



- **Name** : **INDRANIL CHATTOPADHYAY**
- **Designation** : Assistant Professor, Dept. of Life Sciences, Central University of Tamil Nadu, Thiruvavur, India.
- **Broad Area of Specialization:** Human Genetics & Genomics, Specialization in Cancer Genetics
- **Interested Teaching subjects:** Genetics, Cell Biology, Advanced Molecular biology, Advanced Genomic Technology, Developmental Biology and Evolution
- **Research & Teaching Experiences (Post Ph.D.):** Six years
- **Research Interest:** 1. Application of Next generation sequencing technologies to understand molecular mechanism (transcriptomic/ epigenetic bio-markers) that drive metastatic progression of solid tumors. 2. Identification and characterization of genes regulating metastasis in solid tumors systems by RNAi technology 3. Application of Next generation sequencing technologies to identify soluble, genetic or epigenetic bio-markers in other human diseases. 4. Development of combinatorial anti-cancer therapy targeting drivers of tumor invasion and metastasis. Developing molecular targeted therapy for metastatic stage of cancer. 5. Application of Next generation sequencing technologies to Metagenomic aspects in human diseases.
- **Educational Qualifications:**

November, 2009: Ph.D. ( National Institute of Pathology, Indian Council of Medical Research, New Delhi,& Birla Institute of Technology and Science, Pilani, Rajasthan, India). Thesis Title: “Molecular Profile of Esophageal Cancer Patients in North East Region of India.”

October, 1997: M.Sc. in Zoology with specialization in Environmental Biology, Visva Bharati University, WB, India. (1st division and 65%).

- **Professional Experience, Fellowship & Awards:**  
May, 2013-Till date: Assistant Professor, Dept. Of Life Science, Central University of Tamil Nadu. Awarded UGC-BSR Research Start-Up-Grant (F.30-59.2014(BSR) Dated on 6th August, 2014 of Rs.6.0 Lakhs (Rupees Six lakhs only)  
September, 2011 –May, 2013: Post-Doctoral Fellowship in Cancer Genetics Department, Roswell Park Cancer Institute, Buffalo, NY, USA.

June, 2010 –August, 2011: Post-Doctoral Fellowship in Division of Hematology/Oncology, University of Kansas Medical Center, Kansas, USA.

December, 2009- April, 2010: Research Associate in National Institute of Pathology, New Delhi, India.

August, 2004-November, 2009: Senior Research Fellowship in ICMR funded Task force project on “Comprehensive Study of Carcinoma Oesophagus at Northeast India-Multidiscipline approach.” at National Institute of Pathology, New Delhi, India.

September, 2007-October, 2007: UICC International Cancer Technology Transfer Fellowship in Peter MacCallum Cancer Institute, Melbourne, Australia.

February, 2002- July, 2004: Department Atomic Energy Junior Research Fellowship at Indira Gandhi Centre for Atomic Research, Kalpakkam, Tamil Nadu, India.

September, 2000 - January 2002: Research Fellowship in Hormone Research Center, at Chonnam National University, Republic of Korea.

- **Publications:**

Yadav DS, **Chattopadhyay I**, et.al. A pilot study evaluating genetic alterations that drive tobacco- and betel quid-associated oral cancer in Northeast India. **Tumour Biol.** 2014 Sep; **35(9):9317-30. IF: 2.840**

**Chattopadhyay I**, et.al. Genome-wide analysis of chromosomal alterations in patients with esophageal squamous cell carcinoma exposed to tobacco and betel quid from high-risk area in India. **Mutation Research**, 2010; 696 (2): 130–138. **Citations: 32, IF: 3.035.**

**Chattopadhyay I, et.al.** Molecular profiling to identify molecular mechanism in esophageal cancer with familial clustering. **Oncology Report**, 2009; 21(5):1135-1146. **Citations: 17, IF: 2.504.**

**Chattopadhyay I**, et.al. Gene expression profile of esophageal cancer in North East India by cDNA microarray analysis. **World Journal of Gastroenterology**, 2007; 13 (9): 1438-1444. **Citations: 17, IF: 2.433.**

Ihsan R, **Chattopadhyay I**,et.al . Role of epoxide hydrolase 1 gene polymorphisms in esophageal cancer in a high-risk area in India. **Journal of Gastroenterology and Hepatology**, 2010; 25 (8): 1456–1462. **Citations: 22, IF: 3.627.**

Kaushal M, **Chattopadhyay I**, et.al. Contribution of germline *BRCA2* sequence alterations to risk of familial esophageal cancer in high-risk area of India. **Disease of the Esophagus**, 2010; 23:71-75. **Citations: 6, IF: 2.057.**

Singh A, Kapur S, **Chattopadhyay I**,et.al. Cytokeratin immunoexpression in esophageal squamous cell carcinoma of high-risk population in Northeast India. **Applied Immunohistochemistry & Molecular Morphology**, 2009; 17(5):419-424. **Citations: 12, IF: 2.059.**

Thoudam RD, Yadav DS, Mishra AK, Kaushal M, Ihsan R, **Chattopadhyay I**, Chauhan PS, Sarma J, Zomawia E, Verma Y, Nandkumar A, Mahanta J, Phukan R, Kapur S, Saxena S. Distribution of glutathione S-transferase T1 and M1 genes polymorphisms in North East Indians: a potential report. **Genet Test Mol Biomarkers.** 2010 Apr; **14(2):163-9. IF: 1.147**

Sharma A, Das BC, Sehgal A, Mehrotra R, Kar P, Sardana S, Phukan R, Mahanta J, Purkayastha J, Saxena S, Kapur S, **Chatterjee I**, Sharma JK. GSTM1 and GSTT1 polymorphism and susceptibility to esophageal cancer in high- and low-risk regions of India. **Tumour Biol.** 2013 Oct; **34(5):3249-57. Impact Factor: 2.518.**

Anita Sharma, Arvind Pandey, Shashi Sharma, **Indranil Chatterjee**, Ravi Mehrotra, Ashok Sehgal, Joginder K. Sharma. Genetic polymorphism of glutathione S-transferase P1 (GSTP1) in Delhi population and comparison with other global populations. **Meta Gene 2 (2014) 134–142.**

Singh V, Singh LC, Vasudevan M, **Chattopadhyay I**, Borthakar BB, Rai AK, Phukan RK, Sharma J, Mahanta J, Kataki AC, Kapur S, Saxena S. Esophageal Cancer Epigenomics and Integrome Analysis of Genome-Wide Methylation and Expression in High Risk Northeast Indian Population. OMICS. 2015 Oct 23. [Epub ahead of print] PubMed PMID: 26496483.

- **Membership in Professional Societies:**

- HUGO (Human Genome Organization)

- Associate Member of American Association of Cancer Research (USA)

- UICC (International Union against Cancer)

**Professional Expertise:**

- Microarray technology (cDNA/ Oligonucleotide array) for gene expression & Copy Number analysis Study)
- Real-Time PCR
- Automated DNA sequencing
- Next Generation Sequencing (RNA & Chip Sequencing Library preparation, Captured Array Sequencing Library Preparation)
- Bioinformatics (Web-based Free & Commercially Available Software) & Biostatistics
- Laboratory Animal Handling (Mouse Handling: Tumor Xenograft Development)
- Cell Culture & Basic Molecular Biology
- RNAi Technology ( shRNA transfection by Retroviral method)