

CURRICULUM VITAE

Dr. Biswarup Basu
Senior Scientific Officer-II
Chittaranjan National Cancer Institute
37,S.P.Mukherjee Rd,Kolkata-
700026



Awards & Fellowships: NET (CSIR-JRF), June 2004, NET (L.S) December 2003

GATE 2004(92.88 percentile), SLET 2004
CSIR-NEHRU postdoctorate fellowship,2010
NIH postdoctorate fellowship ,2011
SERB-YSS grant (2015-2018)

Education:

2010 Ph.D (Biotechnology) , Jadavpur University, India.
2003 M.S (Zoology), University of Calcutta, India (71.2%)
2001 B.S (Zoology) ,University of Calcutta, India (63.5%)
1998 Higher Secondary (10+2) ,W.B.C.H.S.E (65.7%)
1996 10th ,W.B.B.S.E. (82.2%)

Thesis title: “ Role of Dopamine in Proliferation and Growth of Normal and Leukemic T cells *in vitro*”

Professional Experience:

Year	Institution	Role
August 2004-April 2005	Bose Institute, Kolkata	Project Assistant
May 2005-July 2010	Chittaranjan National Cancer Institute	Ph.D fellow
April 2011-Oct2013	National Cancer Institute(NCI), Maryland, USA	Postdoctorate Research
Oct2013-April2015	Apeejay Stya University, Haryana	Assistant Professor, Gr-II
April 2015-Nov 2018	Amity University,Noida	Assistant Professor, Gr-III
Nov 2018- ongoing	Cittaranjan National Cancer Institute,Kolkata	Senior Scientific Officer-II

Professional Membership: Zoological Society of India(Life Member)
Indian Association of Cancer Research(Life member)
Indian Science Congress Association(Life Member)

Sanctioned Projects -

- Ongoing : " Study on effect of Dopamine/Dopamine D2 agonist treatment with IGF-1 to regulate angiogenesis and normalize blood vessels in Diabetic Retinopathy"(Co-PI, DST, 2017-2020)
- Completed: "Evaluation of effect of Neem leaf glycoprotein treatment in cancer stem cells(CSC) and epithelial to mesenchymal transition (EMT) in breast cancer" (PI, DST-YSS , 2015-2018)

Patent Applied :

A method of targeting RRM domain of NCL with natural compounds

Research interests

- ❖ **Independent Research: Chittaranjan National Cancer Institute and Amity university**
 1. Targeting breast and ovarian cancer with nanodelivery of natural and synthetic compounds
 2. Investigating dynamics of insulin and dopamine in diabetic wound healing and burns
 3. Neural- immune influence in c

- ❖ **Postdoctorate Research : NCI(NIH) ,USA**
 1. Study of inflammatory gene IL-32 as oncogene
 2. Identification of Vav oncogene as stem cell mobilizer

- ❖ **Doctoral Research: Chittaranjan National Cancer Institute, Kolkata, India**

Study of neuroimmune regulation of different tumor development in human and animals and how Dopamine can be used as a small molecule inhibitor of angiogenesis.

- ❖ **Pre Ph.D Research: Bose Institute, Kolkata, India**

PPK gene and its implication in *Mycobacteria*

Conference Presentation/participation

- a. Poster presented at symposium in Golden Jubilee Celebration of C.N.C.I., Kolkata on Nov 1-3rd, 2007.
- b. Organized international symposium ; "Issues and Challenges in Doctoral Research" August, 2014.
- c. Oral presentation at "6th International Conference on Stem Cells and Cancer (ICSCC-2015)_ Proliferation, Differentiation and Apoptosis" on 6th -8th October, 2015, Pune.
- d. Participated at "Indo-UK symposium" at Amity university, 6-8th February, 2016.
- e. Oral presentation at "World Biotechnology Congress" at JNU, 2017
- g. Poster presentation at IACR 2018 at Bose Institute integrated campus, Kolkata, Jan 2018.
- h. Poster presentation at INTZOOCON 2018 at Ramkrishna Mission seva Pratisthan, Feb 2018.
- i. Participated in 10th East Zonal Oncology Symposium at SGCCRI on 19th January, 2019
- j. Poster presentation at Indian Science Congress, Jan 2020
- k. Organized one day symposium at IACR-West Bengal Chapter, Jan 2020
- l. Presented at Indian Association for Cancer Research (IACR March 2020)

Publications

1. Electrospray based fluorescent nanoparticle synthesis from pyrene butyric acid-functionalized poly (D, L-lactide-coglycolide) polymer for the efficient delivery of anticancer drug and selfmonitoring its effect in the drug-resistant breast cancer cells. *Chatterjee M, Maity R, Das S, Mahata N, Basu B*, Chanda N*, Materials Advances. 2020, 1(8), 3033-3048*
2. Multi-Component approach for synthesis of quinolinyl-1,4-dihydropyridines, evaluation of cytotoxicity against MCF7 and molecular docking studies. *Suresh S, Das S, Waidha K, Maity R, Basu B*, Saravanakumar R* Chemistry Select. 2020, 5(34), 10501-10510*
3. Synthesis, spectral analysis and in vitro cytotoxicity of diorganotin (IV) complexes derived from indole-3-butyric hydrazide. *J Devi*, J Yadav, D Kumar, DK Jindal, B Basu Applied Organometallic Chemistry. 2020, 34(10), e5815*

4. A novel triazole NMK-T-057 induces autophagic cell death in breast cancer cells by inhibiting γ -secretase-mediated activation of Notch-signaling. *Das A**, *Narayanam MK*, *Paul S*, *Mukherjee P*, *Ghosh S*, *Ghosh Dastidar D*, *Chakrabarty S*, *Ganguli A*, ***Basu B***, *Pal M*, *Chatterji U*, *Banerjee SK*, *Karmakar P*, *Kumar D*, *Chakrabarti G**.

Journal of Biological Chemistry. 2019,26;294(17):6733-6750

5. Design, synthesis and identification of novel coumapherine derivatives for inhibition of human 5-LOX: Antioxidant, pseudoperoxidase and docking studies. *Muthuraman S*, *Sinha S*, *Vasavi CS*, *Waidha KM*, ***Basu B***, *Munussami P*, *Balamurali MM*, *Doble M*, *Saravana Kumar R**.

Bioorg Med Chem. 2019 ,15;27(4):604-619

6. Novel Nano-insulin Formulation Modulates Cytokine Secretion and re-epithelialization to Accelerate Diabetic Wound Healing. *Kaur P*, *Sharma AK*, *Nag D*, *Das A*, *Datta S*, *Ganguli A*, ***Basu B****, *Chowdhury D**.

Nanomedicine. 2019 Jan;15(1):47-57

7. Sustainable synthesis of single crystalline sulphur-doped graphene quantum dots for bioimaging and beyond . *Sangam S*, *Gupta A*, *Shakeel A*, *Bhattacharya R*, *Sharma AK*, *Suhag D*, *Chakrabarti S*, ***Basu B*** *Garg SK*, *Dutta MK*, *Mukherjee M**

Green Chemistry , 2018, DOI: 10.1039/c8gc01638k

8. Dopamine Regulates Angiogenesis in Normal Dermal Wound Tissues.

Shome S, *Rana T*, *Ganguly S*, ***Basu B***, *Choudhury S*, *Sarkar C*, *Chakroborty D*, *Dasgupta PS**, *Basu S*

PLoS One. 2011;6(9):e25215

9. D1 and D2 Dopamine receptor mediated inhibition of activated normal T cell proliferation is lost in Jurkat T leukemic cells.

Basu B, *Sarkar C*, *Chakroborty D*, *Ganguly S*, *Shome S*, *Dasgupta PS**, *Basu S**

Journal of Biological Chemistry, 2010, 285(35): 27026-27032

10. Dopamine by acting through its D2 receptors inhibits IGF-I induced gastric cancer cell proliferation by upregulating Krüppel like factor 4 through down regulation of IGF-IR and AKT phosphorylation. *Ganguly S*, ***Basu B***, *Shome S*, *Jadhav T*, *Roy S*, *Majumdar J*, *Dasgupta PS**, *Basu S**

American Journal of Pathology ,2010 ,177(6):2701-2707

11. The Immunoregulatory Role of Dopamine: An Update. *Sarkar C*, ***Basu B***, *Chakroborty D*, , *Dasgupta PS**, *Basu S**

Brain, Behavior and Immunity, 2010, 24(4):525-528

12. Catecholamines Regulate Tumor Angiogenesis.

Chakroborty D, *Sarkar C*, ***Basu B*** , *Dasgupta PS**, *Basu*

*S** **Cancer Research, 2009, 69, (9), 2009: 3727-3730**

13. Stimulation of Dopamine D4 Receptors Induce T Cell Quiescence by Up-Regulating Krüppel-Like Factor 2 Expression through Inhibition of ERK1/ERK2 Phosphorylation.

Sarkar C, *Das S*, *Chakroborty D*, *Chowdhury UR*, ***Basu B***, *Dasgupta PS**, *Basu S**

Journal of Immunology, 2006, 177: 7525–7529