

## Publications

1. Arsenic Induces GSK3 $\beta$ -Dependent p-Tau, Neuronal Apoptosis, and Cognitive Impairment via an Interdependent Hippocampal ER $\alpha$  and IL-1/IL-1R1 Mechanism in Female Rats. Keerti Gupta, Jitendra Vishwakarma, Asmita Garg, Rukmani Pandey, Veena Jain, Raksha Gupta, Uttara Das, Somendu Roy and Sanghamitra Bandyopadhyay . *Toxicol Sci.* 2022 Oct 27;190(1):79-98. doi: 10.1093/toxsci/kfac087. Impact factor: 4.849
2. Role of Neuron and Glia in Alzheimer's Disease and Associated Vascular Dysfunction. Bandyopadhyay S. *Front Aging Neurosci.* 2021 Jun 15;13:653334. doi: 10.3389/fnagi.2021.653334. eCollection 2021. Impact factor: 4.504
3. Hypothyroidism Induces Interleukin-1-Dependent Autophagy Mechanism as a Key Mediator of Hippocampal Neuronal Apoptosis and Cognitive Decline in Postnatal Rats. Juhi Mishra, Jitendra Vishwakarma, Rafat Malik, Keerti Gupta, Rukmani Pandey, Shailendra Kumar Maurya, Asmita Garg, Manoj Shukla, Naibedya Chattopadhyay & Sanghamitra Bandyopadhyay. *Mol Neurobiol* 2020 Oct 26. doi: 10.1007/s12035-020-02178-9. Impact factor: 4.260
4. Estrogen deficiency induces memory loss via altered hippocampal HB-EGF and autophagy; Rukmani Pandey, Pallavi Shukla<sup>1</sup>, B. Anjum, Himanshu Pawankumar Gupta, Subhashis Pal<sup>5</sup>, Nidhi Arjaria<sup>6</sup>, Keerti Gupta<sup>1</sup>, Naibedya Chattopadhyay, \*Rohit A. Sinha and \*Sanghamitra Bandyopadhyay. *Journal of Endocrinology*; 2020 Jan 1;244(1):53-70. doi: 10.1530/JOE-19-0197. Impact factor: 4.381
5. Rosiglitazone up-regulates glial fibrillary acidic protein via HB-EGF secreted from astrocytes and neurons through PPAR $\gamma$  pathway and reduces apoptosis in high-fat diet-fed mice. Kushwaha R, Mishra J, Gupta AP, Gupta K, Vishwakarma J, Chattopadhyay N, Gayen JR, Kamthan M, Bandyopadhyay S. *J Neurochem.* 2018 Oct 12. doi: 10.1111/jnc.14610. Impact factor: 4.609
6. Kumar H, Chattopadhyay S, Das N, Shree S, Patel D, Mohapatra J, Gurjar A, Kushwaha S, Singh AK, Dubey S, Lata K, Kushwaha R, Mohammed R, Dastidar KG, Yadav N, Vishwakarma AL, Gayen JR, Bandyopadhyay S, Chatterjee A, Jain MR, Tripathi AK, Trivedi AK, Chattopadhyay N, Ramachandran R, Sanyal S. Leprosy drug clofazimine activates peroxisome proliferator-activated receptor- $\gamma$  and synergizes with imatinib to inhibit chronic myeloid leukemia cells. *Haematologica* 105:971-986, 2020. Imp. Factor: 7.116
7. Arsenic attenuates Heparin-binding EGF-like growth factor/EGFR signalling that promotes matrix-metalloprotease-9-dependent astrocyte damage in the developing rat brain; Rajesh Kushwaha, Juhi Mishra, Sachin Tripathi, Waseem Raza, Kapil Mandrah<sup>1,5</sup>, Somendu Kumar Roy and \*Sanghamitra Bandyopadhyay; *Toxicol. Sci.*; 2018 Apr 1;162(2):406-428. Imp. Factor: 4.081
8. Arsenic induces hippocampal neuronal apoptosis and cognitive impairments via an up-regulated BMP2/Smad-dependent reduced BDNF/TrkB signalling in rats; Rukmani Pandey, Vipin Rai, Juhi Mishra, Kapil Mandrah, Somendu Kumar Roy and \*Sanghamitra Bandyopadhyay; *Toxicol. Sci.* 2017 Sep 1;159(1):137-158. doi: 10.1093/toxsci/kfx124. . Imp. Factor: 4.081
9. Docosahexaenoic acid up-regulates both PI3K/AKT-dependent FABP7-PPAR $\gamma$  interaction and MKP3 that enhance GFAP in developing rat brain astrocytes; Tripathi S, Kushwaha R, Mishra J, Gupta MK, Kumar H, Sanyal S, Singh D, Sanyal S, Sahasrabudhe AA, Kamthan M, Mudiam MK, \*Bandyopadhyay S.; *J Neurochem.* 2017 Jan;140(1):96-113. doi: 10.1111/jnc.13879. Imp. Factor: 4.609.

9. Chronic cerebral hypoperfusion-induced impairment of A $\beta$  clearance requires HB-EGF- dependent sequential activation of HIF1 $\alpha$  and MMP9; Ashok A, Rai NK, Raza W, Pandey R,\*Bandyopadhyay S.; *Neurobiol Dis.* 2016 Jul 16;95:179-193. Imp. Factor: 5.227.
10. Arsenic, Cadmium, and Lead Like Troglitazone Trigger PPAR $\gamma$ -Dependent Poly (ADP- Ribose) Polymerase Expression and Subsequent Apoptosis in Rat Brain Astrocytes. Kushwaha R, Mishra J, Tripathi S, Khare P, \*Bandyopadhyay S. *Mol Neurobiol.* 2017 Mar 10. doi: 10.1007/s12035-017-0469-7. Imp. Factor: 5.076.
11. As, Cd and Pb-mixture induces synergistic A $\beta$  pathology via amyloidogenic APP processing in developing rats: Role of oxidative stress, IL-1 and APP 5'UTR; Anushruti Ashok, Nagendra Kumar Rai, Sachin Tripathi and \*Sanghamitra Bandyopadhyay. *Toxicol Sci.* 2015 Jan;143(1):64-80. doi: 10.1093/toxsci/kfu208. Imp. Factor: 4.081
12. Cypermethrin stimulates GSK3 $\beta$ -dependent A $\beta$  and p-tau proteins and cognitive-loss in young rats: Reduced HB-EGF signaling and downstream neuroinflammation as critical regulators; SK Maurya, J Mishra, S. Abbas, \*S Bandyopadhyay. *Mol Neurobiol.* 2016 Mar; 53(2):968-82. Imp. Factor: 5.076.
13. Similarities in lindane induced alterations in protein expression profiling in different brain regions with neurodegenerative diseases. Mudawal A, Singh A, Yadav S, Mishra M, Singh PK, Chandravanshi LP, Mishra J, Khanna, K, Bandyopadhyay S, Parmar D. *Proteomics.* 2015 Nov;15(22):3875-82. Factor: 4.2.
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frequently read articles, as in web site: <http://jbx.sagepub.com/reports/mfr1.dtl>). Imp. Factor: 2.49.

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