongress-2017, An international conference om Neurodegeneration and stem cell therapy, 9-10th December 2017, Aligarh Muslim University (AMU) India
22. Pravir Kumar (**2017**), Biogenesis V conducted by IILM-CET, Greater Noida, India on "Insights and innovations in biotechnology", 2-3 August 2017
23. Pravir Kumar (**2017**), Characterization and mechanistic role of biomolecules in the reversal of stress induced neurodegeneration, IIIT-Delhi 3rd March http://ccb.iiitd.ac.in/CCB-group-meeting.html
24. Pravir Kumar (**2016**), Physiology behind neurodegenerative disorders, National Conference on Innovation in life science and environment Recent Trends in Biotechnology, Madhya Pradesh Council of Science and Technology (MPCST), VISM, Gwalior 17-18 December [**KEYNOTE SPEAKER**]
25. Pravir Kumar (**2016**), Relevance of Biomedical Engineering in Neuronal Pathophysiology National Conference on Recent Trends in Biotechnology, Madhya Pradesh Council of Science and Technology (MPCST), VISM, Gwalior 30-31 January [**KEYNOTE SPEAKER**]
26. Differential expression of stress and neuro protective proteins under the influence of flavonoids (**2015**) 29th Annual Conference of Society for Neurochemistry India and Advancement in computation Neurochemistry and Neurobiology (SNCI-ACNN), December 19-21, 2015, NEHU Shillong [**Conference speaker and SESSION CHAIRED**]
27. Pravir Kumar (**2015**), Restoration of protective neuroproteins and reversal of symptoms under stress induced neurodegeneration, International Symposium on Neuroscience research from mechanism to application, XXXIII Annual Conference of the Indian Academy of Neurosciences, October 31- November 02, Punjab University, Chandigarh, INDIA [**Symposium speaker]**
28. Pravir Kumar (**2015**), Therapeutic relevance of ubiquitin E3 ligase, molecular chaperones and bioflavonoids in neurodegenerative disorders, 6th World congress on biotechnology, New Delhi, October 5th -7th, 2015 [Invited Speaker and Chaired the Session: Biotechnology in health care]
29. Pravir Kumar (**2015**), Clinical application of protective proteins and biomolecules in neurodegenerative disorders, Centre for Interdisciplinary Research in Basic Sciences, JMI University (07/08/2015) University Jamia Millia Islamia, New Delhi, 5th May to 25th May, 2015
30. Pravir Kumar (**2015**), Therapeutic approaches in neurodegenerative disorders through biomolecules and Engineering tools, UGC-Academic Staff College, University Jamia Millia Islamia, New Delhi, 5th May to 25th May, 2015
31. Pravir Kumar (**2015**), Impact of Biomedical Engineering in Neurosciences 2nd workshop on advanced materials and instrumentation in Bio medical engineering (AMIBE 2015), IIIT, Allahabad
32. Pravir Kumar (**2014**), Pathophysiology behind Alzheimer's Disease, TEQIP-II sponsored two weeks FDP on Frontiers in Chemical and Polymer Sciences 15th-26th December, 2014; DTU, Delhi
33. Pravir Kumar (**2014**), Abrogated cell cycle entry and neuro-muscular degeneration: a lethal move by cell. International Symposium on Translational Neuroscience and XXXII Annual Conference of the Indian Academy of Neurosciences, 01-03 November, NIMHANS Bangalore, INDIA
34. Pravir Kumar (**2013**), Computational analysis of signaling and protein-protein interaction network in Diabetes, NCRTPSB 2013, JMI 16-18 December, INDIA
35. Pravir Kumar (**2013**), Therapeutic role of biomolecules in Parkinson's disease, International conference of Recent advances in molecular mechanism of neurological disorders, February, 2013, All India Institute of Medical Sciences (AIIMS), New Delhi, INDIA (Invited Speaker and Chaired the Session)

36. Pravir Kumar (**2013**), Clinical implication and reversal of hypoxia induced neurodegeneration using flavonoids, National conference on "Emerging trends and Challenges in the Basic and Translational Research in Biochemistry February 4-5, 2013, Banaras Hindu University, Varanasi, INDIA
37. Pravir Kumar (**2012**), Molecular Chaperones and Ubiquitin E3 Ligase mediated attenuation of β-amyloid, International interdisciplinary science conference -2012 on protein folding and diseases December 8-10, 2012, Jamia Milia Islamia University, Delhi, INDIA.
38. Pravir Kumar (**2012**), "Co-operative action of molecular chaperones, proteasome and E3 ligase on beta-amyloid precursor proteins processing" 3rd international conference of bioinformatics and system biology (INCOBS), 16-18 th February, Annamalai University, Chidambaram, TN, INDIA
39. Pravir Kumar (**2012**) Ubiquitin proteasome system and Neurodegenerative disorders: Does Parkin Ubiquitinate A beta 1-42? 26th Annual meeting of Society for Neurochemistry, India (SNCI)" 9th -11th January, Nagpur, INDIA (Plenary lecture)
40. Pravir Kumar. (**2011**) Enhanced level of cyclins Enhanced expression of cyclins and caspases in inclusion body myositis (IBM) and Alzheimer's diseases (AD), 25th Annual meeting of Society for Neurochemistry, India (SNCI) Silver jubilee celebrations and International Symposium on "Metabolic signaling in Brain in health and Disease" 7th -9th January, Hyderabad, INDIA
41. Pravir Kumar (**2009**) Involvement of molecular chaperones and cross functional ligase CHIP and Parkin in Alzheimer's and Parkinson's disease. International conference on Neuroscience Update; Department of Neuroscience, Cochin University of Science and Technology, Kerala, December, INDIA
42. Pravir Kumar (**2009**) Molecular mechanism of chaperones and ubiquitin E3 ligase in neurodegenerative disorders, National Conference on biotechnology for human development, Society for Biotechnologists India (SBTI), Vellore, November INDIA

CONFERENCE AND SYMPOSIUM PRESENTATIONS

(*: Corresponding author)

1. Rahul Tripathi and Pravir Kumar (2019), Predicting genes and pathways influenced by Apolipoprotein E4 (APOE4) in Alzheimer's disease, 33rd Annual Meeting of Society for Neurochemistry (SNCI), Jamia Hamdard, October 10-13, 2019
2. Rohan Gupta and Pravir Kumar (2019), mi-RNA regulatory pathway network and associate biomarkers in Alzheimer's Disease, 33rd Annual Meeting of Society for Neurochemistry (SNCI), Jamia Hamdard, October 10-13, 2019
3. Dia Advani and Pravir Kumar (2019), Protective role of c-Abl inhibitors in neurological disorders: An in silico drug repurposing approach, 33rd Annual Meeting of Society for Neurochemistry (SNCI), Jamia Hamdard, October 10-13, 2019
4. Asmita Jaiswal and Pravir Kumar, Analysis of differentially expressed genes (DEG) and metal toxicity in Alzheimer's Disease, 33rd Annual Meeting of Society for Neurochemistry (SNCI), Jamia Hamdard, October 10-13, 2019
5. Chitranjan Mukherjee and Pravir Kumar (2019), Therapeutic relevance of mi-497/IGF-1 interaction in Alzheimer's disease, 33rd Annual Meeting of Society for Neurochemistry (SNCI), Jamia Hamdard, October 10-13, 2019
6. Diksha Semwal and Pravir Kumar (2019), Pharmacological modeling and mTOR signaling mechanism in neurodegenerative disorders, 33rd Annual Meeting of Society for Neurochemistry (SNCI), Jamia Hamdard, October 10-13, 2019
7. Shruti Thareja and Pravir Kumar (2019), Usage of biomolecules from medicinal plants for neurodegeneration purposes, 33rd Annual Meeting of Society for Neurochemistry (SNCI), Jamia Hamdard, October 10-13, 2019

8.Niraj Kumar Jha and Pravir Kumar*, (2015), Interaction of target drug molecules in hypoxia mediated neurodegeneration, 29th Annual Conference of Society for Neurochemistry India and Advancement in computation Neurochemistry and Neurobiology (SNCI-ACNN), December 19-21, 2015, NEHU Shillong [Oral presentation]

9. Saurabh Kumar Jha and Pravir Kumar*(2015), Comparative analysis of biomolecules in Parkinson's disease therapeutics, 29th Annual Conference of Society for Neurochemistry India and Advancement in computation Neurochemistry and Neurobiology (SNCI-ACNN), December 19-21, 2015, NEHU Shillong [Oral presentation]
10. Dhiraj Kumar and Pravir Kumar*, (2015), Functional lysine residues in Aβ clearance, 29th Annual Conference of Society for Neurochemistry India and Advancement in computation Neurochemistry and Neurobiology (SNCI-ACNN), December 19-21, 2015, NEHU Shillong [Oral presentation]
11. Alka Raina, Saurabh Kumar Jha, Niraj Kumar Jha, Dhiraj kumar, Rashmi K Ambasta and Pravir Kumar*(2015), Putative transcription factor binding elements of ubiquitin E3 ligase in neurodegenerative disorders, 29th Annual Conference of Society for Neurochemistry India and Advancement in computation Neurochemistry and Neurobiology (SNCI-ACNN), December 19-21, 2015, NEHU Shillong [Poster presentation]
12. Abhisekh Srivastava, Puspendramani Mishra, Dhiraj kumar, Saurabh Kumar Jha, Niraj Kumar Jha, Rashmi K Ambasta and Pravir Kumar*(2015), Relevance of terpenoids and alkaloids in neuroprotection, 29th Annual Conference of Society for Neurochemistry India and Advancement in computation Neurochemistry and Neurobiology (SNCI-ACNN), December 19-21, 2015, NEHU Shillong [Poster presentation]
13. Swati Sharan, Niraj Kumar Jha, Saurabh Kumar Jha, Dhiraj kumar, Rashmi K Ambasta and Pravir Kumar*(2015), Post-translational modification mechanism in Parkinson's disease pathology, 29th Annual Conference of Society for Neurochemistry India and Advancement in computation Neurochemistry and Neurobiology (SNCI-ACNN), December 19-21, 2015, NEHU Shillong [Poster presentation]
14. Minal Singh, Niraj Kumar Jha, Saurabh Kumar Jha, Dhiraj kumar, Rashmi K Ambasta and Pravir Kumar*(2015), In silico characterization of holo AβPP promoter and its transactivation modules 29th Annual Conference of Society for Neurochemistry India and Advancement in computation Neurochemistry and Neurobiology (SNCI-ACNN), December 19-21, 2015, NEHU Shillong [Poster presentation]
15. Abhishek Srivastava, Puspendra M Mishra, Saurabh Kumar Jha, Niraj Kumar Jha, Rashmi K Ambasta and Pravir Kumar (2015), In silico analysis cannaboids in neurodegeneration, 6th World congress on biotechnology, New Delhi, October 5th -7th, 2015
16. Pushpendra Mani Mishra, Abhishek Srivastava, Niraj Kumar Jha, Rashmi K Ambasta (2015), Microbial involvement in cause and treatment of Alzheimer's disease, 6th World congress on biotechnology, New Delhi, October 5th -7th, 2015.
17. Pushpendra Mishra, Abhishek Srivastava, Dhiraj Kumar, Rashmi K Ambasta and Pravir Kumar*(2015), Genetic Aberrations in Neurodegenerative disorders: A molecular link between Parkinson's and Huntington's disease. International Congress on Friedreich's ataxia and DNA structure in Health and Disease, AIIMS, New Delhi, 11-13 April, 2015
18. Abhishek Srivastava, Pushpendra Mishra, Dhiraj Kumar, Rashmi K Ambasta and Pravir Kumar*(2015), Role of DNA damage and repair defects in Neurodegenerative disorders. International Congress on Friedreich's ataxia and DNA structure in Health and Disease, AIIMS, New Delhi, 11-13 April, 2015
19. Dhiraj Kumar, Niraj K. Jha, Saurabh K. Jha, Renu Sharma, Kushi Anand, Rashmi K. Ambasta and Pravir Kumar*(2014), Anti cancerous drugs as a neuroprotectant: a therapeutic intervention in neurodegenerative disorders, International Symposium on Translational Neuroscience and XXXII Annual Conference of the Indian Academy of Neurosciences, 01-03 November, NIMHANS Bangalore, INDIA

20. Saurabh Kumar Jha, Niraj Kumar Jha, SatyaPrakash, M. Sonia Angeline, Rashmi K. Ambasta and Pravir Kumar*(2014), In silico study of flavonones in neurodegenerative disorders, International Symposium on Translational Neuroscience and XXXII Annual Conference of the Indian Academy of Neurosciences, 01-03 November, NIMHANS Bangalore, INDIA
21. Niraj Kumar Jha, Saurabh Kumar Jha, Satya Prakash, M. Sonia Angeline, Rashmi K. Ambasta and Pravir Kumar*(2014), Physiological stress in neurodegeneration: Interatomic partners based on In silco study, International Symposium on Translational Neuroscience and XXXII Annual Conference of the Indian Academy of Neurosciences, 01-03 November, NIMHANS Bangalore, INDIA
22. Renu Sharma, Rashmi K Ambasta and Pravir Kumar*(2013), Cell cycle regulation to programmed cell death: role of cyclins in neurodegeneration, NCRTPSB 2013, JMI 16-18 December, INDIA Journal of Protein and Proteomics, Vol.4, No.2 p63
23. Saurabh kumar Jha, Niraj kumar Jha, Rashmi K. Ambasta and Pravir Kumar*(2013), Structurally and functionally analyzed new generation anti-aging neuroprotective drugs, NCRTPSB 2013, JMI 16-18 December, INDIA Journal of Protein and Proteomics, Vol.4, No.2 p62
24. Niraj kumar Jha, Saurabh kumar Jha, Rashmi K. Ambasta and Pravir Kumar*(2013) Computer assisted protein analysis in hypoxia signaling, NCRTPSB 2013, JMI 16-18 December, INDIA Journal of Protein and Proteomics, Vol.4, No.2 p37
25. Dhiraj, Rashmi K. Ambasta and Pravir Kumar*(2013), In silico mutational analysis of voltage gated sodium (Nav1.7) ion channel: therapeutic intervention in diseases, NCRTPSB 2013, JMI 16-18 December, INDIA Journal of Protein and Proteomics, Vol.4, No.2 p42
26. Rohan Kar, Rashmi K. Ambasta, and Pravir Kumar*(2013), Computational analysis and drug targeting in neurodegeneration via Notch signaling, NCRTPSB 2013, JMI 16-18 December, INDIA, Journal of Protein and Proteomics, Vol.4, No.2 p43
27. Rashmi K Ambasta and Pravir Kumar (2013), Computer assisted nano-drug design for cancer therapy, 09-11 December, Bioworld Conference, IIT Delhi, Delhi, INDIA
28. Niraj kumar Jha, Lakshmi, Binod Koirala, Saurabh kumar Jha, Renu Sharma, Rohan Kar, Dhiraj, Jitendra Singh, Rashmi K. Ambasta and Pravir Kumar*; (2013), Identification and validation of key Ubiquitin E3 ligases in type II diabetes: An in silico work; 09-11 December, Bioworld Conference, IIT Delhi, Delhi, INDIA
29. Rohan Kar, Jitendra Singh, Rashmi K. Ambasta, and Pravir Kumar*; (2013) Computational analysis of Notch signalling related Therapeutic targets in glioma and Breast Cancer, 09-11 December, Bioworld Conference, IIT Delhi, Delhi, INDIA
30. Saurabh kumar Jha , Niraj kumar Jha, Deepak Rathore, Rashmi K. Ambasta and Pravir Kumar*(2013), Traditional FDA approved anti-cancerous drugs versus new anti-cancerous drugs: A computational approach, 09-11 December, Bioworld Conference, IIT Delhi, Delhi, INDIA
31. Dhiraj, Satya Prakash, Noopur Kejariwal and Pravir Kumar, Rashmi K. Ambasta (2013); Role of Luteolin in inhibiting the angiogenesis mediated cancer, 09-11 December, Bioworld Conference, IIT Delhi, Delhi, INDIA
32. Renu Sharma, AnkitTripathi, Sagar Verma, Sakshi Sharma, Pravir Kumar and Rashmi K Ambasta (2013); Crosstalk between cancer stem cell markers, chemotherapy and nanoparticles in cancer diagnostics and therapeutics, 09-11 December, Bioworld Conference, IIT Delhi, Delhi, INDIA
33. Ajanma Singh, Jyoti Parmar, Rashmi.K. Ambasta and Pravir Kumar*(2013), "Possible role of mdm2 and dorfin E3 ligase in Parkinson's disease (PD), 22 March, IIT Roorkee, India.

34. Pooja Kesari , Rashmi K. Ambasta and Pravir Kumar*(2013), Computational analysis of ubiquitination sites of impaired protein in neurodegeneration International conference of Recent advances in molecular mechanism of neurological disorders, February, 21-23, All India Institute of Medical Sciences (AIIMS), New Delhi, INDIA
35. Mayank Malhotra, Bhumesh Tanwar, Vishal Singhal, Rashmi K. Ambasta and Pravir Kumar*(2013), Development and analysis of protein - protein interaction network for neuroblastoma and identification of drug targets using in silico knockout analysis International conference of Recent advances in molecular mechanism of neurological disorders, February, 21-23, All India Institute of Medical Sciences (AIIMS), New Delhi, INDIA
36. Prerna Jain, Rashmi K Ambasta and Pravir Kumar*(2013), Role of epigenetic modification in neurological disorders, International conference of Recent advances in molecular mechanism of neurological disorders, February, 21-23, All India Institute of Medical Sciences (AIIMS), New Delhi, INDIA
37. Ankita Gupta, Himani Gupta, Neha Nagpal, Rashmi K Ambasta and Pravir Kumar*(2013), p21 in brain tumour progression and therapeutic interventions, International conference of Recent advances in molecular mechanism of neurological disorders, February, 21-23, All India Institute of Medical Sciences (AIIMS), New Delhi, INDIA
38. Monika Samnat, Rashmi K Ambasta and Pravir Kumar*(2013), Protein Quality control in Endoplasmic reticulum and Neurodegeneration International conference of Recent advances in molecular mechanism of neurological disorders, February, 21-23, All India Institute of Medical Sciences (AIIMS), New Delhi, INDIA
39. Dhiraj, Ambasta K. Rashmi, Kumar Pravir* (2013), Intricacies of scn9a gene mutation in causing primary erythro melalgia (pem), paroxysmal extreme pain disorder (pepd) and congenital insensitivity to pain (cip), International conference of Recent advances in molecular mechanism of neurological disorders, February, 21-23, All India Institute of Medical Sciences (AIIMS), New Delhi, INDIA
40. J Uniyal, M Kandpal, A Moral, Rashmi K Ambasta and P Kumar* (2013), Differential signalling in glial tumors: Potential target for cancer therapy International conference of Recent advances in molecular mechanism of neurological disorders, February, 21-23, All India Institute of Medical Sciences (AIIMS), New Delhi, INDIA
41. Gaurav Rana, Pooja Kesari, Rashmi K Ambasta and Pravir Kumar*(2012), Interactomics of ubiquitin E3 ligase and lysine residues in neurodegenerative disorders IISC-2012, Protein Folding and Disease, December 8-10, 2012, Jamia Milia Islamia University, Delhi (*corresponding author Poster presentation), INDIA
42. Unnati Goel, Dhiraj, Pooja Kesari, Rashmi K. Ambasta and Pravir Kumar*(2012), Angiogenic Signaling and HSP90 Inhibitors in Breast Carcinoma IISC-2012, Protein Folding and Disease, December 8-10, 2012, Jamia Milia Islamia University, Delhi (*corresponding author Poster presentation), INDIA
43. Prerna Jain, Monika Samant, Ajanma Singh, Rashmi K. Ambasta and Pravir Kumar*(2012), ER stress signaling pathway in neuroegenerative disorders. IISC-2012, Protein Folding and Disease, December 8-10, 2012, Jamia Milia Islamia University, Delhi (*corresponding author Poster presentation), INDIA
44. Kushi Anand, Gaurav Rana, Rashmi K Ambasta and Pravir Kumar*(2012), Quercetin elicits inhibition of tumour progression in cancer induced mice and its underlying mechanism. Carcinogenesis meeting17-19 November, Delhi (*corresponding author Poster presentation), INDIA.
45. Kushi Anand, Gaurav Rana, Rashmi K Ambasta and Pravir Kumar*(2012), Oral administration of catechin hydrate does not attenuate tumour progression in EAC induced carcinoma mice model Carcinogenesis meeting17-19 November, Delhi (*corresponding author; Poster presentation), INDIA.
46. S. Angeline, Kushi Anand, A. Sarkar, K. Singh, K. Shah, Priya Chaterjee, R. K. Ambasta, Pravir Kumar*. (2012) Neuroprotective Effect of Naringenin in Rotenone induced model of Parkinson's Disease. 2012-

S-7373-SfN (Poster presentation in the annual meeting of Society of Neuroscience, Oct 17, 2012, New Orleans, Poster # 856.04/F43; *corresponding author) USA.

47. A. Sarkar, S. Angeline, Kushi Anand, P. Asthana, R. K. Ambasta, Pravir Kumar*(2012), Neuroprotective effect of flavanoida in hypobaric hypoxia in murine model. 2012-S-7393-SfN (Poster presentation in the annual meeting of Society of Neuroscience, Oct 17, 2012, New Orleans, Poster # 903.15/XX16; *corresponding author) USA.
48. K. K. Singh, S. Angeline, Kushi. Anand, K. Shah, D. Shah, M. Shah, Priya Chaterjee, R. K. Ambasta, Pravir Kumar*(2012) Protective role of Naringenin on muscle degeneration in PD model. 2012-S-7584-SfN (Poster presentation in the annual meeting of Society of Neuroscience, Oct 17, 2012, New Orleans, Poster # 51.10/F30; *corresponding author) USA.
49. P. Asthana, A.Sarkar, S. Angeline, Kushi Anand, N. Jaiswal, S.K. Jha, N.K. Jha, Priya Chaterjee R. K. Ambasta, Pravir Kumar*(2012), Protective effect of naringenin on hypoxia induced muscles degeneration. 2012-S-7580-SfN (Poster presentation in the annual meeting of Society of Neuroscience, Oct 17, 2012, New Orleans, Poster # 903.16/XX17/F43; *corresponding author) USA.
50. Rashmi K Ambasta, A. Arivarasan, Krisha Soni, Shivangi Yadav, Priya Chatterjee and Pravir Kumar*, (2012) Protective effect of bone marrow transplantation and Curcumin adminsitrationon diabetic brain 2012-S-280.17/QQ16-SfN (Poster presentation in the annual meeting of Society of Neuroscience, Oct 14, 2012, New Orleans, 280.17/QQ16; *corresponding author), USA.
51. Kunal Kumar Singh, Sonia Angeline, Aditi Sarkar and Rashmi K Ambasta, Pravir Kumar*, (2012), Neuroprotective Effect of Sesamol and Naringenin in Rotenone induced model of Parkinson's Disease, Oral presentation, 3rd international conference of bioinformatics and system biology (INCOBS), 16-18 th February, Annamalai University, Chidambaram, TN, *corresponding author), INDIA.
52. Aditi Sarkar, Sonia Angeline, Kunal Kumar Singh, Pallavi Asthana, Rashmi K Ambasta and Pravir Kumar*, (2012) Neuroprotective effect of Naringenin in hypoxic mice, Oral presentation, 3rd international conference of bioinformatics and system biology (INCOBS), 16-18 th February, Annamalai University, Chidambaram, TN, corresponding author), INDIA.
53. Pallavi asthana, Aditi Sarkar, Kunal Kumar Singh, Rashmi K Ambasta and Pravir Kumar*, (2012) Effect of hypobaric hypoxia in heart Oral presentation, 3rd international conference of bioinformatics and system biology (INCOBS), 16-18th February, Annamalai University, Chidambaram, TN, *corresponding author) INDIA.
54. Sonia Angeline, Kunal Kumar Singh, Rashmi K Ambasta and Pravir Kumar*, (2012) Rotenone induced rodent model of Parkinson's disease with debilitating phenotypes and neurodegeneration Oral presentation3rd international conference of bioinformatics and system biology (INCOBS), 16-18th February, Annamalai University, Chidambaram, TN, *corresponding author) INDIA.
55. Pravir Kumar*and Rashmi K Ambasta, Cross-functional E3 ligase parkin and CHIP in Aβ clearance (2012), XXIX annual conference of Indian Academy of Neuroscience, January 2012, New Delhi *corresponding author) INDIA.
56. Kushi Anand, Aditi Sarkar, Karunya R, Rashmi K. Ambasta and Pravir Kumar*(2012), Combined Effect of Naringenin and Curcumin in Ehrlich Ascites Carcinoma mice model. 31st Annual Convention of Indian Association for Cancer Research (IACR) and an International Symposium on 'Cancer Genomics and Its Impact in the Clinics' from 26 - 29 January 2012, ACTREC, Navi Mumbai, J. cancer Res and Therapeutics January Vol 8, S22-35: *corresponding author) INDIA.
57. Kushi Anand, Pallavi Asthana, Anup Kumar, Rashmi K. Ambasta and Pravir Kumar*(2012), Quercetin elicits inhibition in Dalton's Lymphoma Ascites (DLA) induced solid tumour progression, 31st Annual

Convention of Indian Association for Cancer Research (IACR) and an International Symposium on 'Cancer Genomics and Its Impact in the Clinics' from 26-29 January 2012, ACTREC, Navi Mumbai, J. cancer Res and Therapeutics January Vol 8, S22-35: *corresponding author) INDIA.

58. Sonia Angeline, Kushi Anand, Ganesh Mansingh Lad, Priya Chaterjee, Rashmi K Ambasta, Henry W Querfurth and Pravir Kumar*(2011), Rotenone induced rodent model of Parkinson's disease with debilitating phenotypes and differential expression of HSPs (SFN meeting, poster presentation; 2011-S-1945-sfn; 13.11.11; Session 145; *corresponding author), USA.
59. Aditi Sarkar, Kushi Anand, Priya Chaterjee Mandar Bhattacharya, Abhidha Kohli, Sonia Angeline M Inbakumar, Rashmi K Ambasta, Henry Querfurth and Pravir Kumar*(2011), Comparative analysis of molecular chaperones and E3 ligase in mice organs under hypoxic condition with significant neurodegeneration, (SFN meeting, poster presentation; 2011-S-1619-sfn; 15.11.11; Session 669; *corresponding author), USA.
60. Mandar Bhattacharya, Abhidha Kohli, Aditi Sarkar, Priya Chaterjee, Kushi Anand, Sonia Angeline M Inbakumar, Rashmi K Ambasta, and Pravir Kumar*(2011), Histopathological changes, neurodegeneration and caspase activation in mice brain upon acute and chronic hypoxic stress condition, (SFN meeting, Poster presentation, 2011-S-2035-sfn; 15.11.11; Session 669; *corresponding author). USA.
61. Abhidha Kohli, Mandar Bhattacharya, AditiA. Sarkar, Kushi Anand, Sonia Angeline M Inbakumar, Rashmi K Ambasta, and Pravir Kumar*(2011), Comparative analysis of E3 ligase CHIP and Hsp70 in brain and muscles under hypoxic condition (SFN meeting, Poster presentation, 2011-S-2029-sfn; 15.11.11; Session 669; *corresponding author), USA.
62. Rashmi K Ambasta, Arivarasan A, Harshit Shah and Pravir Kumar (2011), Allogenic bone marrow transplantation with anti-oxidant cocktail have potential effect to cure diabetes [(Poster presentation, No. 1863 9th Annual meeting for International society for stem cell research (ISSCR), June 15-18th] Toronto, CANADA.
63. Arivarasan A., Harshit R Shah, Shivangi Yadav, Pravir Kumar and Rashmi K Ambasta, (2011) "Combined effect of bone marrow transplantation and oral Curcumin administration on Streptozotocin induced diabetes mice," Poster Presentation "2nd International Conference on Stem Cells and Cancer (ICSCC-2011): Proliferation, Differentiation, and Apoptosis" from 15th-18th October, Pune, INDIA.
64. Soni Krishna, Shivangi Yadav, Pravir Kumar, Rashmi K. Ambasta; (2011) "Effect of Bone Marrow Transplantation on Heart Damage in Streptozotocin induced Mice", NCRM-NICHI Nichi-In Centre for Regenerative Medicine. Annual Meeting on Stem Cells & Regenerative Medicine, Chennai, INDIA.
65. Arivarasan A., Harshit Shah, Pravir Kumar, Rashmi K. Ambasta; (2011) "Combined effect of bone marrow transplantation and curcumin on streptozotocin induced diabetes" NCRM-NICHI, Nichi-In Centre for Regenerative Medicine. Annual Meeting on Stem Cells & Regenerative Medicine Chennai, INDIA
66. Harshit Shah, Arivarasan, Pravir Kumar, Rashmi K. Ambasta (2011), "Protective effect of bone marrow transplantation on streptozotocin induced diabetes" NCRM-NICHI 2011, Nichi-In Centre for Regenerative Medicine. Annual Meeting on Stem Cells & Regenerative Medicine Chennai, INDIA
67. Priyadharshini ES, Pravir Kumar and Ambasta RK, (2011), Luteolin is a potential anti-angiogenic drug for cancer therapy, XXXVI Annual conference on environmental Mutagen society of India (EMSI) and International symposium on environmental exposures to mutagens and carcinogens on human health Feb 4-6, Vellore (Recipient of third prize for best poster presentation), INDIA
68. Kishore RS., Priyadharshini ES., Sarkar A, Baluapuri A, Anand K, Ambasta RK and Pravir Kumar*, (2011), Lower dose of scorpion (Mesobuthus tamulus) venom elicit anti-cancerous property and enhances apoptosis. XXXVI Annual conference on environmental Mutagen society of India (EMSI) and International symposium on environmental exposures to mutagens and carcinogens on human health Feb 4-6, Vellore (poster presentation; *corresponding author), INDIA.

69. Anand K, Kumar A, Sarkar A, Ambasta RK and Pravir Kumar*,(2011), Quercetin and Catechin elicit anti-angiogenic activities, XXXVI Annual conference on environmental Mutagen society of India (EMSI) and International symposium on environmental exposures to mutagens and carcinogens on human health Feb 4-6, Vellore (poster presentation; *corresponding author), INDIA.
70. Han-Kyu Lee, Pravir Kumar, Gangjian Qin, Tohru Kitada, Kenneth M. Rosen, Qinghao Fu, Jon Degnore, Charbel E-H Moussa, Henry W. Querfurth (2010), Parkin reverses intracellular beta-amyloid accumulation and its negative effects on proteasome function, 18th Annual Hospital Research Celebration, RIH, Providence, USA.
71. H. K. Lee, Pravir Kumar, G. Qin, T. Kitada, K. M.Rosen, Q.Fu, C. E. Moussa and H. W. Querfurth, H. W.:(2009), Parkin reverses intracellular beta-amyloid accumulation and its negative effects on proteasome function. 10/17– 21/2009 Neuroscience Meeting, Chicago, Illinois, (Poster presentation), USA.
72. H.K. Lee, C. Moussa1, G. Qin, T. Kitada, K.M. Rosen, Pravir Kumar, Q. Fu and H.W. Querfurth (2009), Parkin reverses intracellular β-amyloid accumulation and its negative effects on proteasome function. September 15, 7th Annual Alzheimer's Research Day Boston University School of Medicine, Boston, (Poster presentation), USA.
73. Pravir Kumar, Qinghao Fu, Han-Kyu Lee, Henry Querfurth (2007) Cell Cycle Re-entry and the Role of Molecular Chaperones in β-Amyloid Laden Skeletal Muscle Cells and Alzheimer's Disease Brain. TUFTS University A Research Day on Translational Research: Applying Discovery. November 29, 2007
74. Pravir Kumar, Fu Q, Lee H-K, Querfurth HW.(2008), Cycle Re-entry and the Role of Molecular Chaperones in β-Amyloid Laden Skeletal Muscle Cells and Alzheimer's disease Brain. Annual Research day for Caritas St. Elizabeth's Medical Center and Tufts university school of Medicine), Boston, March (Oral presentation), USA.
75. Pravir Kumar, Querfurth HW. (2007), Cytoprotection and abrogation of cell cycle re-entry by cyclin inhibitors and molecular chaperones in ®-amyloid producing muscle cells, annual meeting of Society for Neuroscience, San Diego, CA, November (Poster presentation), USA.
76. Pravir Kumar, Fu Q, Lee H-K, Querfurth HW (2007),. Cell Cycle Re-entry and the Role of Molecular Chaperones in β-Amyloid Laden Skeletal Muscle Cells and Alzheimer's disease Brain. TUFTS University Research Day on Translational Research: Boston, March (Poster presentation), USA.
77. Pravir Kumar, Ambasta RK, Rosen KM, Kosik KS, Band H, Querfurth HW (2005), Interaction of molecular chaperone C-terminus Hsc70 interacting protein (CHIP) with β-Amyloid Precursor Proteins" Annual meeting of Society for Neuroscience, Washington DC, November (Oral presentation), USA.
78. Pravir Kumar, Ambasta RK, Rosen KM Querfurth HW. (2005), Direct interaction of C-terminus Hsc70 interacting protein (CHIP) with amyloid precursor proteins. Annual Research day for Caritas St. Elizabeth's Medical Center (Tufts university school of Medicine), Boston, March (Poster presentation), USA
79. Charbel Moussa, Qinghao Fu, Pravir Kumar, Wendy Robinson, Alex Shtifman, Jose-Raphale Lopez, David Weinberg, Henry Querfurth (2005), "Overexpression of human APP in skeletal muscle of transgenic results in ion dyshomeostasis and weakness. Annual Research day for Caritas St. Elizabeth's Medical Center (Tufts university school of medicine), March, oral presentation (recipient for second prize for biomedical research), Boston, (Oral presentation), USA.

SELECTED THESES:

Devesh Srivastava	Machine Learning-assisted Drug Repurposing for Identification of Potential HDAC6 Inhibitors	M.Tech (Bioinformatics)	May 2023
Murli Mohan Mishra	Finding common involution between Type 2 Diabetes and Alzheimer's Disease (Type 3 diabetes) and the recent advancement in their therapeutic regime using computational approach	M.Tech (Industrial Biotech)	May 2023
Nancy Sanjay Gupta	Identification of potential DNMT1inhibitors in Alzheimer's therapeutics: a drug repurposing and machine learning approach	M.Tech (Industrial Biotech)	May 2023
Harsha Jha	Translating a ladder from AI/ML, novel biomarkers and EV's for personalized medicine in neurodegenerative disease and therapeutics	M.Tech (Industrial Biotech)	May 2023
Kumud Kaul	Targeting NNMT by Jeratinine E using bioanalytics to target Parkinson's disease	M.Sc. Biotech	May 2023
Shallu Chauhan	Prediction of pecilocin as a potential therapeutic regime in countering glioblastoma using computational approach	M.Sc. Biotech	May 2023
Neha Nagvanshi	Repurposing of Anti-viral compounds against HDAC6 in Alzheimer's Therapeutics	M.Sc. Biotech	May 2023
Sanya	Emerging molecular mechanism as therapeutics for Alzheimer's disease	M.Sc. Biotech	May 2023
Shanu Bhardwaj	A drug repurposing Approach through pharmacophore modelling and molecular docking to manage Alzheimer's Disease Via GSK-3 beta modulation	M.Sc. Biotech	May 2023
Tanya Kalra	Identification of natural compound for attenuation of Diabetic neuropathic pain	M.Sc. Biotech	May 2023
Twinkle	In silico exploration for repurposing breast cancer medications in sleep and neurodevelopmental disorders.	M.Sc. Biotech	May 2023
Harshita Goswami	Computational Analysis of Post-Translational Modifications in Major Neurodegenerative Diseases	M.Tech (Bioinformatics)	May 2022
Mehar Sahu	Computational Analysis of Post Translational Modifications in the Pathogenesis of Alzheimer's Disease	M.Tech (Biomedical Engineering)	Jul-21
Ankita Das	Missing link between NLRP3 mediated neuroinflammation and micro RNA in Alzheimer's disease	M.Tech (Biomedical Engineering)	Jul-21
Devesh Srivastava	In silico approach towards Parkinson's disease pathophysiology, drug repurposing and post translational modifications	M.Tech (Bioinformatics)	Jul-21
Swati Tiwri	In silico identification of common proteins involved in crotonylation and acetylation in Alzheimer's disease and drug repurposing	M.Tech (Biomedical Engineering)	Jul-21

Akanksha Khosla	In silico analysis of potential drugs as neuroprotectants targeting mitochondrial protein PINK1 of Parkinson's disease	M.Sc (Biotechnology)	Jun-21
Vaibhav Oli	Role of FOXO3 in regulation of neurodegenerative disorders	M.Sc (Biotechnology)	Jun-21
Ankita Jha	Cell cycle re-entry and its pharmacological implications in neurodegenerative diseases	M.Sc (Biotechnology)	Jun-21
Nishtha Malhotra-	In silico screening of potential therapeutic molecule rescue from Alzheimer's disease targeting cdk7	M.Sc (Biotechnology)	Jun-21
Chitranjan Mukherjee	Analysis of circRNA Mediated ceRNA Network in Parkinson's Disease	M.Tech (Bioinformatics)	Nov-20
Diksha Semwal	Integrated Bioinformatics Analysis to Identify Critical Genes and Potential Drug Candidate Discovery	M.Tech (Bioinformatics)	Nov-20
Asmita Jaiswal	Identification and screening of DEGs, Pathways, and Therapeutic Agents for	M.Tech (Biomedical Engineering)	Nov-20
Shruti Thareja	A Study on Flavonoids to Ameliorate the Cause of Various Neurodegenerative Diseases	M.Tech (Biomedical Engineering)	Nov-20
Indu Bisht	An integrated approach to unravel potential crosstalk between Alzheimer's disease and Parkinson's disease	M.Tech (Bioinformatics)	Sep-19
Ambika Dubey	Omics' Data Analysis of Repurposed Drugs Entinostat and Tropicamide Against Dopamine Metabolism	M.Tech (Bioinformatics)	Sep-19
Ankita Arora	Screening and designing of KIFA5A like motor proteins in Amyotrophic Lateral Sclerosis (ALS)	M.Tech	Sep-19
Parul Sharma	Screening of Vitamins based on Structure-Activity Relationship as a potential therapeutic molecule against oxidative stress-mediated neurodegeneration	M.Tech	Sep-19
Rohan Gupta	In silico Design of Novel Isoform Selective Histone Deacetylase Inhibitor as a therapeutic approach for Alzheimer's disease Using Multiple Sequence Alignment, Machine Learning, Molecular Docking, ADME, And Mutation Analysis	M.Tech (Bioinformatics)	Aug-18
Rohan Ajit Singh	3D QSAR studies, virtual screening and machine learning of novel Protein Kinase C derivatives to obtain new inhibitors for Cancer	M.Tech	Aug-18
Deepak Kumar	Combined sequence and sequence-structure based analysis of SNPs associated with genes involved in Parkinson's disease	M.Tech.	Aug-18
Harleen	An in-silico approach to investigate the therapeutic potential of Ayurvedic drugs against Allopathic in treatment of Alzheimer's disease (Type-3 Diabetes)	M.Tech.	Aug-17

Swati Sharan	In silico study to repurpose DJ1 binding compounds for Alzheimer's disease and Parkinson's related dementia	M.Tech.	Aug-17
Alka Raina	Characterization of putative drugs for targeting Alzheimer's disease and Type II Diabetes Mellitus	M.Tech.	Aug-17
Minal Singh	In silico analyses of holo AβPP Promoter and transactivation modules	M.Tech.	Aug-17
Shailesh Kumar Singh	Application of Biomolecules in Huntington's Disease: An in-silico analysis of Huntingtin HTT gene with drugs	M.Tech.	Aug-16
Abhishek Srivastava	Therapeutics application of anti-cancerous drug in neurodegenerative disorders	M.Tech.	Aug-16
Deepak Singh	In silico docking studies of Cu-Zn SOD and plant derivatives to identify potential drugs for the treatment of Amyotrophic Lateral Sclerosis (ALS)	M.Tech.	Aug-16
Ankita Yadav	In silico analysis of biomolecules for LRRK2 gene and its clinical relevance	M.Tech.	Aug-16
Nikhil	In silico analysis of potential tau protein kinase inhibitors using docking studies for the treatment of Alzheimer's Disease	M.Tech.	Aug-16
Sidharth Sharma	Enhancing production of organic acids by immobilized thermophilic nitrilase of Pseudomanas sp KNB2	M.Tech.	Aug-16
Shashank Kumar Singh	Immobilization and reaction condition optimization of Amidase of Bacilus Sp. MNB-1	M.Tech.	Aug-16
Deepak Rathore	Preparation and characterization of alginate, alginate-chitosan, alginate-gelatin scaffold for tissue engineering	M.Tech.	2016 October
Satyaprakash	Protein profiling and in silico Analysis pf PPI network in Meningitis CSF samples	M.Tech	2015 July
Noopur Kejariwal	Characterization of putative drugs for the clinical application in Alzheimer's disease	M.Tech	2015 August
Ankit Tripathi	Clinical case studies and propensity of Diabetes in Delhi population	M.Tech	2015 August
Sagar Verma	A pilot study to examine the role of drug metabolizing enzymes in Parkinson's disease	M.Tech	2015 August
Dhiren Pattanayak	Computational analysis of key transcription factor binding modules in Alzheimer's disease and its associated genes	M.Tech	2015 July
Sakshi Sharma	Genetic association of ABC transporter gene in leukemia	M.Tech	2015 August
Dhiraj	Neurological Channelopathic Knowledge Base(NCKB): An application software for Ion channels and Neurological channelopathies	M.Tech	2014 July
Binod Koirala	Study of apoptotic pathway in Diabetes	M.Tech	2014 July

Lakshmi	Role of ubiquitin E3 ligase, angiogenic and apoptotic signaling in Diabetes	M.Tech	2013 July
Ravi Tomar	Study of Small Ubiquitinin like Modifiers and Chaperonic Signaling in Non-Insulin Dependent Diabetes Mellitus	M.Tech	2014 July
Abhidha Kohli	The effect of hypoxia on mice skeletal muscle and cardiovascular system	M.Tech	2011 June
Mandar Bhattacharya	The effect of high-altitude hypoxia on mice nervous and renal system	M.Tech	2011 June
Ganesh Mansing Lad	Generation of murine model of in vivo study of Parkinson's disease using rotenone	M.Sc	2010 May
Kunal Kumar Singh	Toxic effect of rotenone on different organs in Parkinson's disease like model	M.Sc	2012 June
Pallavi Asthana	Involvement of angiogenic marker and chaperones in solid tumour	M.Sc	2012 May
Anup Kumar	Screening and characterization of anticancer biomolecules	M.Sc	2011 June
*Mayank Pathak	Screening of edible plant materials for antimicrobial activity (Internal guide)	M.Tech	2011 May
*Ambika S. Kurbet	Use of in vitro colony forming assay and cytogenetics as a plausible predictive parameter in prognosis of chronic myeloid leukemia	M.Tech	2011 May
*Jay Prakash Kumar	Cloning, expression, purification and crystallization of thioredoxin (Trx) and thioredoxin reductase (pTrxR and TrxR) from hydra magnipapillata	M.Sc	2012 June
*Vikas Malik	Model organism to demonstrate cellular senescence in organismal aging	M.Sc	2012 June
*Shalini Pal	To study the association between iron deficiency anaemia and stroke and its impact on stroke severity and outcome	M.Sc	2012 June
*R. Karunya	Development of a potency assay for therapeutic monoclonal antibody anti CD6	M.Sc	2012 June
*Gunjan Singh	Role of vitamin D in the regulation of Cathelicidin (hCAP-18/LL-37), antimicrobial peptide in visceral leishmanlasis patients	M.Sc	2011 June
*Kumari Neha	Changes in the level of replication proteins due to depletion of protein associated with ubiquitin ligase in HELA cell	M.Sc	2011 June
*Kumari Soni	Detection of mutation in alpha globin gene in thalassemia patients	M.Sc	2011 June
*B. Komathi	Molecular characterization of Candida sp.	M.Sc	2011 June
*Arpita Maheshwari	To study the role of carbohydrate domains in host-parasite interaction by using synthetic glycoconjugates	M.Sc	2011 June
*Archan Chakraborty	A study of neurodegeneration involved in SCA1 using Drosophila melanogaster as a model system	M.Tech	2011 June

*Ruchi Bansal	Post-transcriptional gene silencing by siRNA in cancerous cell-line	M.Tech	2011 May
*Manisha	Genetic diversity studies in Brassica carinata using microsatellite markers	M.Tech	2011 May
*Girisaran Gangatharan	Cellular and molecular mechanisms of Zebrafish fin regeneration	M.Tech	2011 Nov
*Gunjan Singh	In silico analysis of stress gene in breast cancer	M.Tech	2016 August
Priya Chatterjee and Apporva Baluapuri	Pathophysiological study of cerebrospinal fluid (CSF) in Parkinson's disease	B.Tech	2010 May
Mayank Malhotra Bhumesh Tanwar and Vishal Singhal	System biology of neuroblastoma: in silco drug targets identification, structure prediction and development of online neuroblastoma database of Protein-Protein interaction	B.Tech	2013 May
Jashpreet Singh and Jayshree	ECG signal analysis, De-noising and characterization of heart disease	B.Tech	2014, May
Ashutosh Kumar, Bhavesh Gulia, Gaurav	Intellectual property rights, Law, case studies and analysis with Indian Laws	B.Tech	2015, May
Himanshi Allahabadi	Neurogene: A platform to analyze the genetics of neurodegeneration	B.Tech	2015, May
Rajat Gupta	Calpain Dysregulation in Neurodegenerative Disorders	B.Tech	2016, May
Piyush Sawhney	In silico docking of ROCK2 protein with Rho kinase inhibitor SR3677 in Alzheimer's disease	B.Tech	2016, May
Parul Yadav	Therapeutic relevance of LARK2 inhibitors in pathophysiology of Parkinson's disease: an in silico study	B.Tech	2016, May
Shashank Gunjan	Metal ion toxicity in Alzheimer's disease	B.Tech	2016, May
Pooja Pabari	A DYRK1A protein based in silico association study between Down's Syndrome and Alzheimer's disease	B.Tech	2016, May
Vanshika Bawa	Predictive modeling for diagnosis of Dementia in mild-and moderate TBI patients	B.Tech	2018, May
Ananya Pathak	Translation of spiking Neural Network in Python	B.Tech	2018, May

Garima Gulati	Unique Protein Targets of Multi Drug Therapy in Diabetes Type II and III	B.Tech	2019, June
Raghav Bhard-waj	Implementation of Python-based Artificial Neural Network System & its Application in Malaria Detection	B.Tech	2019, June
Nikita	"Effects of Sitagliptin on Various Receptors in Diabetes"	B.Tech	2019, June
Yuvraj Singh	Effects of Sulfonylurea and Plant Products on Diabetes	B.Tech	2019, June
Rahul Yadav	Effect of flax seed in male breast cancer	B.Tech	2019, June
Urvi Bhatia	Detecting early Alzheimer's disease using R programming and computational tools	B.Tech	2018, May
Priya Mittal	Molecular pathophysiology of dystrophin deficient muscle in Du-chenne muscular dystrophy	B.Tech	2010 June

PROFESSIONAL MEMBERSHIPS

1. Society for Neuroscience, Washington, USA
2. Alzheimer forum, USA
3. Indian Academic of Neurosciences, (India)-LK92 Life member
4. Society for Biotechnologist (India)-L494, Life member
5. Society for Neurochemistry (India); LM-I 265, Life member
6. Asia Pacific Society for Neuroscience (APSN), 10-4-043-022.
7. International Society for Neurochemistry (ISN)
8. American Society of Neurochemistry (ASN)

ONGOING RESEARCH ACTIVITIES (2020-2025)

NEUROBIOLOGY (Molecular basis of neurodegenerative disorders)

Currently guiding 12 PhD students and 10 MS and BS students

ALZHEIMER'S DISEASE

(1) Action of molecular chaperone and ubiquitin E3 ligase in the clearance of Aβ toxic metabolites

Specific Aim 1: To dissect the molecular mechanism of ubiquitination of Aβ plaque to reverse the AD symptoms (memory and cognitive repairing and a proper neuronal communication).

Specific Aim 2: To investigate the functional significance of mutant CHIP and Parkin (TPR domain and Ubl domain) in association with different HSPs in bAPP biology. Does CHIP and Parkin ubiquitinate Ab?

Specific Aim 3: To explore the cross-talk mechanism between Alzheimer's and Parkinson's disease at $A\beta_{1-42}$ level.

Specific Aim 4: To identify the bio molecules (Indian medicinal plants) for Ab plaque rupture that play in neuroprotection

(2) Transcriptional regulatory mechanism and cross-talk between RAGE and LRP genes in Aβ-Biology

Specific Aim 1: To isolate and clone LRP and RAGE promoters' sequence of human in reporter gene construct (pGL3-Basic).

Specific Aim 2: To investigate the position and function of candidate genes (putative transcription factor binding elements, TFBEs) in LRP and RAGE promoters those regulate/control the β-APP/Aβ-expression.

Specific Aim 3: To elucidate the mechanism of interaction between putative candidate genes with protein of interest at chromatin level.

Specific Aim 4: To determine the post translational modification role of RAGE and LRP genes in mammalian cell system upon pharmacological and physiological stimuli.

(3) Trascriptomics approach for the characterization of various transcription factor binding elements in β-APP gene regulation

Specific Aim 1: To determine the involvement of heat shock elements and other transcription factors (TFs) in β-APP gene regulation.

Specific Aim 2: To investigate the position and function of relevant putative transcription factor binding elements (TFBEs) that affects the β- APP gene.

Specific Aim 3: To elucidate the mechanism of interaction between putative transcription factor binding elements with protein of interest chromatin level.

(4) Understanding the molecular mechanism of hypoxia induced neuro-muscular degeneration

Specific aim 1: To determine the functional role and intricate mechanism of various ubiquitin E3 ligases and signaling molecules in hypoxia induced muscles and neurons.

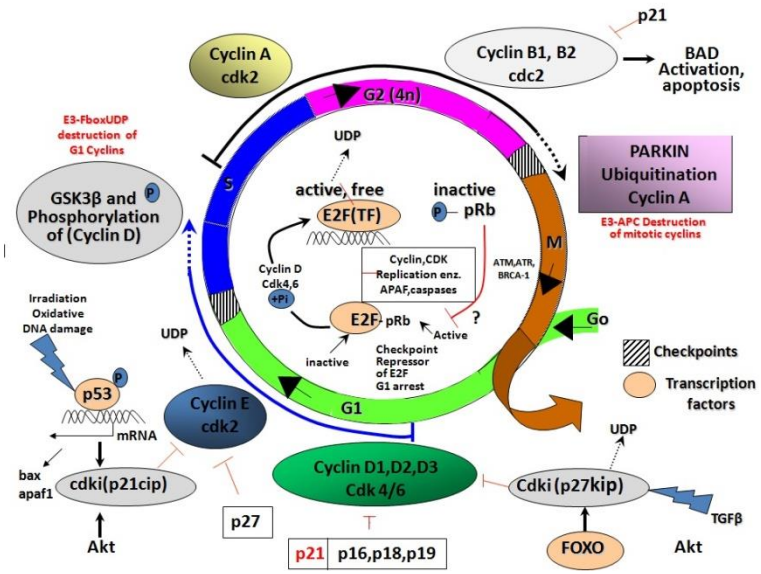
Specific aim 2: To identify the genes, proteins and biomarkers which are involved in hypoxia induced neuro muscular degeneration and its correction mechanism

Specific aim 3: To check the efficacy of various biomolecules in hypoxia induced muscle and neurons

PARKINSON'S DISEASE

(5) Effect of post-mitotic cell division in neurons and muscles in cell culture and PD animal model

Specific aim 1: To check the cell cycle phase markers, cyclins and CDKs in neurodegenerative models (hypoxia and PD model)



Specific aim 2: To identify the major signaling pathways which are disturbed during the cell cycle re-entry in aged brain and muscles

Specific aim 3: To explore the efficacy of various biomolecules in cell cycle dyshomeostasis and depleting the cyclin/CDKs level

DRUG SCREENING AND DISCOVERY: IDENTIFICATION OF LEAD MOLECULES

(6) Screening and identification of lead molecules from Indian medicinal plants

We have around 100 molecules which action is not known completely neither in neurodegenerative disorders nor in cardiovascular problems. Moreover, the main aim of our research work is to identify the key signalling molecule and pathway where these drugs are acting, and it would open an avenue to explore the therapeutic mechanism of major diseases.

Further to use these drugs we may take the advantage of **neuroprosthetics** to deliver the drug site specifically in animal model initially and then for clinical trials.

NEURO-ONCOLOGY

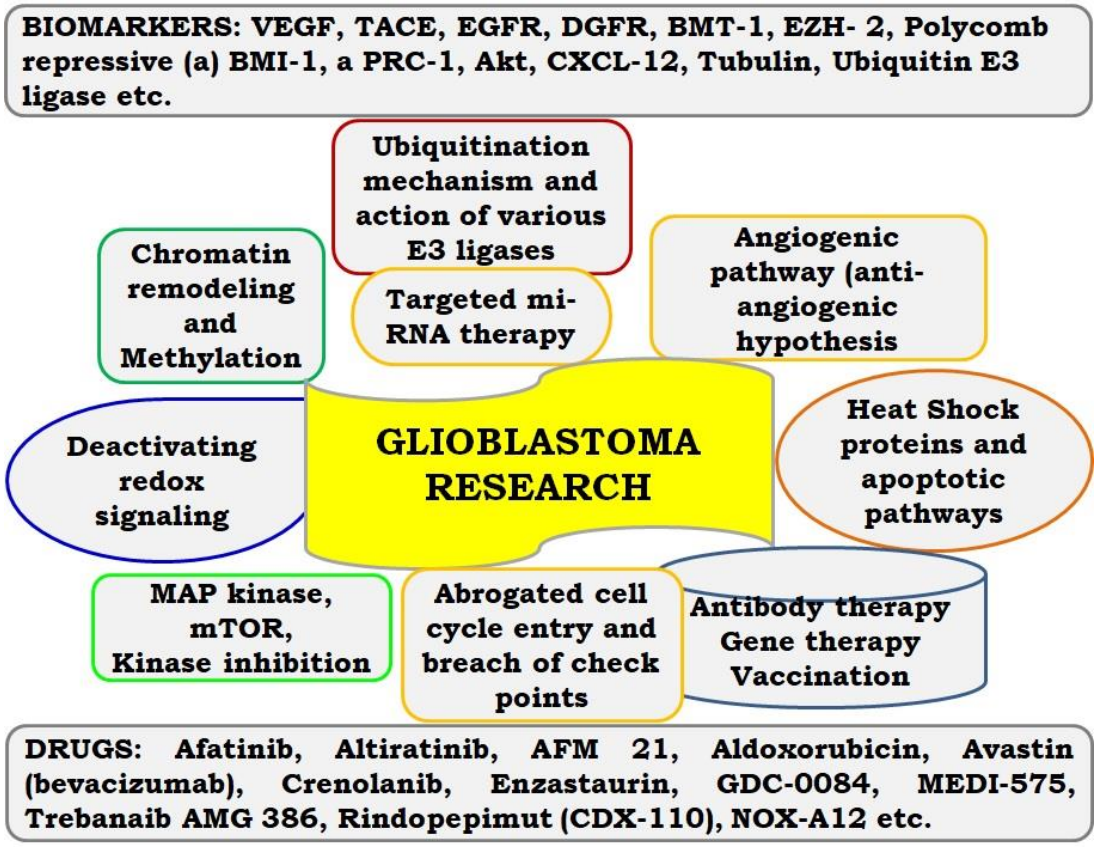
(7) Collaborative action of molecular chaperone, ubiquitin E3 ligase and signalling molecules in the reversal of glioblastoma and other brain tumors

Specific aim 1: To determine the functional role and intricate mechanism of various ubiquitin E3 ligases and signaling molecules in glioblastoma samples.

Specific aim 2: To identify the genes, proteins and biomarkers which are involved in glioblastoma.

Specific aim 3: To understand the cell cycle deregulation and alteration in angiogenic and other signaling pathways in glioblastoma

Specific aim 4: To check the efficacy of various biomolecules (from Indian medicinal plants) in glioblastoma and other brain tumors



Teaching Philosophy

"Good teacher teaches, and great teacher inspires"

I am committed to an interdisciplinary approach to research and teaching, and all my courses are structured accordingly. Rather than simply lecturing to a class, I strive to cultivate an interactive environment in which students can express themselves freely while learning to engage with the past in meaningful ways. My experience in universities (VIT and DTU) takes great pride in its training of young scholars, and I feel that it is my responsibility to uphold these standards and to encourage and challenge students to work up to their potential, in hopes that their experiences in my classes will teach them far more than the history of biological sciences. I encourage students to work hard, under-stand concepts and deliver presentations.

I am preparing classes well in advance so that information flow in a streamline manner to their brains. My classes are flooded with intermittent assessments, discussion, tutorials, quiz, and higher-order thinking questions and of course troubleshooting (if any). My teaching methodology included, regular lecture, PPT presentation, video demonstration.

TEACHING PORTFOLIO

SUBJECTS TAUGHT AT DOCTORAL, MASTERS AND BACHELOR LEVELS

SUBJECTS TAUGHT	CLASS	STUDENTS STRENGTH
Genetic Engineering	M.Sc. Biotechnology 2019-2021	36
Molecular Therapeutics	M.Sc. Biotechnology 2019-2021	36
Gene therapy	M.Tech. Biomedical Engineering 2019-2021	05
Application of genomics in Medicine Theory and Lab	Master of Technology (M.Tech.) Bioinformatics 2014-current@DTU	43
Advanced Genetic Engineering	Master of Technology (M.Tech.) Bioinformatics 2014-Current @DTU	45
Human Anatomy and Physiology Theory and Lab	Master of Technology (M.Tech.) Bio-medical Engineering, 2013-current@DTU	43
Advanced Proteomics	Master of Technology (M.Tech.) Bioinformatics 2013-current @DTU	45
Protein Engineering	Master of Technology (M.Tech.) Industrial Biotechnology 2013-current @DTU	10
Genomics in Medicine	Master of Technology (M.Tech.) Bio-medical Engineering, 2013@DTU	43
Genomics and Proteomics (Theory and Lab)	Bachelor of Technology (B.Tech.) Biotech. 2013 @DTU	24
Genetic Engineering (Theory and Lab)	Bachelor of Technology (B.Tech.) Biotech.2012 @DTU	20
High throughput and structural Biology Lab	Master of Technology (M.Tech.) Biotech. 2012@DTU	23
Signal Transduction	Master of Science (M.Sc.) Biotech. 2012	65
Genetic Engineering	Master of Science (M.Sc.) Biotech. 2011	185
Medical Biotechnology	Master of Science (M.Sc.) Biotech 2011	190
Genetic Engineering	Master of Technology (M.Tech.) Biotech. 2010	37
Animal Biotechnology	Master of Technology (M.Tech.) Biotech. 2010	52
Medical Biotechnology	Master of Science (M.Sc.) BMG 2009	83
Medical Biotechnology	Master of Science (M.Sc.) Biotech.2010	70
Molecular Medicine	Bachelor of Technology (B.Tech.) Biotech.2009	134
Molecular Medicine	Bachelor of Technology (B.Tech.) Biotech.2010	200

Genomics and Proteomics	Bachelor of Technology (B.Tech.) Biotech.2009	120
Molecular Biology	Bachelor of Technology (B.Tech.) Biotech.2010	40
Recombinant DNA Technology	Bachelor of Technology (B.Tech.) Biotech.2009	40
Cell Biology	Bachelor of Technology (B.Tech.) Biotech.2009	14
Medical Biotechnology	Bachelor of Technology (B.Tech.) Biotech.2009	15

Developed different courses such as signal transduction, molecular medicine, Medical biotechnology, Molecular Neurobiology and many more.

Last updated: July, 2023