1. Publications

1. Das, A., Narayanan, M.K., Paul, S., Mukherjee, P., Ghosh, S., Ghosh Dastidar, D., Chakrabarty, S., Ganguli, A., Basu, B., Pal, M., Chatterji, U., Banerjee, S.K., Karmakar, P., Kumar, D., and Chakrabarti, G. (2019) A novel triazole NMM–T–057 induces autophagic cell death in breast cancer cells by inhibiting γ-secretase-mediated activation of Notch-signaling. J. Biol. Chem. doi: 10.1074/jbc.RA119.007671 (Impact factor – 4.010)

2. Das, S., Mukherjee, P., Chatterjee, R., Jamal, Z. and Chatterji, U. (2019) Nanoformulation of Wedelolactone promotes acquisition of chemosensitivity of breast cancer stem cells through coordinated regulation of pluripotency markers and NF-κB inhibition. Mol Cancer Ther 18(3): 680-692. (Impact Factor – 5.365)

3. Mukherjee, P., Gupta, A. and Chatterji, U. (2018) A TWIST in the tale. Significances Bioeng Biosci 2(2): SBB.000532. (Review)

4. Saha, I., Pradhan, D., Chatterji, U. and Maiti, B. R. (2018) Arecoline cannot alter pineal-testicular responses to metabolic stress in Wistar rats. Acta Endocrinologica 14:175-183. (Impact Factor – 1.2)

5. Saha, I., Chatterjee, A., Chakraborty, S.B., Chatterji, U., and Maiti, B. R. (2018) Arecoline inhibits pineal-testis function in experimentally induced hypothyroid rats. Arch. Physiol. Biochem. 13:1-9. (Impact Factor – 1.2)

6. Mitra, T., Prasad, P., Mukherjee, P., Ray Chaudhuri, S., Chatterji, U. and Roy, S.S. (2018) Stemness and chemoresistance are imparted to the OC cells through TGFβ1 driven EMT. J. Cell. Biochem. 119 (7): 5775-5787 (Impact Factor – 3.446)

7. Mitra, I., Mukherjee, S., Venkata, P. Reddy, B., Chatterjee, S.K., Mukherjee, S., Ghosh, S., Chatterji, U. and Moi, S. (2017) DNA/protein interactions, cell cycle arrest and apoptosis study of potent cytotoxic Pt(II) complexes with reduced side effects. J. Mol. Liquids. 248: 515-526 (Impact Factor – 3.648)

8. Mukherjee, S., Mitra, I., Venkata, P. Reddy, B., Fouzder, C., Mukherjee, S., Ghosh, S., Chatterji, U. and Moi, S. (2017) Cytotoxic Pt(II) complexes with low toxicity and better efficacy: a comparable study with recognized anticancer drugs. J. Mol. Liquids 247: 126-140 (Impact Factor – 3.648)

9. Bhowal, A., Majumder, S., Ghosh, S., Basu, S., Sen, D., Roychowdhury, S., Sengupta, S. and Chatterji, U. (2017) Pathway-based expression profiling of benign prostatic hyperplasia and prostate cancer delineates an immunophillin molecule associated with cancer progression. Sci. Rep. 7(1): 9763. (Impact Factor – 4.259)

10. Mukherjee, P., Gupta, A., Chattopadhyay, D.J. and Chatterji, U. (2017) Modulation of SOX2 expression delineates an end-point for paclitaxel-effectiveness in breast cancer stem cells. Sci. Rep. 7(1): 9170. (Impact Factor – 4.259)

11. Saha, I., Chatterjee, A., Chatterji, U. and Maiti, B. R. (2017) Arecoline cannot alter testicular dysfunction and pineal activation caused by noise in Wistar rat. Arch. Physiol. Biochem. 13:1-9. (Impact Factor – 1.2)

12. Maji, P., Chatterjee, R., Choudhury, B.P., Chatterji, U. and Ganguly, J. (2017) Enhanced p53-dependent growth inhibition of human glioblastoma cells by combinatorial treatment of temozolomide and novel purified natural carbohydrate of Pleurotus florida. Int. J. Pharma. Pharma. Sci. 9(6): 189-193. (Impact Factor – 2.11)

13. Chatterjee, A. and Chatterji, U. (2017) All-trans retinoic acid ameliorates arsenic-induced oxidative stress and apoptosis in the rat uterus by modulating MAPK signaling proteins. J. Cell. Biochem. 118(11): 3796-3809. (Impact Factor – 3.446)

14. Choudhury, S., Gupta, P., Ghosh, S., Mukherjee, S., Chakraborty, P., Chatterji, U. and Chattopadhyay, S. (2016) Arsenic-induced dose-dependent modulation of the NFкB/IL-6 axis in thymocytes triggers differential immune responses. Toxicol. 357-358: 85-96. (Impact Factor – 3.621)
15. Majumder, S., Bhowal, A., Basu, S., Mukherjee, P., Chatterji, U. and Sengupta, S. (2016) Deregulated E2F5p38/SMAD3 circuitry reinforces the pro-tumorigenic switch of TGFβ signaling in prostate cancer. J Cell Physiol. 231(11): 2482-92. (Impact Factor – 3.839)

16. Sinha, S., Jothiramajayam, M., Ghosh, M., Jana, A., Chatterji, U. and Mukherjee, A. (2015) Vetiver oil (java) attenuates cisplatin-induced oxidative stress, nephrotoxicity and myelosuppression in Swiss albino mice. Food Chem Toxicol. 81: 120-128. (Impact Factor – 3.210)

17. Mondal, A. and Chatterji, U. (2015) Artemisinin represses telomerase subunits and induces apoptosis in HPV-39 infected human cervical cancer cells. J. Cell. Biochem. 116(9): 1968-81. (Impact Factor – 3.446)

18. Saha, I., Das, J., Maiti, B. R. and Chatterji, U. (2015) A Protective Role of Arecoline Hydrobromide in Experimentally Induced Male Diabetic Rats. BioMed Res Int. 2015: 1-12 (Impact Factor – 2.71)

19. Kumar, S., Acharya, R., Chatterji, U. and De, P. (2014) Controlled synthesis of β-sheet polymers based on side-chain amyloidogenic short peptide segments via RAFT polymerization. Polymer Chem 5: 6039-6050 (Impact Factor – 5.3)

20. Kumar, S., Acharya, R., Chatterji, U. and De, P. (2013) Side-Chain Amino Acid Based pH Responsive Self-Assembled Block Copolymers for Drug Delivery and Gene Transfer. Langmuir 29(49): 15375-15385 (Impact Factor – 4.19)

21. Ghosh, S., Acharya, R., Chatterji, U. and De, P. (2013) RAFT polymerization of methacrylates containing a tryptophan moiety: controlled synthesis of biocompatible fluorescent cationic chiral polymers with smart pH-responsiveness. Polym. Chem. 4, 1141-1152. (Impact Factor – 5.3)

22. Kumar, S., Acharya, R., Chatterji, U. and De, P. (2013) Controlled Synthesis of pH Responsive Cationic Polymers Containing Side-Chain Peptide Moieties via RAFT Polymerization and Their Self Assembly. J. Mater. Chem. B. 1(7), 946-957. (Impact Factor – 6.0)

23. Roy, P., Das, S., Mondal, A., Chatterji, U. and Mukherjee, A. (2012) Enhanced antitumor effects of andrographolide nanoparticles in MCF-7 human breast cancer cells and Ehrlich’s ascites carcinoma in mice. Curr Pharma Biotech. 13(15):2669-81. (Impact Factor – 3.455)

24. Chatterjee, A. and Chatterji, U. (2011) All-trans retinoic acid protects against arsenic-induced uterine toxicity in female Sprague-Dawley rats. Toxicol. Appl. Pharmacol. 257: 250-263. (Impact Factor - 3.993; 5-year impact factor – 4.258)

25. Saha, I., Chatterjee, A., Mondal, A., Maiti, B. R. and Chatterji, U. (2011) Arecoline upregulates androgen receptors and G1 cell cycle proteins in the prostate gland of male Wistar rats. Toxicol. Appl. Pharmacol. 255 (2): 160-168. (Impact Factor - 3.993; 5-year impact factor – 4.258)

26. Chakraborty, S. B., Mazumdar, D., Chatterji, U. and Banerjee S. (2011) Growth of Mixed-Sex and Monosex Nile tilapia in Different Culture Systems. Turkish J Fisheries Aquatic Sciences. 11: 133-140.

27. Sarkar, K., Srivastava, R., Chatterji, U. and Kundu, P.P. (2011) Evaluation of Chitosan and their self-assembled nanoparticles with pDNA for the application in gene therapy. J. Appl. Polymer Sc. 121: 2239-2249. (Impact Factor - 1.203)

28. Chatterjee, A. and Chatterji, U. (2010) Inorganic arsenic abrogates the estrogen signaling pathway in the rat uterus. Reprod. Biol. Endocrinol. 8: 80-90. (Impact Factor - 2.68)

29. Chowdhury, M., Chatterjee, A., Mandal, A. and Chatterji, U. (2010) Ovaprim abrogates expression of GnRH receptor- II in the Indian catfish. Int. J. Biol. 2: 189-198.

30. Dasgupta, R., Chatterji, U., Nag, T.C., Chaudhuri-Sengupta, S., Nag, D. and Maiti, B. R. (2010) Ultrastructural and hormonal modulations of the thyroid gland following arecoline treatment in albino mice. Mol. Cell. Endo. 319: 1-7. (Impact Factor - 3.5)

31. Saha, I., Chatterji, U., Chaudhuri-Sengupta, S. and Maiti, B. R. (2007) Suppression of circadian rhythm of pineal and testicular hormones following lithium treatment in normal and reversed light-dark cycles, constant light and constant dark in rats. Biol. Rhy. Res. 38 (1): 19-32. (Impact Factor - 0.731)

32. Saha, I., Chatterji, U., Chaudhuri-Sengupta, S., Nag, T. C., Nag, D., Banerjee, S. and Maiti, B. R. (2007) Ultrastructural and hormonal changes in the pineal-testicular axis following arecoline administration in rats. J Exp Zool Part A Ecol Genet Physiol. 307 (4): 187-98. (Impact Factor - 3.364)
33. Riby, J. E., Xue, L., Chatterji, U., Bjeldanes, E.L., Firestone, G. L. and Bjeldanes, L. F. (2006) Activation and Potentiation of Interferon-(gamma) Signaling by 3,3’-Diindolylmethane in MCF-7 Breast Cancer Cells. *Mol. Pharmacol.* 69 (2): 430-9. (Impact Factor - 4.711)

34. Chatterji, U. and Siddiqi, M. (2004) Telomeres and Cancer. *Science and Culture*. 70 (3-4): 100-104. (Review)

35. Chatterji, U. and Siddiqi, M. (2004) Telomeres and Cancer. *Science and Culture*. 70 (3-4): 100-104. (Review)

36. Chatterji, U. and Siddiqi, M. (2004) Telomeres and Cancer. *Science and Culture*. 70 (3-4): 100-104. (Review)

2. List book/book chapter (if any)

1. Chatterji, U. (2011) Environmental Modulations and Reproduction: the Favourable and Unfavourable Paradigms. *In: Perspectives in Animal Ecology & Reproduction*. Vol.7, pp 378-410. M/s. Daya Publishing House, New Delhi, India.

2. Chatterji, U. (2011) Efficacy of induced breeding strategies. *In: Advances in Fish Research Vol: 5; Chapter 4

3. Chatterji, U. (2019) Lung Cancer: Old story, New modalities. *In: Modulation of Oxidative Stress in Lung Diseases*. (in press)

3. Extramural research grant

| Sl. No. | Title                                                                 | Date of start & Date of completion | Cost                   | Agency & Ref. No.                          |
|--------|----------------------------------------------------------------------|------------------------------------|-----------------------|-------------------------------------------|
| 1.     | “Telomerase inhibition as potential anti-cancer therapeutic strategy”| 3 years 27.7.2005 – 26.7.08       | Rs. 10.00 lakhs       | DST, New Delhi (Fast Track Fellowship) SR/FTP/LSA-080/2002 dated 16.12.2003 |
| 2.     | “Reversing Arsenic-Induced Endocrine Disruption With Retinoic Acid: A Therapeutic Strategy” | 3 years 1.5.2006 – 30.4.2009     | Rs. 11.68 lakhs       | University Grants Commission, New Delhi (Major Project Scheme) 31-227/2005 (SR) dated 31.3.2006 |
| 3.     | “Investigating the Molecular Dynamics of Progression of Prostate Cancer” | 3 years 1.7.2007 - in progress    | Rs. 16.2 lakhs        | UPE Project under University Grants Commission, New Delhi UGC/193/UPE/07 |
| 4.     | “Delivery of antisense oligonucleotides (ASO) to the androgen receptor of prostate cancer cells by nanoparticles: a prospective antitumoral strategy” | 1 year 1.7.2007 - in progress    | Rs. 2 lakhs + 1 student | Nanoscience and Nanotechnology Center, University of Calcutta No. CONV/ 006 / NANOGRAC (2009) dated 25-Feb-2009 |
| 5.     | “Biotechnical manipulation and stocking of tilapia for sustainable culture of Indian major carps”. | 2 years                             | Rs. 12,09,560         | West Bengal State Council of Science and Technology, Kolkata 1112/WBSCST/F/0216/08 dated 28.09.2010 |
| 6.     | “Effect of arsenic treatment on endocrine physiology and immune status of Swiss albino mice” | 3 years 1.7.2012 – 30.6.2015     | Rs. 11.23 lakhs       | University Grants Commission, New Delhi (Major Project Scheme) 31-227/2005 (SR) dated 31.3.2006 |
| 7.     | “Evaluating the gene expression profile of breast cancer stem cells which are resistant to conventional chemotherapeutic drugs” | 4 years 4.10.12 – 3.10.2016      | Rs. 76.25 lakhs       | Department of Biotechnology, New Delhi BT/PR5731/MED/31/165/2012 dated 4.10.12 |
|   | “Characterization of tight junction proteins and use of phytochemicals towards restoration of tight junctional complex disruption as a possible treatment against cancer” | 3.5 years | Rs. 39.20 lakhs | Biotech Consortium India Limited, Department of Biotechnology, New Delhi “Twinning Programme” BCIL/NER-BPMC/2013 dated 26.03.2013 |
|---|---|---|---|---|
| 9. | “Targeting breast cancer stem cells with phosphodiesterases inhibitors” | 3 years | Rs. 19.56 | Department of Biotechnology, GoWB; Memo No. 248 (Sanc) / BT(Estt) / RD-27/2016 |
| 10. | “Delineating the role of hippo signaling pathway components in maintenance of pluripotency, chemoresistance and metastatic properties of breast cancer stem cells: clinical and therapeutic implications” | 3 years | Rs. 34.62 | Department of Biotechnology, GoWB; Memo No. 140 (Sanc)/ BT/P/ Budget/RD-75/2017 |

4. **Patents (if any)** - Nil

5. **List of Honours/Awards**
   - Gold-medalist; Ranked 1st in Masters examination in Zoology of the University of Calcutta in 1991.
   - Awarded DN Ganguly Memorial Medal for best dissertation on “Earth Summit” by the Zoological Society, Kolkata, in 1992.
   - Awarded Junior and Senior Research Fellowship from the Indian Council of Medical Research, New Delhi, from 1994-1998.
   - Awarded BOYSCAST Fellowship from the Department of Science and Technology, New Delhi, for research on Stem Cell and Cancer Biology at Cornell University, Ithaca, New York, USA, from April to September, 2008.

6. **Foreign visit (if any)**
   - Visited Cornell University, Ithaca, New York, USA in 208 and 2009 as BOYSCAST fellow
   - Visited Lisbon, Portugal in 2011 for International Conference
   - Visited Suchou, China in 2014 for International Conference

7. **Membership in scientific bodies**
   1. Associate Member, American Association of Cancer Research (AACR), USA
   2. Life Member, Indian Association for Cancer Research (IACR)
   3. Member, Senate, University of Calcutta, 2007-2012
   4. External Expert and Examiner for Jagadish Bose National Science Talent Search scholarships
   5. Executive Committee member, Cancer Foundation of India
   6. Member of Selection Committee for placement and promotion of college staff
   7. Executive Committee member, The Cytometry Society, India (2015-2017)
   8. Secretary, The Cytometry Society, India (2017-2019)
   9. Convener, Academic Excellence Committee, University of Calcutta (2015-2016)
   10. Member, Ph.D. Committee, Dept. of Zoology, CU (2017-2021)