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Visiting Faculty

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Professional Guidance

1. Ph.D. Neurosciences: Awarded - 02
2. M.Sc. Neurosciences: Awarded - 04
3. B.Sc. (H) Neurosciences: Awarded – 19(2018), 20(2019), 18(2020), 23(2021), 24(2022)

Professional Experience

1. April 2022 – Ongoing as **Chief Scientific Officer**, GloNeuro, Sector 107, Noida, India
(including Apr 23 – Ongoing as **Consultant Neuroscientist**, Shiksha Infotech, Bangalore, India; &
Jun 2022 – Dec 2022 as **Consultant Neuroscientist**, REM42 Technologies, Bangalore, India)
2. September 2017 – March 2022 as **Assistant Professor (Grade III)**, Amity Institute of Neuropsychology and Neurosciences (AINN), Amity University UP, Noida, India.
3. January 2016 – August 2017 as **SERB – National Post-Doctoral Fellow** and **Research Associate**, CSIR - Centre for Cellular and Molecular Biology (CCMB), Hyderabad, India.
4. July 2009 – December 2015 as **ICMR/ NIN-Senior Research Fellow** and **Research Associate**, National Institute of Nutrition (NIN), Hyderabad, India.
(including 6 months as **IBRO APRC Research Exchange Fellow / UNSW Visiting Fellow** at University of New South Wales, Sydney, Australia, and 4 months as **Young Investigator Fellow & Ricerca Assegnista (Research Fellow)** at Università degli Studi di Verona, Verona, Italy, and
5. March 2009 – August 2009 as **Lecturer** at Int. Inst. of Technology and Management (IITM), Hyderabad, India.
6. September 2007 – February 2009 as **Junior Research Fellow (CSIR)**, Dept of Neurophysiology, National Institute of Mental Health And Neuro Sciences (NIMHANS), Hosur Road, Bangalore, India.
7. June 2006 – July 2007 as **BCIL Research Assistant & Trainee** under Biotech Industrial Training Program of DBT, Government of India & Biotech Consortium India Ltd. (BCIL) at Virchow Biotech, Hyderabad, India.

Education

1. **Doctor of Philosophy (Biochemistry)**, Year: 2015, ICMR – NIN and Osmania University, Hyderabad.
2. **Master of Science (Neuroscience)**, Year: 2006, School of Studies in Neuroscience, Jiwaji University, Gwalior.
3. **Bachelor of Science (Major- Zoology)**, Year: 2002, School of Life Sciences, IGNO University, New Delhi.

Awards/ Fellowships & Travel Grants

1. **ALBA-CHS Travel Award** from Chica & Heinz Schaller Foundation (CHS) at **2024 FENS Forum**, Vienna, Austria [25th – 29th June, 2024].
2. Organized **IBRO-APRC Associate School on Advances in Neurodegenerative Disorders and Therapeutics** at Amity Institute of Neuropsychology and Neurosciences, Amity University UP, India [27th September – 01st October 2021].
3. **Korean Society of Lipid and Atherosclerosis – ICoLA Grant** to attend 10th International Congress on Lipid Metabolism & Atherosclerosis (ICoLA2021) at Seoul, Korea [10th – 11th September 2021].
4. **ALBA-FKNE-yIBRO Diversity Grant** at FENS - VIRTUAL FORUM 2020 [11th – 15th July 2020]
5. **IBRO-APRC Travel & Short Stay Grant 2020** at MONASH University, Kuala Lumpur, Malaysia [January 2021]
6. **MSBMB-ASEAN YSN Rapid Oral Award** in recognition for outstanding oral presentation at **27th Federation of Asian and Oceanian Biochemistry & Molecular Biology (FAOBMB) conference** at Kuala Lumpur, Malaysia [19th – 22nd August 2019].
7. **UNESCO Travel Grant** for presentation at **27th FAOBMB and 44th Malaysian Society for Biochemistry & Molecular Biology (MSBMB) conference** at Kuala Lumpur, Malaysia [19th – 22nd August 2019].
8. **Japan Neuroscience Society (JNS) Travel Award** to attend the **International Exchange Meeting for Young Researchers, 42nd Annual Meeting of the Japan Neuroscience Society (Neuro2019) and 62nd Annual Meeting of the Japan Society of Neurochemistry** at Niigata, Japan [23rd – 28th July 2019].
9. **Korean Society of Lipid and Atherosclerosis Travel Award** to attend 6th International Congress on Lipid Metabolism & Atherosclerosis (ICoLA2017) at Seoul, Korea [08th – 09th September 2017]. *Not availed.*
10. **IBRO International Travel Grant 2016 (January – June)** to attend the **3rd International Congress Hidden Hunger (CHH17)** at Stuttgart, Germany [20th – 22nd March 2017].
11. **ISN-JNC Fellowship and Travel grant** to attend **1st ISN-JNC Flagship School** at Alpbach, Austria. Funded by International Society for Neurochemistry (ISN) [12th – 18th September 2016].
12. **SfN / IBRO International Travel Grant** to attend **Annual Meeting of Society for Neuroscience (SfN) ‘Neuroscience 2015’** at Chicago, USA [17th – 21st October 2015].
13. **IBRO 9th World Congress Symposium Speaker Award** to participate (as speaker) in **9th IBRO World Congress of Neuroscience** at Rio de Janeiro, Brazil [7th – 11th July 2015].
14. **IBRO APRC fellowship and Travel Grant for 1st IBRO/APRC Chandigarh Neuroscience School: Basic & Research Concepts of Depression & Cognitive Dysfunction** at Panjab University, Chandigarh, India [03rd–

08th November 2014]. *Not availed.*

15. **Best Poster Award** at the **2014 ACPS Symposium: Game Changers in Perinatal Science** by **The Australian Centre for Perinatal Science** at University of New South Wales, Sydney, Australia [20th August 2014].
16. **JNS-IAN Travel Award** to attend the International Exchange Meeting for Young Researchers and 37th Annual Meeting of the Japan Neuroscience Society (Neuroscience2014) at Yokohama, Japan [10th – 13th September 2014].
17. **IBRO fellowship and Travel Grant** for **IBRO Advanced School of Neuroethology** at Hokkaido University, Sapporo, Japan [24th – 28th July 2014].
18. **IBRO International Travel Grant 2014 (January – June)** to attend the **Annual Meeting of Australasian Neuroscience Society** (ANS 2014) at Adelaide, Australia [28th – 31st January 2014].
19. **IBRO APCR Exchange Fellowship 2013** at University of New South Wales, Australia [Apr-Sept 2014]
20. **DBT Travel Support/ Grant** for International Conference to attend **Annual Meeting of Society for Neuroscience (SfN) ‘Neuroscience 2013’** at San Diego, USA [9th – 13th November 2013].
21. **Science and Engineering Board (SERB) DST Financial Grant** for International Scientific Event to participate in **Annual Meeting of Society for Neuroscience (SfN) ‘Neuroscience 2013’** at San Diego, USA [9th – 13th November 2013]. *Not availed.*
22. **IBRO Kemali Foundation Travel Support** for **3rd IBRO-Kemali College** at Cortona, Italy [25th – 31st August 2013].
23. **Travel award** from **Federation of Asian Oceanian Neuroscience Societies (FAONS)** for **33rd Annual Meeting of the Australian Neuroscience Society** (ANS 2013) at Melbourne, Australia [3rd – 6th February 2013].
24. **IBRO-APRC fellowship and Travel Grant** for **Advanced School on Brain Imaging** at the Monash Biomedical Imaging Research Centre, Clayton, Australia [30th January – 1st February 2013].
25. Awarded **Reduced registration fee slot** to attend the ISDN 2012 conference **“19th Biennial Meeting of the International Society for Developmental Neuroscience”**, Mumbai, India [11th – 14th January 2012].
26. **IBRO Special Travel Grant** for **8th IBRO World Congress of Neuroscience** at Florence, Italy [14th July – 18th July 2011].
27. **IBRO Young Investigator Visiting Program fellowship** [June 2011 – July 2011].
28. **ISN – CAEN Financial Support 2011** to visit University of Verona, Italy from Committee for Aid and Education in Neurochemistry (CAEN) of the **International Society for Neurochemistry (ISN)** [April 2011 – August 2011].
29. **Senior Research Fellowship (ICMR – National Task Force on Ageing)** at National Institute of Nutrition (NIN), Indian Council of Medical Research (ICMR), Hyderabad, India. [13th July 2009 – 26th December 2012].
30. **Junior Research Fellowship (CSIR - GATE)** at National Institute of Mental Health And Neuro Sciences (NIMHANS), Bangalore, India. [01st September 2007 – 28th February 2009].
31. National Level **Graduate Aptitude Test in Engineering - GATE 2007** [93.22 Percentile – Life Sciences].
32. **Best Research Proposal prize** at 1st UAE- IBRO Neuroscience School, Al Ain, UAE.
33. **Best Presentation of the session Award** at 1st UAE- IBRO Neuroscience School, Al Ain, UAE.

34. **UAE- IBRO fellowship and Travel award** to attend **1st UAE- IBRO Neuroscience School**, Al Ain, UAE. [Jan 24th- 31st, 2007].
35. **IBRO- APRC fellowship** for **Neuroscience Orientation Summer Program** at Tehran, Iran. [Sept 2nd -21st, 2006].
36. **IBRO- APRC special fellowship & Travel award** to attend **6th IBRO- Associate School of Neuroscience** at Tehran, Iran. [Aug 26th -30th, 2006].
37. **Two years DBT Studentship** in **M. Sc. Neuroscience** from Department of Biotechnology (DBT), Govt. of India. [July 2004- June 2006].

Research Interests

Neurobiology of Aging and Obesity, Sleep Neurobiology and Technology, Spinal Cord Injury, Epilepsy, Neurodegeneration, Micronutrient deficiency, Early life stress

Membership in Scientific Societies

1. International Brain Research Organisation (IBRO) – Member and Alumni.
2. International Society for Developmental Neuroscience (ISDN) – Member.
3. International Behavioural Neuroscience Society (IBNS) – Member [3735] since May 2007.
4. International Society for Neurochemistry (ISN) – Member.
5. Indian Academy of Neurosciences (IAN) – Life Member.
6. Society for Biological Chemists (India) - Life Member since Nov 2017.
7. Society for Neurochemistry, India (SNCI) – Life Member since 2019.
8. Nutrition Society of India (NSI) – Life Member.
9. The American Physiological Society (APS) – Graduate Student Member.
10. Japan Neuroscience Society (JNS) – Associate Member.
11. European Molecular and Cellular Cognition Society (EMCCS) – Student Member.
12. The Molecular and Cellular Cognition Society (MCCS) – Regular Member since Jan 2015.
13. European Behavioural Pharmacology Society (EBPS) – Student Member.
14. International Society to Advance Alzheimer's Research and Treatment (ISTAART) Professional Membership

Reviewer / Member of Editorial Board:

1. Journal of Alzheimer's Disease – [Associate Editor](#)
2. Scientific Reports – [Editorial Board Member](#)
3. BioMedical Engineering OnLine – [Associate Editor](#)
4. Current Alzheimers Research – [Thematic Issue Editor](#)
5. WikiJournal of Medicine – [Associate Editor](#)
6. Frontiers in Aging Neuroscience - [Guest Associate Editor](#)
7. Current Topics in Medicinal Chemistry – [Thematic Issue Editor](#)
8. Brain Sciences – [Special Issue Editor](#)
9. Journal of Biological Regulators and Homeostatic Agents – [Special Issue Editor](#)

10. Frontiers in Psychology - [Handling Editor](#)

11. **Reviewer in the International Peer-reviewed Journals** - The Lancet; Cellular and Molecular Life Sciences; Frontiers in Pharmacology; Frontiers in Neuroscience; Frontiers in Nutrition; Frontiers in Aging Neuroscience; Frontiers in Psychiatry; Medical Hypotheses; Neuroscience; BioMed Research International; Health Promotion International; Heliyon; Biochimie; Epilepsy & Behaviour; Science of the Total Environment; International Journal of Molecular Sciences; Neuropsychiatric Disease and Treatment; Nutrients; Alzheimer's & Dementia: The Journal of the Alzheimer's Association; Healthcare; Carbon Letters; Children; PLoS One; Frontiers in Neurology; Journal of Ethnopharmacology; Sensors; Journal of Inflammation Research; Journal of Clinical Medicine; ACS Omega; Current Medical Imaging; Biomedicines; Journal of Personalized Medicine; Medicina; Diagnostics; Environmental Science and Pollution Research; Acta Psychologica; Journal of Imaging; Ageing Research Reviews; Nutritional Neuroscience; Science Progress; Artificial Intelligence in the Life Sciences; Open Veterinary Journal; Appetite; Signal Transduction and Targeted Therapy; Journal Of Exposure Science And Environmental Epidemiology (Nature); Brain Research Bulletin; BioMedical Engineering OnLine; Nature and Science of Sleep; Neuropharmacology; Archives of Medical Research; Toxicology and Environmental Health Sciences; BMC Neuroscience; Science Advances; Molecular Neurobiology; Cell Biochemistry and Biophysics; Clinical Epidemiology; Phytomedicine Plus; Data in Brief; Clinical Epigenetics; Gastrointestinal Disorders; Metabolites; Brain and Behavior; Brazilian Journal of Pharmaceutical Sciences; Aspects of Molecular Medicine; Diseases; Journal of Pharmacy and Pharmacology; Metabolic Brain Disease; Scientific Reports; Physiology & Behavior; Naunyn-Schmiedeberg's Archives of Pharmacology; Neurology International; Lasers in Medical Science; BMC Complementary Medicine and Therapies; Cardiovascular Innovations and Applications; Probiotics and Antimicrobial Proteins; Journal of Alzheimer's Disease; Archives of Gerontology and Geriatrics; Journal of Molecular Neuroscience; Current Oncology; Journal of Neuroinflammation; Molecular Brain; Lipids in Health and Disease; International Journal for Quality in Health Care; Journal of Neuroimmune Pharmacology.

12. [International Books Editor](#) –

- a. **Academic Press, Elsevier.** Title: The Potential of Intermittent Fasting in Age-related Diseases and Precision Anti-aging Therapeutics. ISBN: 9780443300608. Editors: Abhishek Kumar Singh, **Jitendra Kumar Sinha**, Raviraja Seetharam (TBP May 2025)
- b. **CRC Press, Taylor and Francis:** Title: The Biology of Neurological Disorders. ISBN: 9781032813431. Editors: **Jitendra Kumar Sinha**, Shampa Ghosh (Ongoing; TBP September 2025);
- c. **Academic Press, Elsevier.** Title: Advancements in Neuropsychology and Neuroscience: Understanding the Complexities of the Brain. ISBN: 9780443365447. Editors: **Jitendra Kumar Sinha**, Shampa Ghosh (Ongoing; TBP March 2026)

Journal Publications

1. Sethi P, Ghosh S, Singh KK, Han SS, Bhaskar R, **Sinha JK***. Nanoparticle-Based Therapeutics for Glioblastoma Multiforme Treatment. *Advanced Therapeutics*, 2025; 2400546. <https://doi.org/10.1002/adtp.202400546> *Corresponding author. ISSN: 2366-3987, **Impact Factor: 3.7**
2. Nagayach A, Bhaskar R, Ghosh S, Abomughaid MM, Han SS, Singh KK, Almutary AG, Jha NK, Dhivyadharshni M, Chaudhary K, Atteri S, Chauhan A, **Sinha JK***. Interplay between circadian rhythm, aging, and neurodegenerative disorder. *Open Biology* (Accepted), 2025. <https://doi.org/10.1098/rsob.240161> *Corresponding author. ISSN: 2046-2441, **Impact Factor: 4.5**
3. Ghosh S, Narayanan KB, Singh KK, **Sinha JK***. Prevalence of Alcohol and Tobacco Use and Mental Health Correlates Among Male Coal Miners in West Bengal. *Indian Journal of Medical Research* (Accepted) 2025. https://doi.org/10.25259/IJMR_1691_2024 *Corresponding author. ISSN: 0971-5916, **Impact Factor: 2.7**
4. Singh SR, Bhaskar R, Ghosh S, Yarlagadda B, Singh KK, Verma P, Sengupta S, Mladenov M, Hadzi-Petrushev N, Stojchevski R, **Sinha JK***, Avtanski D. Exploring the Genetic Orchestra of Cancer: The Interplay Between Oncogenes and Tumor Suppressor Genes. *Cancers*, 2025; 17(7), 1082. <https://doi.org/10.3390/cancers17071082> *Corresponding author. ISSN: 2072-6694, **Impact Factor: 4.5**
5. Stojchevski R, Sutanto EA, Sutanto R, Hadzi-Petrushev N, Mladenov M, Singh SR, **Sinha JK**, Ghosh S, Yarlagadda B, Singh KK, Verma P, Sengupta S, Bhaskar R & Avtanski D. Translational Advances in Oncogene and Tumor-Suppressor Gene Research. *Cancers*, 2025; 17(6), 1008. <https://doi.org/10.3390/cancers17061008> ISSN: 2072-6694, **Impact Factor: 4.5**
6. Ghosh S, Bhaskar R, Singh KK, **Sinha JK***. Immunotherapy challenges and potential role of unclassified antibodies in complex autoimmune encephalitis. *J Neuroimmunol.* 2025; 578555. <https://doi.org/10.1016/j.jneuroim.2025.578555> *Corresponding author. ISSN: 1872-8421, **Impact Factor: 2.9**
7. Sharma H, Narayanan KB, Ghosh S, Singh KK, Rehan P, Amist AD, Bhaskar R, **Sinha JK***. Nanotherapeutics for Meningitis: Enhancing Drug Delivery Across the Blood-Brain Barrier. *Biomimetics*. 10(1):25, 2025. <https://doi.org/10.3390/biomimetics10010025> *Corresponding author. ISSN: 2313-7673, **Impact Factor: 3.4**
8. Ghosh S, Bhaskar R, Ghosh S, **Sinha JK***. Promoting quality mental healthcare across India: The potential of the QualityRights programme. *Indian Journal of Medical Research*; 160(2): 76-178, 2024. https://doi.org/10.25259/ijmr_1466_23 [PMID: 39513211]. *Corresponding author. ISSN: 0971-5916, **Impact Factor: 4.2**
9. Singh KK, Ghosh S, Bhola A, Verma P, Amist AD, Sharma H, Sachdeva P, **Sinha JK***. Sleep and Immune System Crosstalk: Implications for Inflammatory Homeostasis and Disease Pathogenesis. *Annals of Neurosciences*. 2024;0(0). <https://doi.org/10.1177/09727531241275347> Ahead of Print *Corresponding author. ISSN: 0972-7531, **Impact Factor: 1.8**
10. **Sinha JK***, Jorwal K, Singh KK, Han SS, Bhaskar R, Ghosh S. The Potential of Mitochondrial Therapeutics in the Treatment of Oxidative Stress and Inflammation in Aging. *Mol Neurobiol.*; 2024; <https://doi.org/10.1007/s12035-024-04474-0> [PMID: 39230868] *Corresponding author. ISSN: 0893-7648, **Impact Factor: 4.6**

11. Nagayach A, Bhaskar R, Ghosh S, Singh KK, Han SS, **Sinha JK***. Advancing the Understanding of Diabetic Encephalopathy through Unravelling Pathogenesis and Exploring Future Treatment Perspectives. *Ageing Res Rev.*;102450, 2024; <https://doi.org/10.1016/j.arr.2024.102450> *Corresponding author. ISSN: 1568-1637, **Impact Factor: 12.5**
12. Sethi P, Bhaskar R, Singh KK, Gupta S, Han SS, Avinash D, Abomughaid MMA, Koul A, Rani B, Ghosh S, Jha NK, **Sinha JK***. Exploring Advancements in Early Detection of Alzheimer's Disease with Molecular Assays and Animal Models. *Ageing Res Rev.*; 100: 102411, 2024; <https://doi.org/10.1016/j.arr.2024.102411> [PMID: 38986845] *Corresponding author. ISSN: 1568-1637, **Impact Factor: 12.5**
13. Ghosh S, Bhaskar R, Mishra R, Babu MA, Abomughaid MMA, Jha NK, **Sinha JK***. Neurological Insights into Brain-Targeted Cancer Therapy and Bioinspired Microrobots. *Drug Discovery Today*. 29(9): 104105, 2024; <https://doi.org/10.1016/j.drudis.2024.104105> [PMID: 39029869] *Corresponding author. ISSN: 1359-6446, **Impact Factor: 6.5**
14. Ghosh S, **Sinha JK***. Challenges and Solutions for Better Management of Side Effects in Geriatric Oncology. *Cureus*; 16(5): e59941. <https://doi.org/10.7759/cureus.59941> [PMID: 38854254] *Corresponding author. ISSN: 2168-8184, **Impact Factor: 1.2**
15. Vashisth K[#], **Sinha JK[#]**, Jha NK, Singh MP, Singh KK, Narayanan KB, Ghosh S. Neuropharmacological Insights into Type 3 Diabetes: Molecular Mechanisms, Therapeutic Advances, and Future Directions. *J Biol Regul Homeost Agents*; 38(5): 3645-3655, 2024. <https://doi.org/10.23812/j.biol.regul.homeost.agents.20243805.288> *Equal First author. ISSN: 0393-974X, **Impact Factor: 3.2**
16. Sachdeva P, Narayanan KB, **Sinha JK***, Gupta S, Ghosh S, Singh KK, Bhaskar R, Almutary AG, Zothantluanga JH, Kotta KK, Nelson VK, Paiva-Santos AC, Abomughaid MM, Kamal M, Iqbal D, ALHarbi MH, ALMutairi AA, Dewanjee S, Nuli MV, Vippamakula S, Jha SK, Ojha S, Jha NK. Recent Advances in Drug Delivery Systems Targeting Insulin Signalling for the Treatment of Alzheimer's Disease. *J Alzheimers Dis.*; 98(4): 1169-1179, 2024; <https://doi.org/10.3233/JAD-231181> [PMID: 38607755] *Corresponding author. ISSN: 1387-2877, **Impact Factor: 4**
17. Vashisth K, Sharma S, Ghosh S, Babu MA, Ghosh S, Iqbal D, Kamal M, Almutary AG, Jha SK, Ojha S, Bhaskar R, Jha NK, **Sinha JK***. Immunotherapy in Alzheimer's Disease: Current Status and Future Directions. *J Alzheimers Dis.*; 2024; <https://doi.org/10.3233/JAD-230603> *Corresponding author. ISSN: 1387-2877, **Impact Factor: 4**
18. Ghosh S, **Sinha JK***. Enhancing Patient-Centric Approaches and Regulatory Measures in Valproate Use. *Qeios.*; 2024; <https://doi.org/10.32388/UPFAR0> *Corresponding author. ISSN: 2632-3834
19. **Sinha JK**, Trisal A, Ghosh S, Gupta S, Singh KK, Han SS, Mahapatra M, Abomughaid MM, Abomughayedh AM, Almutary AG, Iqbal D, Bhaskar R, Mishra PC, Jha SK, Jha NK, Singh AK. Psychedelics for Alzheimer's Disease-Related Dementia: Unveiling Therapeutic Possibilities and Pathways. *Ageing Res Rev.*; 96: 102211, 2024; <https://doi.org/10.1016/j.arr.2024.102211> [PMID: 38307424] ISSN: 1568-1637, **Impact Factor: 13.1**
20. Ghosh S, Dhungel S, Shaikh MF, **Sinha JK***. Editorial: World Digestive Health Day: Investigating the link between Neurodegenerative Disease and Gut Microbiota. *Front. Aging Neurosci.*; 15: 1351855, 2024.

<https://doi.org/10.3389/fnagi.2023.1351855> [PMID: 38249716] *Corresponding author. ISSN: 1663-4365,

Impact Factor: 4.8

21. Ghosh S, Raghunath M, **Sinha JK***. Navigating the Commonality of Healthcare Failures: COVID-19 and Conflict Zones. *Cureus*; 15(12): e50668, 2023. <https://doi.org/10.7759/cureus.50668> [PMID: 38229812] *Corresponding author. ISSN: 2168-8184, **Impact Factor: 1.2**
22. Ghosh S, Ghosh S, Sharma H, Bhaskar R, Han SS, **Sinha JK***. Harnessing the Power of Biological Macromolecules in Hydrogels for Controlled Drug Release in the Central Nervous System: A Review. *Int J Biol Macromol.*; 254(1): 127708, 2024. <https://doi.org/10.1016/j.ijbiomac.2023.127708> [PMID: 37923043] *Corresponding author. ISSN: 0141-8130, **Impact Factor: 8.2**
23. Bano S, Raza MA, Ghosh S, Pandit NS, Srivastava S, Azam M, Dey SK, Han SS, **Sinha JK***, Ruwali M. Emerging Therapeutic Targets in Molecular Neuropharmacology for Alzheimer's Disease. *J Biol Regul Homeost Agents*; 37(11): 5769-5784, 2023. <https://doi.org/10.23812/j.biol.regul.homeost.agents.20233711.553> *Corresponding author. ISSN: 0393-974X, **Impact Factor: 3.2**
24. Ghosh S, **Sinha JK**, Raghunath M, Han SS, Bhaskar R. Accountability and protection for health care in conflict zones. *The Lancet*; 402(10412):1524-25, 2023. [https://doi.org/10.1016/S0140-6736\(23\)01693-8](https://doi.org/10.1016/S0140-6736(23)01693-8) [PMID: 37898526] ISSN: 0140-6736, **Impact Factor: 168.9**
25. Ghosh S, **Sinha JK***, Ghosh S, Sharma H, Bhaskar R, Narayanan KB. A Comprehensive Review of Emerging Trends and Innovative Therapies in Epilepsy Management. *Brain Sciences*. 2023; 13(9):1305. <https://doi.org/10.3390/brainsci13091305> [PMID: 37759906] *Corresponding author. ISSN: 2076-3425, **Impact Factor: 3.9**
26. Ghosh S, Vashisth K, Ghosh S, Han SS, Bhaskar R, **Sinha JK***. From sleep to cancer to neurodegenerative disease: the crucial role of Hsp70 in maintaining cellular homeostasis and potential therapeutic implications. *J Biomol Struct Dyn*; 0(0): 1-12, 2023. <https://doi.org/10.1080/07391102.2023.2252509> [PMID: 37643058] *Corresponding author. ISSN: 0739-1102, **Impact Factor: 4.4**
27. **Sinha JK**, Ghosh S, Ghosh S, Bhaskar R, Han SS. Improving Therapeutic Approaches to Insomnia: The Need for Objective Sleep Data. *Lancet Healthy Longev.*; 2023; 4(9), e459. [https://doi.org/10.1016/S2666-7568\(23\)00158-7](https://doi.org/10.1016/S2666-7568(23)00158-7) [PMID: 37659428] ISSN: 2666-7568, **Impact Factor: 13.1**
28. Ghosh S[#], **Sinha JK[#]***, Ghosh S, Vashisth K, Han SS, Bhaskar R. Microplastics as an Emerging Threat to the Global Environment and Human Health. *Sustainability*; 2023; 15(14): 10821. [#]Equal contribution, *Corresponding author. <https://doi.org/10.3390/su151410821> ISSN: 2071-1050, **Impact Factor: 3.9**
29. Ghosh S, Ghosh S, Raghunath M, Bhaskar R, **Sinha JK**. Balancing potential benefits and ethical considerations of gene editing. *The Lancet*; 401(10394): 2109-10, 2023. [https://doi.org/10.1016/S0140-6736\(23\)01084-X](https://doi.org/10.1016/S0140-6736(23)01084-X) [PMID: 37355284] ISSN: 0140-6736, **Impact Factor: 168.9**
30. Sachdeva B, Sachdeva P, Negi A, Ghosh S, Han S, Dewanjee S, Jha SK, Bhaskar R, **Sinha JK***, Paiva-Santos AC, Jha NK, Kesari KK. Chitosan Nanoparticles-Based Cancer Drug Delivery: Application and Challenges. *Marine Drugs*; 2023; 21(4): 211. <https://doi.org/10.3390/md21040211> [PMID: 37103352] *Corresponding author. ISSN: 1660-3397, **Impact Factor: 5.4**
31. Sachdeva P, Ji S, Ghosh S, Ghosh S, Raghunath M, Kim H, Bhaskar R, **Sinha JK**, Han SS. Plausible Role of

- Stem Cell Types for Treating and Understanding the Pathophysiology of Depression. *Pharmaceutics*; 2023; 15(3), 814. <https://doi.org/10.3390/pharmaceutics15030814> [PMID: 36986674] ISSN: 1999-4923, **Impact Factor: 5.4**
32. Sachdeva B, Sachdeva P, Ghosh S, Ahmad F, **Sinha JK***. Ketamine as a therapeutic agent in major depressive disorder and posttraumatic stress disorder: Potential medicinal and deleterious effects. *Ibrain*. 2023;9(1):90-101. <https://doi.org/10.1002/ibra.12094> [PMID: 37786516] *Corresponding author. ISSN: 2313-1934
33. Ghosh S, **Sinha JK***. Editorial - Contributions of Medicinal Chemistry During the Pandemic of Covid-19. *Current Topics in Medicinal Chemistry*; 2023; 23(2): 114. <https://doi.org/10.2174/156802662302230131095541> [PMID: 36919361] *Corresponding author. ISSN: 1568-0266, **Impact Factor: 3.4**
34. Ghosh S, Durgvanshi S, Han SS, Bhaskar R, **Sinha JK***. Therapeutics for the management of cytokine release syndrome in COVID-19. *Current Topics in Medicinal Chemistry*; 2023; 23(2): 128-142. <http://doi.org/10.2174/1568026622666220707114121> [PMID: 35796445] *Corresponding author. ISSN: 1568-0266, **Impact Factor: 3.4**
35. Sachdeva P, Ghosh S, Ghosh S, Han S, Banerjee J, Bhaskar R, **Sinha JK***. Childhood Obesity: A Potential Key Factor in the Development of Glioblastoma Multiforme. *Life (Basel)*; 2022; 12(10) 1673: 1-18. <https://doi.org/10.3390/life12101673> [PMID: 36295107] *Corresponding author. ISSN: 2075-1729, **Impact Factor: 3.2**
36. **Sinha JK***, Vashisth K, Ghosh S. Epidemiological studies on sleep quality can help in improving public mental health initiatives and development of better sleep technologies. *Sleep Epidemiology*; 2022; 2 :100049. <https://doi.org/10.1016/j.sleep.2022.100049> ISSN: 2667-3436
37. Ghosh S, Sachdeva B, Sachdeva P, Chaudhary V, Rani GM, **Sinha JK***. Graphene quantum dots as a potential diagnostic and therapeutic tool for the management of Alzheimer's disease. *Carbon Letters*; 2022; 32: 1381-94. <https://doi.org/10.1007/s42823-022-00397-9> *Corresponding author. ISSN: 1976-4251, **Impact Factor: 4.5**
38. **Sinha JK***, Vashisth K, Ghosh S. The importance of sleep studies in improving the health indices of a nation. *Sleep Medicine X*; 2022; 4: 100049. <https://doi.org/10.1016/j.sleepx.2022.100049> [PMID: 35669384] *Corresponding author. ISSN: 2590-1427
39. Kaur J, Ghosh S, Singh P, Dwivedi AK, Sahani AK, **Sinha JK***. Cervical spinal lesion, completeness of injury, stress and depression reduce the efficiency of mental imagery in people with spinal cord injury *American Journal of Physical Medicine & Rehabilitation*; 2022; 101(6): 513-19. <https://doi.org/10.1097/phm.0000000000001955> [PMID: 35034059] *Corresponding author. ISSN: 0894-9115, **Impact Factor: 3.0**
40. Ghosh S, **Sinha JK***, Khan T, Devaraju KS, Singh P, Vaibhav K, Gaur P. Pharmacological and Therapeutic Approaches in the Treatment of Epilepsy. *Biomedicines*. 2021; 9(5): 4701-14. <https://doi.org/10.3390/biomedicines9050470> [PMID: 33923061] *Corresponding author. ISSN: 2227-9059, **Impact Factor: 4.7**
41. Ghosh S, Manchala S, Raghunath M, Sharma G, Singh AK, **Sinha JK***. Role of Phytomolecules in the Treatment of Obesity: Targets, Mechanisms and Limitations. *Current Topics in Medicinal Chemistry*; 2021;

- 21(10): 863-877. <https://doi.org/10.2174/1568026621666210305101804> [PMID: 33676390] *Corresponding author. ISSN: 1568-0266, **Impact Factor: 3.4**
42. Mishra P, **Sinha JK***, Rajput SK. Efficacy of Cicuta virosa medicinal preparations against pentylentetrazole-induced seizures. *Epilepsy & Behavior*; 2021; 115: 107653 *Corresponding author. <https://doi.org/10.1016/j.yebeh.2020.107653> [PMID: 33358679] ISSN: 1525-5050, **Impact Factor: 2.6**
43. Mishra P, Mittal AK, Rajput SK, **Sinha JK***. Cognition and memory impairment attenuation via reduction of oxidative stress in acute and chronic mice model of epilepsy using antiepileptogenic Nux vomica. *Journal of Ethnopharmacology*; 2021; 267: 113509 *Corresponding author. <https://doi.org/10.1016/j.jep.2020.113509> [PMID: 33141053] ISSN: 0378-8741, **Impact Factor: 5.4**
44. Mishra P, Mittal AK, Kalonia H, Madan S, Ghosh S, **Sinha JK***, Rajput SK*. SIRT1 promotes neuronal fortification in neurodegenerative diseases through attenuation of pathological hallmarks and enhancement of cellular lifespan. *Current Neuropharmacology*; 2021; 19(7):1019-1037. *Corresponding author. <https://doi.org/10.2174/1570159x18666200729111744> [PMID: 32727328] ISSN: 1570-159X, **Impact Factor: 5.3**
45. Kaur J, Ghosh S, Sahani AK, **Sinha JK***. Mental Imagery as a Rehabilitative Therapy for Neuropathic Pain in People With Spinal Cord Injury: A Randomized Controlled Trial. *Neurorehabilitation & Neural Repair*; 2020; 34(11): 1038–1049. <https://doi.org/10.1177/1545968320962498> [PMID: 33040678].*Corresponding author. ISSN: 1545-9683, **Impact Factor: 4.2**
46. Ghosh S[#], **Sinha JK[#]**, Khandelwal N, Chakravarty S, Kumar A, Raghunath M. Increased stress and altered expression of histone modifying enzymes in brain are associated with aberrant behaviour in vitamin B12 deficient female mice. *Nutritional Neuroscience*; 2020; 23(9):714-23. <https://doi.org/10.1080/1028415x.2018.1548676> [PMID: 30474509]. [#]Equal contribution. ISSN: 1028-415X, **Impact Factor: 3.6**
47. Ghosh S, Sharma G, **Sinha JK*** (2020). The pandemic of COVID-19 needs awareness and preparedness instead of stigma and panic. *IndiaRxiv*; <https://doi.org/10.35543/osf.io/gy2t7>
48. Ghosh S, Durgvanshi S, Agarwal S, Raghunath M, **Sinha JK***. Current status of drug targets and emerging therapeutic strategies in the management of Alzheimer's disease. *Current Neuropharmacology*; 18(9): 883-903, 2020. *Corresponding author. <https://doi.org/10.2174/1570159x18666200429011823> [PMID: 32348223]. ISSN: 1570-159X, **Impact Factor: 5.3**
49. Ghosh S, Raghunath M, Das BC, **Sinha JK***. High sugar content in baby food – an Indian perspective. *The Lancet Diabetes and Endocrinology*; 2019;7(10):748-749. [https://doi.org/10.1016/s2213-8587\(19\)30291-8](https://doi.org/10.1016/s2213-8587(19)30291-8) *Corresponding author. [PMID: 31535615] ISSN: 2213-8587, **Impact Factor: 44.5**
50. Ghosh S, Raghunath M, **Sinha JK***. Recurring acute encephalitis syndrome outbreaks in Bihar, India. *The Lancet*; 394(10202): 914, 2019. *Corresponding author. [https://doi.org/10.1016/s0140-6736\(19\)31811-2](https://doi.org/10.1016/s0140-6736(19)31811-2) [PMID: 31526729] ISSN: 0140-6736, **Impact Factor: 168.9**
51. Ghosh S[#], **Sinha JK[#]**, Raghunath M. ‘Obesaging’: Linking obesity and ageing. *Indian Journal of Medical Research*; 149(5): 610-615, 2019. [#]Equal contribution. https://doi.org/10.4103/ijmr.ijmr_2120_18 [PMID: 31417028] ISSN: 0971-5916, **Impact Factor: 4.2**

52. Kaur J, Ghosh S, Sahani AK, **Sinha JK***. Mental imagery training for treatment of central neuropathic pain: a narrative review. *Acta Neurologica Belgica*; 119(2): 175-186, 2019. <https://doi.org/10.1007/s13760-019-01139-x> [PMID: 30989503] *Corresponding author. ISSN: 0300-9009, **Impact Factor: 2.7**
53. Ghosh S[#], **Sinha JK[#]**, Muralikrishna B, Putcha UK, Raghunath M. Chronic transgenerational vitamin B12 deficiency of severe and moderate magnitudes modulates adiposity – probable underlying mechanisms. *Biofactors*; 43(3): 400-414, 2017. <https://doi.org/10.1002/biof.1350> [PMID: 28186655]. [#]Equal contribution. ISSN: 1872-8081, **Impact Factor: 6**
54. Schaefer N, Blumrich EM, Lourenco MV, Joshi P, Hegemann RU, Rotermund C, Jamwal S, Ali N, Romero EMG, Sharma S, Ghosh S, **Sinha JK**, Loke H, Jain V, Lepeta K, Salamian A, Sharma M, Golpich M, Nawrotek K, Paidi RK, Shahidzadeh S, Piermatiri T, Amini E, Pastor V, Wilson Y, Adeniyi PA, Datusalia AK, Vafadari B, Saini V, Suárez-Pozos E, Kushwah N, Fontanet P, Turner AJ. The malleable brain: plasticity of neural circuits and behavior. *Journal of Neurochemistry*; 142: 790-811, 2017. <https://doi.org/10.1111/jnc.13815> [PMID: 28632905]. § Cover Page. ISSN: 0022-3042, **Impact Factor: 4.7**
55. Ghosh S, **Sinha JK***, Raghunath M. Epigenomic maintenance through dietary intervention can facilitate DNA repair process to slow down the progress of premature aging. *IUBMB Life*; 68(9): 717-721, 2016. <https://doi.org/10.1002/iub.1532> [PMID: 27364681]. *Corresponding author. ISSN: 1521-6551, **Impact Factor: 4.6**
56. Ghosh S, **Sinha JK**, Kumar PU, Raghunath M. Severe but not moderate vitamin B12 deficiency impairs lipid profile, induces adiposity and leads to adverse gestational outcome in female C57BL/6 mice. *Frontiers in Nutrition*; 3:1, 2016. <https://doi.org/10.3389/fnut.2016.00001> [PMID: 26835453]. ISSN: 2296-861X, **Impact Factor: 5.0**
57. Maniam J, Antoniadis CP, Youngson NA, **Sinha JK**, Morris MJ. Sugar consumption produces effects similar to early life stress exposure on hippocampal markers of neurogenesis and stress response. *Frontiers in Molecular Neuroscience*; 8:86, 2016. <https://doi.org/10.3389/fnmol.2015.00086> [PMID: 26834554]. ISSN: 1662-5099, **Impact Factor: 4.8**
58. **Sinha JK[#]**, Ghosh S[#], Raghunath M. Progeria: A rare genetic premature aging disorder. *Indian Journal of Medical Research*; 139(5): 667-74, 2014. [PMID: 25027075]. [#]Equal contribution. ISSN: 0971-5916, **Impact Factor: 4.2**
59. **Sinha JK**, Ghosh S, Swain U, Giridharan NV, Raghunath M. Increased macromolecular damage due to oxidative stress in the neocortex and hippocampus of WNIN/Ob, a novel rat model of premature aging. *Neuroscience*; 269: 256–264, 2014. <https://doi.org/10.1016/j.neuroscience.2014.03.040> [PMID: 24709042]. § Cover Page. ISSN: 0306-4522, **Impact Factor: 3.3**
60. Mansoor AK, Thomas S, **Sinha JK**, Alladi PA, Ravi V, Raju TR. Olfactory tract transection reveals robust tissue-level plasticity by cellular numbers and neurotrophic factor expression in olfactory bulb. *Indian Journal of Experimental Biology*; 50(11): 765-770, 2012. [PMID: 23305026]. ISSN: 0019-5189, **Impact Factor: 0.944**
61. **Sinha JK***, Ghosh S, Raghunath M. The neuroscience global village: Young investigator program for students from countries with limited resources on the occasion of the 8th IBRO World Congress.

- BioEssays*; 34(1): 7-9, 2012. <https://doi.org/10.1002/bies.201100156> [PMID: 22170471]. *Corresponding author. ISSN: 1521-1878, **Impact Factor: 4.65**
62. Ghosh S, **Sinha JK**. The need for rejuvenation of Indian biomedical journals. *Indian Journal of Medical Research*; 132: 736-737, 2010. [PMID: 21245625]. ISSN: 0971-5916, **Impact Factor: 4.2**
63. **Sinha JK***, Ghosh S. Scoring more than ten plus century - Antiquity in gerontology? *Indian Journal of Medical Research*; 131: 586-587, 2010. [PMID: 20424313]. *Corresponding author. ISSN: 0971-5916, **Impact Factor: 4.2**

Peer-reviewed Book Chapters

1. **Sinha JK**, Ghosh S (2025) Psychopathology. In: T. Shackelford (ed.), *Encyclopedia of Religious Psychology and Behavior*, Pp 1-8. ISBN: 978-3-031-38971-9 (Print). https://doi.org/10.1007/978-3-031-38971-9_454-1 Springer Nature Switzerland AG.
2. Ghosh S, **Sinha JK*** (2025) The Dalai Lama. In: T. Shackelford (ed.), *Encyclopedia of Religious Psychology and Behavior*, Pp 1-3. ISBN: 978-3-031-38971-9 (Print). https://doi.org/10.1007/978-3-031-38971-9_1919-1 Springer Nature Switzerland AG. *Corresponding author.
3. Jorwal K, Ghosh S, **Sinha JK*** (2025) The Enlightenment: Impact on Religion. In: T. Shackelford (ed.), *Encyclopedia of Religious Psychology and Behavior*, Pp 1-9. ISBN: 978-3-031-38971-9 (Print). https://doi.org/10.1007/978-3-031-38971-9_1213-1 Springer Nature Switzerland AG. *Corresponding author.
4. Anand HJ, Ghosh S, **Sinha JK*** (2025) Music: Animals and. In: T. Shackelford (ed.), *Encyclopedia of Religious Psychology and Behavior*, Pp 1-6. ISBN: 978-3-031-38971-9 (Print). https://doi.org/10.1007/978-3-031-38971-9_1676-1 Springer Nature Switzerland AG. *Corresponding author.
5. Ghosh S, **Sinha JK*** (2025) Altruism. In: T. Shackelford (ed.), *Encyclopedia of Religious Psychology and Behavior*, Pp 1-5. ISBN: 978-3-031-38971-9 (Print). https://doi.org/10.1007/978-3-031-38971-9_20-1 Springer Nature Switzerland AG. *Corresponding author.
6. Sethi P, Singh KK, Amist AD, Singh MP, **Sinha JK***, Ghosh S (2024) Molecular and Neuroimaging Biomarkers in the Diagnosis of Alzheimer's Disease. In: Sandeep Kumar Singh, Ricardo Maccioni (ed.), *A New Era in Alzheimer's Research: Pathogenesis, Prevention, and Treatment*. Pp 51-65. ISBN: 9780443155406 (Print). <https://doi.org/10.1016/B978-0-443-15540-6.00006-9> Academic Press, Elsevier. *Co-corresponding author.
7. Singh A, Sethi P, Ghosh S, Singh KK, Rohatgi S, Singh P, **Sinha JK*** (2024) Current status of Prevention strategies adapted for Alzheimer's Disease. In: Sandeep Kumar Singh, Ricardo Maccioni (ed.), *A New Era in Alzheimer's Research: Pathogenesis, Prevention, and Treatment*. Pp 91-108. ISBN: 9780443155406 (Print). <https://doi.org/10.1016/B978-0-443-15540-6.00004-5> Academic Press, Elsevier. *Corresponding author.
8. Bhola A, Sharma K, Ghosh S, Singh KK, Bhaskar R, **Sinha JK*** (2024) Is the controversy between Baptists and Tauists still present? In: Sandeep Kumar Singh, Ricardo Maccioni (ed.), *A New Era in Alzheimer's Research: Pathogenesis, Prevention, and Treatment*. Pp 143-152. ISBN: 9780443155406 (Print). <https://doi.org/10.1016/B978-0-443-15540-6.00005-7> Academic Press, Elsevier. *Corresponding author.
9. Mishra PK, Ghosh S, Singh KK, **Sinha JK*** (2024) Physical Exercise and Lifestyle Management: Preventive Measures for Alzheimer's Disease. In: Sandeep Kumar Singh, Ricardo Maccioni (ed.), *A New Era in Alzheimer's Research: Pathogenesis, Prevention, and Treatment*. Pp 169-182. ISBN: 9780443155406 (Print).

<https://doi.org/10.1016/B978-0-443-15540-6.00003-3> Academic Press, Elsevier. *Corresponding author.

10. Mishra PK, Singh KK, Ghosh S, **Sinha JK*** (2024) Future perspectives on the clinics of Alzheimer's disease. In: Sandeep Kumar Singh, Ricardo Maccioni (ed.), *A New Era in Alzheimer's Research: Pathogenesis, Prevention, and Treatment*. Pp 217-232. ISBN: 9780443155406 (Print). <https://doi.org/10.1016/B978-0-443-15540-6.00001-X> Academic Press, Elsevier. *Corresponding author.
11. Durgvanshi S, Misra P, Ghosh S, **Sinha JK*** (2023) Maternal Neglect of Children: Neurocognitive Underpinnings. In: T. K. Shackelford (ed.), *Encyclopedia of Domestic Violence*. Pp 1-9. ISBN: 978-3-030-85493-5 (Print). https://doi.org/10.1007/978-3-030-85493-5_1183-1 Springer Nature Switzerland AG. *Corresponding author.
12. Ghosh S, Sharma H, Singhal M, Gupta S, **Sinha JK*** (2023) Sleep Disorders and Domestic Violence. In: T. K. Shackelford (ed.), *Encyclopedia of Domestic Violence*. Pp 1-7. ISBN: 978-3-030-85493-5 (Print). https://doi.org/10.1007/978-3-030-85493-5_1559-1 Springer Nature Switzerland AG. *Corresponding author.
13. Ghosh S, Syal T, **Sinha JK*** (2023) Addis Ababa Action Agenda. In: T. K. Shackelford (ed.), *Encyclopedia of Domestic Violence*. Pp 1-3. ISBN: 978-3-030-85493-5 (Print). https://doi.org/10.1007/978-3-030-85493-5_9-2 Springer Nature Switzerland AG. *Corresponding author.
14. Jorwal K, Ghosh S, **Sinha JK*** (2023) Human Psychology: As Altricial Species. In: T. K. Shackelford (ed.), *Encyclopedia of Sexual Psychology and Behavior*. Pp 1-5. ISBN: 978-3-031-08956-5 (Print). https://doi.org/10.1007/978-3-031-08956-5_171-1 Springer Nature Switzerland AG. *Corresponding author.
15. Syal T, Ghosh S, **Sinha JK*** (2023) Sir Francis Galton. In: T. K. Shackelford (ed.), *Encyclopedia of Sexual Psychology and Behavior*. Pp 1-4. ISBN: 978-3-031-08956-5 (Print). https://doi.org/10.1007/978-3-031-08956-5_169-1 Springer Nature Switzerland AG. *Corresponding author.
16. Anand H, Ghosh S, **Sinha JK*** (2023) Neurotoxin Regulation Hypothesis. In: T. K. Shackelford (ed.), *Encyclopedia of Sexual Psychology and Behavior*. Pp 1-4. ISBN: 978-3-031-08956-5 (Print). https://doi.org/10.1007/978-3-031-08956-5_172-1 Springer Nature Switzerland AG. *Corresponding author.
17. Sharma H, Ghosh S, **Sinha JK*** (2023) Dominance (alleles). In: T. K. Shackelford (ed.), *Encyclopedia of Sexual Psychology and Behavior*. Pp 1-4. ISBN: 978-3-031-08956-5 (Print). https://doi.org/10.1007/978-3-031-08956-5_165-1 Springer Nature Switzerland AG. *Corresponding author.
18. Jorwal K, Ghosh S, **Sinha JK*** (2023) Child Maltreatment: Animal Research. In: T. K. Shackelford (ed.), *Encyclopedia of Domestic Violence*. Pp 1-11. ISBN: 978-3-030-85493-5 (Print). https://doi.org/10.1007/978-3-030-85493-5_1858-1 Springer Nature Switzerland AG. *Corresponding author.
19. **Sinha JK***, Sachdeva P, Ahmad F, Sarkar J, Izhar R, Rahman A, Ghosh S. (2023) Pharmacotherapy and Emerging Treatment Strategies for Schizophrenia. In: Chatterjee, I. (eds) *Cognizance of Schizophrenia: A Profound Insight into the Psyche*. Pp 149-179. ISBN: 978-981-19-7021-4 (Print). https://doi.org/10.1007/978-981-19-7022-1_10 Springer, Singapore. *Corresponding author.
20. Ghosh S, Gupta A, **Sinha JK*** (2023). Freudianism and Sigmund Freud. In: T. K. Shackelford (ed.), *Encyclopedia of Sexual Psychology and Behavior*. Pp 1-5. ISBN: 978-3-031-08956-5 (Print). https://doi.org/10.1007/978-3-031-08956-5_168-1 Springer Nature Switzerland AG. *Corresponding author.
21. Kurrey K, Ghosh S, **Sinha JK*** (2023). Alarm Pheromones. In: T. K. Shackelford (ed.), *Encyclopedia of Sexual Psychology and Behavior*. Pp 1-4. ISBN: 978-3-031-08956-5 (Print). https://doi.org/10.1007/978-3-031-08956-5_164-1 Springer Nature Switzerland AG. *Corresponding author.

22. Rastogi T, Ghosh S, Sarkar J, **Sinha JK*** (2023) Sex Differences: Neurodevelopment. In: T. K. Shackelford (ed.), *Encyclopedia of Sexual Psychology and Behavior*. Pp 1-8. ISBN: 978-3-031-08956-5 (Print). https://doi.org/10.1007/978-3-031-08956-5_174-1 Springer Nature Switzerland AG. *Corresponding author.
23. Sharma H, Ghosh S, **Sinha JK*** (2023) Physiological Adaptation: Genetic and Environmental Adaptations. In: T. K. Shackelford (ed.), *Encyclopedia of Sexual Psychology and Behavior*. Pp 1-6. ISBN: 978-3-031-08956-5 (Print). https://doi.org/10.1007/978-3-031-08956-5_173-1 Springer Nature Switzerland AG. *Corresponding author.
24. Vashisth K, Ghosh S, Sharma G, **Sinha JK*** (2023). Hagen's Defection Hypothesis. In: Shackelford, T.K. (eds) *Encyclopedia of Sexual Psychology and Behavior*. Pp 1-5. ISBN: 978-3-031-08956-5 (Print). https://doi.org/10.1007/978-3-031-08956-5_170-1 Springer Nature Switzerland AG. *Corresponding author.
25. Ghosh S, Aziz A, Namgyal D, **Sinha JK*** (2023). Electromyography. In: Shackelford, T.K. (eds) *Encyclopedia of Sexual Psychology and Behavior*. Pp 1-4. ISBN: 978-3-031-08956-5 (Print). https://doi.org/10.1007/978-3-031-08956-5_167-1 Springer Nature Switzerland AG. *Corresponding author.
26. Sachdeva P, Ghosh S, **Sinha JK*** (2023) Electrodermal Activity (EDA). In: Shackelford, T.K. (eds) *Encyclopedia of Sexual Psychology and Behavior*. Pp 1-6. ISBN: 978-3-031-08956-5 (Print). https://doi.org/10.1007/978-3-031-08956-5_166-1 Springer Nature Switzerland AG. *Corresponding author.
27. Bhuvaneshwar Y, Sharma H, Ghosh S, **Sinha JK*** (2023) Amnesty Report 2009. In: T. K. Shackelford (ed.), *Encyclopedia of Domestic Violence*. Pp 1-6. ISBN: 978-3-030-85493-5 (Print). https://doi.org/10.1007/978-3-030-85493-5_37-1 Springer Nature Switzerland AG. *Corresponding author.
28. **Sinha JK**, Pathak S, Rana N, Ghosh S. (2022) Cerebellum. *Encyclopedia of Animal Cognition and Behavior*. Living Reference Work. pp 1198-1203. Editors: Jennifer Vonk, Todd Shackelford. ISBN: 978-3-319-55064-0 (Print). https://doi.org/10.1007/978-3-319-55065-7_1338 New York, Springer Nature Switzerland AG.
29. Ghosh S, Sharma H, **Sinha JK*** (2022) Short Term Memory. *Encyclopedia of Animal Cognition and Behavior*. Living Reference Work. pp 6415-6421. Editors: Jennifer Vonk, Todd Shackelford. ISBN: 978-3-319-55064-0 (Print). https://doi.org/10.1007/978-3-319-55065-7_1509 New York, Springer Nature Switzerland AG. *Corresponding author.
30. Ghosh S, Sharma H, Swain U, Mishra PK, Gaur P, **Sinha JK***. (2022) Ganglion. *Encyclopedia of Animal Cognition and Behavior*. Living Reference Work. pp 2866-2871. Editors: Jennifer Vonk, Todd Shackelford. ISBN: 978-3-319-55064-0 (Print). https://doi.org/10.1007/978-3-319-55065-7_1772 New York, Springer Nature Switzerland AG. *Corresponding author.
31. Ghosh S, Verma M, Singh AK, **Sinha JK***. (2022) Medulla Oblongata. *Encyclopedia of Animal Cognition and Behavior*. Living Reference Work. pp 4161-4170. Editors: Jennifer Vonk, Todd Shackelford. ISBN: 978-3-319-55064-0 (Print). https://doi.org/10.1007/978-3-319-55065-7_1784 New York, Springer Nature Switzerland AG. *Corresponding author.
32. Durgvanshi S, Ghosh S, **Sinha JK***. (2022) Critical Periods. *Encyclopedia of Animal Cognition and Behavior*. Living Reference Work. pp 1797-1800. Editors: Jennifer Vonk, Todd Shackelford. ISBN: 978-3-319-55064-0 (Print). https://doi.org/10.1007/978-3-319-55065-7_528 New York, Springer Nature Switzerland AG. *Corresponding author.
33. **Sinha JK**, Agarwal S, Ghosh S. (2022) Long Term Potentiation. *Encyclopedia of Animal Cognition and Behavior*. Living Reference Work. pp 4009-4014. Editors: Jennifer Vonk, Todd Shackelford. ISBN: 978-3-319-55064-0 (Print). https://doi.org/10.1007/978-3-319-55065-7_1698 New York, Springer Nature

Switzerland AG.

34. Kaur J, Ghosh S, **Sinha JK***. (2022) Temporal Lobe. *Encyclopedia of Animal Cognition and Behavior*. Living Reference Work. pp 6898–6903. Editors: Jennifer Vonk, Todd Shackelford. ISBN: 978-3-319-55064-0 (Print). https://doi.org/10.1007/978-3-319-55065-7_578 New York, Springer Nature Switzerland AG. *Corresponding author.
35. **Sinha JK**, Aziz A, Ghosh S, Raghunath M. (2022) Maternal Behavior. *Encyclopedia of Animal Cognition and Behavior*. Living Reference Work. pp 4120–4125 Editors: Jennifer Vonk, Todd Shackelford. ISBN: 978-3-319-55064-0 (Print). https://doi.org/10.1007/978-3-319-55065-7_1345 New York, Springer Nature Switzerland AG.
36. **Sinha JK**, Durgvanshi S, Ghosh S. (2022) Attention-Deficit Hyperactivity Disorder. *Encyclopedia of Animal Cognition and Behavior*. Living Reference Work. pp 551–556. Editors: Jennifer Vonk, Todd Shackelford. ISBN: 978-3-319-55064-0 (Print). https://doi.org/10.1007/978-3-319-55065-7_1057 New York, Springer Nature Switzerland AG.
37. Ghosh S, Durgvanshi S, Agarwal S, **Sinha JK***. (2022) Pituitary Gland. *Encyclopedia of Animal Cognition and Behavior*. Living Reference Work. pp 5293–5300. Editors: Jennifer Vonk, Todd Shackelford. ISBN: 978-3-319-55064-0 (Print). https://doi.org/10.1007/978-3-319-55065-7_654 New York, Springer Nature Switzerland AG. *Corresponding author.
38. **Sinha JK**, Ghosh S. (2022) Radial arm maze. *Encyclopedia of Animal Cognition and Behavior*. Living Reference Work. pp 5843–5845. Editors: Jennifer Vonk, Todd Shackelford. ISBN: 978-3-319-55064-0 (Print). https://doi.org/10.1007/978-3-319-55065-7_645 New York, Springer Nature Switzerland AG.
39. **Sinha JK**, Aziz A, Ghosh S. (2022) Homunculus. *Encyclopedia of Animal Cognition and Behavior*. Living Reference Work. pp 3218–3221. Editors: Jennifer Vonk, Todd Shackelford. ISBN: 978-3-319-55064-0 (Print). https://doi.org/10.1007/978-3-319-55065-7_1427 New York, Springer Nature Switzerland AG.
40. **Sinha JK**, Ghosh S. (2022) Open field test. *Encyclopedia of Animal Cognition and Behavior*. Living Reference Work. pp 4799–4800. Editors: Jennifer Vonk, Todd Shackelford. ISBN: 978-3-319-55064-0 (Print). https://doi.org/10.1007/978-3-319-55065-7_764 New York, Springer Nature Switzerland AG.
41. **Sinha JK**, Khan T, Ghosh S. (2022) Paternal behaviour. *Encyclopedia of Animal Cognition and Behavior*. Living Reference Work. pp 5080–5084. Editors: Jennifer Vonk, Todd Shackelford. ISBN: 978-3-319-55064-0 (Print). https://doi.org/10.1007/978-3-319-55065-7_1383 New York, Springer Nature Switzerland AG.
42. **Sinha JK**, Aziz A, Ghosh S. (2022) Dentate gyrus. *Encyclopedia of Animal Cognition and Behavior*. Living Reference Work. pp 1988–1992. Editors: Jennifer Vonk, Todd Shackelford. ISBN: 978-3-319-55064-0 (Print). https://doi.org/10.1007/978-3-319-55065-7_1779 New York, Springer Nature Switzerland AG.
43. **Sinha JK**, Ghosh S. (2022) Embryo. *Encyclopedia of Animal Cognition and Behavior*. Living Reference Work. pp 2282–2284. Editors: Jennifer Vonk, Todd Shackelford. ISBN: 978-3-319-55064-0 (Print). https://doi.org/10.1007/978-3-319-55065-7_14 New York, Springer Nature Switzerland AG.
44. Ghosh S, Raghunath M, **Sinha JK***. (2022) Fetus. *Encyclopedia of Animal Cognition and Behavior*. Living Reference Work. pp 2716–2721. Editors: Jennifer Vonk, Todd Shackelford. ISBN: 978-3-319-55064-0 (Print). https://doi.org/10.1007/978-3-319-55065-7_62 New York, Springer Nature Switzerland AG. *Corresponding author.
45. Ghosh S, **Sinha JK***. (2022) Intron. *Encyclopedia of Animal Cognition and Behavior*. Living Reference Work.

pp 3673–3676. Editors: Jennifer Vonk, Todd Shackelford. ISBN: 978-3-319-55064-0 (Print). https://doi.org/10.1007/978-3-319-55065-7_70 New York, Springer Nature Switzerland AG. *Corresponding author.

46. Tripathi MK, **Sinha J**, Srivastava SK, Kumar D. (2019) Bioinformatics in Skin Cancer: A System Biology Approach to Understanding the Molecular Mechanisms and It's Regulations. *Skin Aging & Cancer*. Editors: Dwivedi A, Agarwal N, Ray L, Tripathi AK. ISBN: 978-981-13-2540-3 (Print). https://doi.org/10.1007/978-981-13-2541-0_10 Singapore, Springer Nature Switzerland AG.

Conference Publications in Peer-Reviewed Journals

1. **Sinha JK**, Ghosh S, Singh KK, Singh MP, Raghunath M. Exploring Therapeutic Potentials and Pathways of Psychedelics in Alzheimer's Disease-Related Dementia. *Alzheimers Dement*. **2024**;20(S6):e084413. <https://doi.org/10.1002/alz.084413> ISSN: 1552-5279 **Impact factor: 14**
2. Ghosh S, Singh KK, Amist AD, **Sinha JK**. Exploring Novel Molecular Targets for Alzheimer's Disease in Neuropharmacology. *Alzheimers Dement*. **2024**;20(S6):e085882. <https://doi.org/10.1002/alz.085882> ISSN: 1552-5279 **Impact factor: 14**
3. Ghosh S, Singh KK, Jha S, Raghunath M, **Sinha JK**. Interconnected dynamics of 'obesageing': Intricate relationship between obesity and ageing processes. *Alzheimers Dement*. **2024**;20(s1):e085889. <https://doi.org/10.1002/alz.085889> ISSN: 1552-5279 **Impact factor: 14**
4. Bhaskar R, Singh KK, Ghosh S, Mahapatra M, **Sinha JK**. Exploring homeostasis restoration as a potential therapeutic avenue for addressing obesity and sleep disorders. *Alzheimers Dement*. **2024**;20(s1):e088259. <https://doi.org/10.1002/alz.088259> ISSN: 1552-5279 **Impact factor: 14**
5. **Sinha JK**, Singh KK, Verma P, Amist AD, Singh MP, Ghosh S. The role of sleep in the immune system and its effects on inflammatory homeostasis and disease initiation. *Journal of Sleep Research*; 33(S1): e14291, **2024**. <https://doi.org/10.1111/jsr.14291> ISSN: 0962-1105 **Impact factor: 3.4**
6. **Sinha JK***, Durgvanshi S, Verma M, Ghosh S. Investigation of SLC6A9 and SLC5A1 as a promising therapeutic target for obesity and diabetes using in silico characterization, 3D structure prediction and molecular docking analysis. *Alzheimer's Dement*; 19 (S1): e064229, **2023**. <https://doi.org/10.1002/alz.064229> ISSN: 1552-5279 **Impact factor: 14**
7. **Sinha JK**, Ghosh S, Raghunath M. Concomitant high oxidative stress and poor antioxidant enzyme activity with DNA damage may underlie obesity and reduced longevity in WNIN/Ob obese rats. *Journal of Neurological Sciences*; 429: 118615, **2021**. <https://doi.org/10.1016/j.jns.2021.118615> ISSN: 0022-510X **Impact factor: 4.4**
8. **Sinha JK**. Targeting epilepsy with novel therapeutic entities to investigate the biochemical and molecular mechanisms. *Clinical Neurophysiology*; 132(8): e67-68, **2021**. <https://doi.org/10.1016/j.clinph.2021.02.128> ISSN: 1388-2457 **Impact factor: 4.861**
9. **Sinha JK**, Ghosh S, Raghunath M. DNA damage in brain may lead to cognitive dysfunctions and reduced longevity in WNIN/Ob obese rats. *Alzheimer's Dement*; 17(s12): e57963, **2021**. <https://doi.org/10.1002/alz.057963> ISSN: 1552-5279 **Impact factor: 14**
10. Ghosh S, **Sinha JK**, Raghunath M. Maternal vitamin B12 deficiency is associated with increased oxidative

- stress and DNA damage in brain regions of C57BL/6 mouse offspring. *Clinical Neurophysiology*; 132(8): e122, **2021**. <https://doi.org/10.1016/j.clinph.2021.02.300> ISSN: 1388-2457 **Impact factor: 4.861**
11. **Sinha JK**, Ghosh S, Raghunath M. Understanding the neurobiology of premature aging and dementia in a unique animal model, the WNIN/Ob obese rat. *Alzheimer's Dement*; 16(s12): e12278, **2020**. <https://doi.org/10.1002/alz.12278> ISSN: 1552-5279 **Impact factor: 14**
 12. **Sinha JK**, Giridharan NV, Raghunath M. Can systemic and central IGF1 and BDNF levels play a role in decreasing the longevity of WNIN obese mutant rats? *Int J Dev Neurosci*; 30(8): 648-649, **2012**. <https://doi.org/10.1016/j.ijdevneu.2012.03.253> ISSN: 1873-474X **Impact factor: 2.54**
 13. **Sinha JK**, Ray B, Sharma S, Roy TS. Age changes in the human abducens nerve: A morphometric study. *Physiol Pharmacol*; Supplement 1:36, **2006**.

Popular Articles

1. Ghosh S, **Sinha JK***. Neurology Commentary: Epilepsy With Generalized Tonic–Clonic Seizures Alone: Electroclinical Features and Prognostic Patterns. *Elsevier Practice Update*; Available at <https://www.practiceupdate.com/c/159034/1/7/> **2023**.
2. Aziz A, Ghosh S, Shaikh MF, **Sinha JK***. Role of nutrition in combating stress-related neuronal complications during the COVID-19 pandemic. *Association of Pharmaceutical Teachers of India (APTI) Women's Forum Newsletter*; 10(12): 15-20, **2020**.
3. Patel SF, **Sinha JK**, Khan S. IBRO School: A budding experience. *Newslet Ibn Sina Acad*; 7(1)24: 11-13, **2007**.

Brief Description of Ph.D. Work

Thesis Title: Accelerated ageing / reduced longevity of WNIN/Ob obese rats: Role of altered neurochemical profile, oxidative damage and trophic support in the brain. Wistar of the National Institute of Nutrition obese (WNIN/Ob) is a unique rat strain isolated and established at NIN, Hyderabad, India, from its existing stock of Wistar rat colony (WNIN). This animal model exhibits all traits of metabolic syndrome and has a remarkably reduced lifespan (1.5 years as compared to 3 years in parental WNIN rats), *albeit*, the factors associated with premature ageing is not well understood. Various studies on the WNIN/Ob obese rats have already established it as a suitable model of obesity and metabolic syndrome. The purpose of my study was to establish these rats as an animal model of accelerated ageing / reduced longevity. Considering that available literature shows (i) the association of altered neurochemical profile, oxidative damage and decreased trophic support with normal ageing and (ii) WNIN/Ob rats show reduced lifespan, we wanted to check if these factors underlie the premature ageing observed in this animal model. Therefore, we hypothesised that altered neurochemical profile, oxidative damage and decreased trophic support underlie the accelerated ageing / reduced longevity in WNIN/Ob rats.

Our studies including survival analysis demonstrate WNIN/Ob obese rats to be a useful model for decreased longevity. Various changes seen during normal ageing in control WNIN rats around 15 months of age appeared in the WNIN/Ob obese rats at a much younger age of 3-6 months, confirming accelerated ageing in them. We observed the factors that underlie normal ageing such as neuronal loss and astrogliosis, altered

neurochemical profile and decreased brain metabolism, increased oxidative and glucocorticoid stress and decreased neurotrophic support, at a much younger age in WNIN/Ob obese rats. This implicates that various factors that underlie normal ageing are also associated with reduced longevity in WNIN/Ob obese rats.

Responsibilities Undertaken

1. Senior Research Coordinator (September 2017 – March 2022)
2. Mentor for B.Sc. (H) students (20 in 2017, 18 in 2018, 17 in 2019)
3. Institutional Faculty Coordinator – Mission Impossible (2017 – March 2022)
4. Institutional Drive Engine – Mission Outcome (2017 – March 2022)
5. Class Representative Coordinator (2017 – March 2022)
6. Convocation Coordinator (2017)
7. Faculty Coordinator - Amity Youth Festival (2018, 2019)
8. Faculty Coordinator - Ethical and Social Responsibility (HVCO) (2017)
9. Faculty Coordinator - Programme Review and Outcome Assessment Committee (PROAC) (2017,18)
10. Examination Center Superintendent – Term-End Exams (2020)
11. Examination Dy. Center Superintendent – Term-End Exams (2018 – 19)
12. NTCC Coordinator & Board Member – All semesters of B.Sc. (H) and M.Sc. Neurosciences (2017 - 2022)
13. Board Member – Admissions Interview; Parents Interaction
14. Board of Studies (B.Sc. & M.Sc.) – Member (2018 - March 2022)
15. Institutional Faculty Coordinator – Sports (2017 - March 2022)
16. Institutional NAAC Coordinator (2017,18)

Invited Talks/ Oral Presentations

1. **Sinha JK.** Brain Awareness: Understanding Epilepsy - A Neurological Disorder, Not a Supernatural Phenomenon. Invited Expert Speaker at *Two Days Expert Talk Session (28th - 29th January 2025) organized under the Prime Minister School for Rising India (PM SHRI) Initiative for the academic session 2024-25*, at Udaipur, India. 29th January 2025.
2. **Sinha JK.** Unlocking the code: Deciphering the Molecular secrets of Brain Disorders. Invited Guest Lecture at *RUSA sponsored One Day National Webinar, Biofacet – 2024 on “Recent Trends in Neurological Research”*, at Mumbai, India. 24th August 2024.
3. **Sinha JK.** Deciphering Brain Mechanisms in Obesity: Insights from an Animal Model. Invited Plenary Lecture at *IBRO-APRC Neuroscience School Nepal on Psychophysiology of Neurological Disorders – Genomics and Non-Genomics Perception*, at Kathmandu, Nepal. 24th April – 8th May 2024.
4. **Sinha JK.** Good sleep hygiene can alter cognition and pain perception. Invited Lecture at *IBRO-APRC School on Understanding pathophysiology of Pain and cognition using animal experiments*, at Hyderabad, Telangana, India. 12th – 16th December 2022.
5. **Sinha JK.** Preventive Strategies of Obesity in Children with Developmental Disabilities. Invited Lecture at *Society for Neurochemistry India (SNCI) Virtual meeting on Cognitive and Neurodevelopmental*

Disorders at Shillong, India. 30th October – 1st November 2021.

6. **Sinha JK.** Is obesity a brain disease: Lessons from animal models. Invited Lecture at *IBRO-APRC Associate School on Animal Models of Neurobiology Research: Models to Molecules*, at Amarkantak, India. 20th – 24th September 2021.
7. **Sinha JK.** Food addiction: a piece of obesity jigsaw. Invited Lecture at *IBRO-APRC Associate School on Neurobiology of Addiction*, at Chandigarh, India. 23rd – 28th August 2021.
8. **Sinha JK.** Understanding the neurobiology of obesity. Invited Special Lecture at *IBRO-APRC School of Neuroscience on Understanding of Neuroscience and Spectrum of Neurogenetic Disorders*, Kathmandu, Nepal. 20th – 25th August 2021.
9. **Sinha JK.** Targeting epilepsy with novel therapeutic entities to investigate the biochemical and molecular mechanisms. Oral Presentation at *7th Asian-Oceanian Congress on Clinical Neurophysiology (AOCCN)*, Kuala Lumpur, Malaysia, 30th January – 1st February 2021.
10. **Sinha JK.** Understanding the neurobiology of premature aging in a unique animal model, the WNIN/Ob obese rat. Invited Talk at *International Conference on Frontiers in Neuroscience and Neurochemistry: Dynamic Challenges and Approaches* and *33rd annual meeting of Society for Neurochemistry, India (SNCI)*. Jamia Hamdard, New Delhi. 10th – 12th October 2019.
11. **Sinha JK.** Weakened neurotrophic support and aberrant levels of neurometabolites in the brain underlie reduced lifespan of WNIN/Ob obese rats. Oral Presentation at *27th Federation of Asian and Oceanian Biochemist & Molecular Biologist (FAOBMB)* and *44th Malaysian Society for Biochemistry & Molecular Biology (MSBMB) conference*, Kuala Lumpur, Malaysia. 19th – 22nd August 2019.
12. **Sinha JK.** DNA damage with concomitant high oxidative stress and poor antioxidant enzyme activity underlie obesity and accelerated aging in WNIN/Ob obese rats. Oral Presentation at *42nd Annual Meeting of the Japan Neuroscience Society* and *62nd Annual Meeting of the Japan Society of Neurochemistry*, Niigata, Japan. 23rd – 28th July 2019.
13. **Sinha JK.** Untangling the neurobiology of obesity. Invited Lecture at *IBRO-APRC School of Neuroscience*, Amarkantak, India. 03rd – 09th March 2019.
14. **Sinha JK.** Models of obesity. Technical Lecture at *IBRO-APRC School of Neuroscience*, Amarkantak, India. 03rd – 09th March 2019.
15. **Sinha JK, Ghosh S, Raghunath M.** Early onset degenerative changes in the brain of WNIN/Ob obese rats: Probable role in premature ageing. Oral Presentation at *47th Annual National Conference of Nutrition Society of India*, Hyderabad, India. 09th – 10th October 2015. [Young Scientist's Award (Junior) Presentation – Experimental Nutrition]
16. **Sinha JK, Ghosh S, Raghunath M.** Probable role of degenerative changes in the brain of WNIN/Ob obese rats, a model of premature ageing. Oral Presentation at *International Conference on Biochemistry, Nutrition and Pharmacy in human welfare 2015*, Hyderabad, India. 03rd – 05th September 2015.
17. **Sinha JK.** Oxidative stress links obesity and brain ageing in health and disease. *The 9th IBRO World Congress of Neuroscience*, Rio de Janeiro, Brazil. 07th – 11th July 2015.
18. **Sinha JK.** Reduced longevity in WNIN obese rats. Oral Presentation at *IBRO Kemali College - RNA and the*

- Etiology of Brain Disease*, Neuroscience School of Advanced Studies, Cortona, Italy. 25th – 31st August 2013.
19. **Sinha JK**. Involvement of DNA damage and astrocytic infiltration in reduced longevity of WNIN obese rats. Oral Presentation at *Wellcome Trust/DBT India Alliance sponsored Science and Communication Workshop (SciComm 2013)*, Hyderabad, India. 20th – 22nd March 2013
 20. **Sinha JK**, Giridharan NV, Raghunath M. Reduced hypothalamic BDNF levels in WNIN obese mutant rats. In session III: Trophic factors, Neuromediators and Receptors (10th June). Moderators: Prof. R. Pellitteri, Prof. G. Panzica. Oral Presentation at *XXI Convegno Nazionale del Gruppo Italiano Per Lo Studio Della Neuromorfologia (GISN)*, San Benedetto del Tronto, Italy. 9th – 10th June 2011.
 21. **Sinha JK**. HiLearning - A new concept for probable mechanism of learning at neuronal level. In research proposal competition. Oral Presentation at *1st UAE- IBRO Neuroscience School- Fundamentals of Basic and Clinical Neurosciences* UAE University, Al Ain, UAE. 24th - 31st Jan 2007.

Poster Presentations

1. **Sinha JK**, Ghosh S, Raghunath M. Establishing an animal model to study the neurobiology of obesity and ageing. 48th Annual Meeting of Society for Neuroscience (SfN) 'Neuroscience 2018' at San Diego, USA [03rd – 07th November 2018].
2. **Sinha JK**, Ghosh S, Raghunath M. Maternal vitamin B12 deficiency is associated with poor learning and memory and increased oxidative stress in brain of mouse offspring. 3rd International Congress Hidden Hunger (CHH17) at Stuttgart, Germany [20th – 22nd March 2017].
3. **Sinha JK**, Ghosh S, Tiwari V, Patel AB, Giridharan NV, Raghunath M. Altered levels of neurotrophic factors and neurochemical profile in the brain as the probable causes of decreased longevity of WNIN obese rats. 30th Annual Meeting of the Society for Neurochemistry India (SNCI 2016) at Hyderabad, India [9th – 11th December 2016].
4. **Sinha JK**, Ghosh S, Raghunath M. Maternal vitamin B12 deficiency is associated with poor learning and memory in the brain of mouse offspring. 1st ISN-JNC Flagship School at Alpbach, Austria. [12th – 18th September 2016].
5. **Sinha JK**, Ghosh S, Raghunath M. Establishing an animal model to study the neurobiology of obesity and ageing. 45th Annual Meeting of Society for Neuroscience (SfN) 'Neuroscience 2015' at Chicago, USA [17th – 21st October 2015].
6. **Sinha JK**, Ghosh S, Swain U, Raghunath M. Oxidative stress induced DNA damage and compromised antioxidant enzyme activity links obesity and accelerated aging in WNIN/Ob obese rats. 37th Annual Meeting of the Japan Neuroscience Society (Neuroscience 2014) at Yokohama, Japan [10th – 13th September 2014].
7. Maniam J, Antoniadis C, **Sinha JK**, Youngson NA, Morris MJ. Are hippocampal gene expression changes induced by early life stress mediated by DNA methylation? Australian Centre for Perinatal Symposium - Game Changers in Perinatal Science at UNSW, Sydney, Australia. [20th August 2014].
8. **Sinha JK**, Ghosh S, Swain U, Raghunath M. Brain DNA damage may cause reduced longevity in WNIN obese rats. 11th International Congress of Neuroethology and 36th Annual Meeting of the Japanese Society for

- Comparative Physiology and Biochemistry (2014 ICN / JSCP) at Sapporo, Japan. [28th July – 01st August 2014].
9. **Sinha JK**, Ghosh S, Raghunath M. Oxidative stress links obesity and brain ageing in health and disease. 34th Annual Meeting of Australasian Neuroscience Society (ANS 2014) at Adelaide, Australia [9th – 10th January 2014].
 10. **Sinha JK**, Ghosh S, Swain U, Raghunath M. Increased DNA damage in brain results in reduced longevity in WNIN/Ob obese rats. Indo-Taiwan Joint Interdisciplinary Neuroscience Symposium - 2014 at Hyderabad, India [9th – 10th January 2014].
 11. **Sinha JK**, Ghosh S, Swain U, Raghunath M. Increased DNA damage in brain is associated with reduced longevity in a novel obese rat model. Annual Meeting of Society for Neuroscience (SfN) 'Neuroscience 2013' at San Diego, USA [9th – 13th November 2013].
 12. Ghosh S, **Sinha JK**, Rajan WD, Kumar KP, Chakravarty S, Kumar A, Raghunath M. Vitamin B12 deficiency in early life leads to neural and behavioral changes in mice during adulthood. Annual Meeting of Society for Neuroscience (SfN) 'Neuroscience 2013' at San Diego, USA [9th – 13th November 2013].
 13. **Sinha JK**, Ghosh S, Tiwari V, Patel AB, Giridharan NV, Raghunath M. Altered levels of neurotrophic factors and neurochemical profile in the brain as the probable causes of decreased longevity of WNIN obese rats. 33rd Annual Meeting of the Australian Neuroscience Society (ANS 2013) at Melbourne, Australia [3rd – 6th February 2013].
 14. Ghosh S, **Sinha JK**, Swain U, Raghunath M. Premature accumulation of DNA damage in the brain of WNIN obese rats as a possible cause of their reduced longevity. Annual Meeting of the Australian Neuroscience Society (ANS 2013) at Melbourne, Australia [3rd – 6th February 2013].
 15. **Sinha JK**, Giridharan NV, Raghunath M. Can systemic and central IGF1 and BDNF levels play a role in decreasing the longevity of WNIN obese mutant rats? 19th Biennial Meeting of the International Society for Developmental Neuroscience - Neurodevelopment and Neurological diseases at Mumbai, India [11th – 14th January 2012].
 16. **Sinha JK**, Giridharan NV, Raghunath M. Impaired BDNF signaling in hypothalamus may underlie accelerated ageing in WNIN obese mutant rats. 8th World Congress of IBRO at Florence, Italy [14th – 18th July 2011].
 17. **Sinha JK**, Roy B, Sharma S, Roy TS. Age changes in adult human abducens nerve. IIIrd NBRC International Conference at Manesar, India. [13th -15th December 2007]
 18. **Sinha JK**, Roy B, Sharma S, Roy TS. Age changes in the human abducens nerve: A morphometric study. 6th IBRO - Associate School of Neuroscience at Tehran, Iran. [26th -30th August 2006].

Schools / Workshops / Conferences Attended

1. 17th – 21st June 2019. Title “**One Week Workshop on Yoga for Health**” Venue: Amity University UP, Noida, India.
2. 02nd - 03rd November 2017. Title “**National Seminar on Non-Communicable Diseases**” Venue: Amity University UP, Noida, India.

3. 20th – 22nd March 2017. Title: “**3rd International Congress Hidden Hunger (CHH17)**” Venue: Mövenpick Hotel Stuttgart, Stuttgart, Germany.
4. 03rd – 05th March 2017. Title: “**6th Meeting of Asian Forum for Chromatin and Chromosome Biology**” Venue: Centre for Cellular and Molecular Biology (CCMB), Hyderabad, India.
5. 09th – 11th December 2016. Title: “**National Conference on Recent Trends in Neurological and Psychiatric Research**” Venue: Centre for Cellular and Molecular Biology (CCMB), Hyderabad, India.
6. 12th – 16th December 2016. Title: “**Workshop on Modern Molecular Techniques to study Neurological and Psychiatric Disorders**” Venue: CCMB, Hyderabad, India.
7. 12th – 18th September 2016. Title: “**1st ISN-JNC Flagship School**” Venue: Congress Centrum Alpbach, Alpbach, Austria.
8. 5th – 6th May 2016. Title: “**Symposium on Next Generation Sequencing**” Venue: Centre for Cellular and Molecular Biology (CCMB), Hyderabad, India.
9. 17th – 21st October 2015. Title: “**45th Annual Meeting of Society for Neuroscience (SfN) - Neuroscience 2015**” Venue: McCormick Convention Center, Chicago, USA.
10. 09th – 10th October 2015. Title: “**47th Annual National Conference of Nutrition Society of India**” Venue: National Institute of Nutrition, Hyderabad, India.
11. 03rd -05th September 2015. Title: “**International Conference on Biochemistry, Nutrition and Pharmacy in human welfare (ICBNP) – 2015**” Venue: Osmania University, Hyderabad, India.
12. 07th – 11th July 2015, Title: “**9th IBRO World Congress of Neuroscience**” Venue: Rio de Janeiro, Brazil.
13. 10th – 13th September 2014, “**International Exchange Meeting for Young Researchers**” and “**37th Annual Meeting of the Japan Neuroscience Society (Neuroscience 2014)**” Venue: Pacifico Yokohama, Yokohama, Japan.
14. 28th July – 01st August 2014, “**11th International Congress of Neuroethology**” and “**36th Annual Meeting of the Japanese Society for Comparative Physiology and Biochemistry (2014 ICN / JSCPb)**” Venue: Sapporo Convention Center, Sapporo, Japan.
15. 24th – 28th July 2014, “**IBRO/APRC Advanced School of Neuroethology**” Venue: Hokkaido University, Sapporo, Japan
16. 17th – 18th May 2014, “**Kioloa Neuroscience Colloquium 2014**” funded by SfN Sydney Chapter and Australian Neuroscience Society. Venue: ANU Coastal Campus, Kioloa, Australia.
17. 9th – 10th January 2014, Title: “**Indo-Taiwan Joint Interdisciplinary Neuroscience Symposium – 2014**” Venue: Hyderabad Central University, Gachibowli, India.
18. 9th – 13th November 2013. Title: “**43rd Annual Meeting of Society for Neuroscience (SfN) - Neuroscience 2013**” Venue: San Diego Convention Center, San Diego, USA.
19. 25th – 31st August 2013, Title: “**3rd IBRO-Kemali College: RNA and the Etiology of Brain Diseases**” funded by IBRO School of Excellence Committee and IBRO-Kemali Foundation. Venue: Neuroscience School of Advanced Studies (NSAS), Cortona, Italy.
20. 20th – 22nd March 2013, **Wellcome Trust/DBT India Alliance** sponsored “**Science and Communication Workshop (SciComm 2013)**” at Hyderabad, India.

21. 3rd – 6th February 2013, Title: **“33rd Annual Meeting of the Australian Neuroscience Society”** and **“FAONS (Federation of Asian Oceania Neuroscience Societies) Symposium 2013”** Venue: Melbourne Convention Centre, Melbourne, Australia. Organized by: FAONS & ANS.
22. 30th January – 1st February 2013, Title: **“IBRO/APRC Advanced Neuroscience Imaging Course”** Venue: Monash Biomedical Imaging Research Centre, Monash University, Clayton, Australia. Organized by: IBRO & Australian Neuroscience Society (ANS).
23. 4th August 2012, Title: **“ICMR Workshop on Biomedical Communication”** Venue: NIN, Hyderabad, India.
24. 11th – 14th January 2012, Title: **“19th Biennial Meeting of the International Society for Developmental Neuroscience”** Venue: TIFR, Mumbai, India.
25. September 2011, Title: **“Basic Course Work in Biostatistics for Ph.D. Students”** Venue: NIN, Hyd, India.
26. 24th April – 24th Aug 2011, Title: **“IBRO Young Investigator Program”** Venue: University of Verona, Italy.
27. 14th – 18th July 2011, Title: **“8th IBRO World Congress of Neuroscience”** Venue: Florence, Italy.
28. 9th – 10th Jun 2011, Title: **“XXI Convegno Nazionale del Gruppo Itlaiano per lo Studio della Neuromorfologia (G.I.S.N.)”** Venue: San Benedetto del Tronto (AP), Italy.
29. 20th – 21st Nov 2009, Title: **“XXXXI National Conference of the Nutrition Society of India (NSI); Chronic Diseases the New Pandemic”** Venue: National Institute of Nutrition (NIN), Hyderabad, India.
30. 19th Nov 2009, **“Workshop: Assessment of nutritional status and dissemination on new RDA for Indians; Group: BIOSTATISTICS”** Venue: National Institute of Nutrition (NIN), Hyderabad, India.
31. 4th – 7th Nov 2009, Title: **“XXIX Annual Conference of Society of Toxicology – STOX-09”** & **“International Symposium on ‘Current Trends in Toxicology & Pre-Clinical Toxicology’ ”** Venue: National Institute of Nutrition (NIN), Hyderabad, India. Organized by: STOX & NIN.
32. 4th Nov 2009, Title: **“Workshop on Pre-clinical Toxicology Ethics in Animal Experimentation & GLP”** Venue: National Institute of Nutrition (NIN), Hyderabad, India. Organized by: Society for Toxicology (STOX)
33. 2nd – 4th Sept 2009, Title: **“6th Indo-Australian Biotechnology Conference.”** Venue: Indian Institute of Chemical Technology, Hyderabad, India.
34. 12th – 14th Dec 2008, Title: **“International Conference on Advances in Neurosciences & XXVI Annual Meeting of IAN.”** Venue: Cochin University of Science & Technology, India.
35. 9th – 10th Dec 2008, Title: **“NBNI Workshop on Neurobiology and Neuroinformatics.”** Venue: Centre for Neuroscience, Cochin University of Science & Technology, India.
36. 1st – 15th January 2008, Title: **“Course on Care, Breeding and Management of Laboratory Animals”** Venue & Organized by: Central Animal Research Facility, NIMHANS, Bangalore, India.
37. 21st- 22nd Jan 2008, Title: **“The 3rd Symposium of the Molecular and Cellular Cognition Society (MCCS) – Asia.”** Venue: National Centre for Biological Sciences, Bangalore, India. Organised by MCCS, Asia and NCBS, India.
38. 24th- 31st Jan 2007, Title: **“1st UAE- IBRO Neuroscience School- Fundamentals of Basic and Clinical Neurosciences.”** Venue: UAE University, Al Ain, UAE. Organized by: UAE University Neuroscience Group and IBRO.
39. 8th January – 7th July 2007, Title: **“Biotech Industrial Training Programme 2006-07”** Venue: Virchow

- Biotech Pvt. Ltd., Hyderabad. Organized by: Biotech Consortium India Ltd. & Dept. of Biotech., Govt. of India.
40. 13th -15th Dec 2006, Title: **“III International NBRC Conference.”** Venue: National Brain Research Centre, Manesar, India. Organized by: NBRC, India.
41. 24th & 25th Nov 2006, Title: **“Workshop on Good Laboratory Practices (GLP) for Academia.”** Venue: AIIMS, New Delhi. Organized by: Dept. of Sci. & Tech., Govt. of India.
42. 2nd -21st Sept 2006, Title: **“1st Neuroscience Orientation Summer Program.”** Venue: Tarbiat Modarres University (TMU), Tehran, Iran. Organized by: IBRO and TMU, Iran.
43. 20th May 2006, Title: **“Pharmacogenomics Symposium.”** Venue: Ranbaxy Research Lab. (RRL), Gurgaon, India. Organized by: RRL and Dept. of Pharmacology, AIIMS, New Delhi, India.
44. 28th -30th Jan 2005, Title: **“Neuroscience: From Basic to Clinic- XXII Annual Conference of Indian Academy Neurosciences (IAN).”** Venue: Neuroscience Center, Jiwaji University, Gwalior, M.P., India. Organized by: IAN, India.

References

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