Dr. MOITRI BASU

PRESENT AFFILIATION

DST-INSPIRE faculty at Department of Biophysics, Bose Institute, Kolkata.

POSITIONS HELD

- From 2015, January – DST-INSPIRE faculty at Bose Institute, Kolkata.
- 2014, July – 2014, December - DBT-Research Associate-I in the Biophysics and Structural Biology Division, Saha Institute of Nuclear Physics, Kolkata.
- 2008-2014 – PhD at CSIR-IICB, Kolkata.
  Research specialization: Signaling pathways driving the invasiveness of ovarian cancer.

ACADEMIC PROFILE

- Qualified DST-INSPIRE faculty fellowship awarded by DST.
  Qualified DBT-Research Associateship awarded by Department of Biotechnology.
- Awarded PhD degree in Biochemistry from University of Calcutta.
  - Title of Doctoral thesis: 'STUDIES ON THE ROLE OF PITX2 HOMEODOMAIN TRANSCRIPTION FACTOR TO MAINTAIN OVARIAN STRUCTURE AND FUNCTION'.
- Qualified CSIR-NET (by Govt. of India) for JRF and LS.
  - Qualified GATE (Life Science).
- M.Sc in Biophysics and Molecular Biology, University of Calcutta
- B.Sc in Microbiology (Hons.), University of Calcutta

PUBLICATIONS

1. **Basu M**, Sengupta I, Khan W, Srivastava DK, Chakrabarti P, Roy S, Das C. Dual histone reader ZMYND8 inhibits cancer cell invasion by positively regulating epithelial genes. Biochem J. 2017 Apr 21. pii: BCJ20170223. doi: 10.1042/BCJ20170223. [Epub ahead of print]
2. **Basu M**, Khan MW, Chakrabarti P, Das C. Chromatin reader ZMYND8 is a key target of all trans retinoic acid-mediated inhibition of cancer cell proliferation. **Biochim Biophys Acta**. 2017;1860(4):450-459.
3. Adhikary S, Sanyal S, **Basu M** *et al*. Selective Recognition of H3.1K36 dimethylation / H4K16 acetylation facilitates the regulation of ATRA-responsive genes by putative chromatin reader ZMYND8. **J. Biol. Chem.** 2016; 291(6), 2664-2681.

4. **Basu M**, Bhattacharya R, Ray U, Mukhopadhyay S, Chatterjee U, Roy SS**.** Invasion of ovarian cancer cells is induced by PITX2-mediated activation of TGF-β and activin-A. **Mol Cancer.** 2015;14(1):162. doi: 10.1186/s12943-015-0433-y.

5. **Basu M**, Mukhopadhyay S, Chatterjee U, Roy S S. FGF16 promotes invasive behavior of SKOV-3 ovarian cancer cells through the activation of MAPK signaling pathway. **J. Biol. Chem.** 2014; 289 (3), 1415-1428.

6. **Basu M,** Roy SS. Wnt/β-catenin pathway is regulated by PITX2 homeodomain protein and thus contributes to the proliferation of human ovarian adenocarcinoma cell, SKOV-3. **J Biol Chem.** 2013; 288:4355-4367.

7. Ghosh S, **Basu M,** Roy SS. ETS-1 regulates vascular endothelial growth factor-induced matrix metalloproteinase-9 and matrix metalloproteinase-13 expression in human ovarian carcinoma cell SKOV-3. **J. Biol. Chem.** 2012; 287, 15001-15.

PROJECTS SANCTIONED

- INSPIRE faculty scheme (2015-2020)

STUDENTS PERSUING PhD UNDER MY SUPERVISION

Two

HONOURS & ACHIEVEMENTS

- Invited to present paper at **young scientist** category, New Biology section at Indian Science Congress, 2016.
- **Awarded Best poster** in 'New Biology' section in 100th Indian Science Congress, 2013.
- Awarded Best poster in Cell Biology & Physiology Research Festival held at CSIR-IICB, Kolkata in 2012.
- Awarded scholarship from Govt. of West Bengal in B.Sc examination (Microbiology Hons.) from University of Calcutta.