

# CLINICOGENOMICS LAB

## ABOUT US:

Clinicogenomics lab, Department of Physiology, Surendranath College, affiliated to University of Calcutta, is an integrated, high-throughput molecular biology laboratory focusing on the genetics and genomic technologies, together with anthropometric parameters and data analysis with information management tools on clinical data of human samples. It deals with socially impacting diseases and analyses the salient genetic orientations associated with the diseases. It not only focuses on the genetic markers present among diseased individuals but also deals with the ethnic variation of those markers as well. Clinicogenomics lab is targeting a future that will be able to predict diseases after analysing genetic makeup of an individual and uplift the practice of personalised medicine.

### MENTOR



Dr. Indranil Kar  
Principal, Surendranath College

### PRINCIPAL INVESTIGATOR and CO-PRINCIPAL INVESTIGATOR



**Dr. Barnali Ray Basu**  
Assistant Professor  
Department of Physiology, Surendranath College.

A committed, determined and self-motivated faculty and researcher with experience of studying and teaching System Physiology, Molecular Biology, Cancer biology, Genomics, Neurophysiology and Stress Physiology. Did Ph. D in Fermentation Biotechnology in 2007 from Biochemical Engineering Division, Department of Chemical Engineering, University of Calcutta, Kolkata, India. Bachelors and Masters in Human Physiology from University of Calcutta. Currently interested in genetic polymorphism associated with several diseases.



**Dr. Nilansu Das**  
Associate Professor  
Head, Department of Molecular Biology, Surendranath College.

A dedicated and self-devoted faculty and researcher with experience of studying, and teaching Molecular Biology, Biotechnology, Cancer Biology, Genetics, Epigenetics, Arsenic Toxicity and Physiology. Did PhD from University of Calcutta with thesis entitled “**Studies on oral cancer**”. Carried out post-doctoral research at University of Connecticut Health Center and the National Institute of Health, USA. Bachelor in Physiology from Presidency College and Masters in Biophysics and Molecular Biology from University of Calcutta. His expertise is enhancing the productivity in academic and administrative aspects.

## RESEARCH SCHOLARS

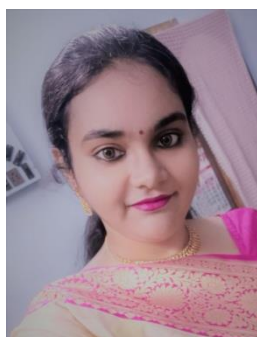


### **Sanchari Chakraborty**

Research Scholar

Department of Physiology, Surendranath College.

Completed Bachelors (2015) and Masters (2017) in Physiology and Human Physiology respectively from University of Calcutta. She has project experience with entitled “Testicular status of ROS, LPO and Cholesterol after Paraquat Treatment in Young Adult Mice” and “Interaction of Sup35 Protein with Lipid Raft and Vesicles” from University of Calcutta and CSIR-IICB, Kolkata respectively. Cleared RET examination 2020, organised by University of Calcutta. Pursuing doctoral research on “Revisiting Polycystic Ovary Syndrome, Stress, Insulin Resistance, Obesity and Vitamin D Profile: Studies on Population of West Bengal” under guidance of Dr. Barnali Ray Basu, at Department of Physiology, Surendranath College, University of Calcutta. During the academic journey actively participated in multiple scientific seminars.



### **Ankita Samaddar**

Research Scholar

Department of Physiology, Surendranath College.

Completed Bachelors (2014) and Masters (2016) in Physiology and Human Physiology respectively from University of Calcutta with Biochemistry as special paper in Masters. Cleared RET examination 2021, organised by University of Calcutta. Pursuing doctoral research on genetic polymorphism associated with Reproductive physiology under Dr. Barnali Ray Basu, Assistant Prof., Department of Physiology, Surendranath College. Possess immense interest in molecular biology, genetics and Bioinformatics. Completed workshop on Bioinformatics at InBol

Additional Interests: Title holder (Sangeet Bisharod) in Rabindra Sangeet



### **Randrita Pal**

Research Scholar

Department of Physiology, Surendranath College.

Completed Bachelors (2016) and Masters (2018) in Physiology and Human Physiology respectively from University of Calcutta with Environmental Physiology as special paper. Cleared GATE examination twice in the year 2018 and 2020. Cleared RET examination 2020, organised by Department of Physiology, University of Calcutta. Pursuing doctoral research on genetic polymorphism associated with neurodegeneration under Dr. Barnali Ray Basu, Assistant Prof., Department of Physiology, Surendranath College. Completed hands on workshop on Proteomics from IIT, Mumbai, Chromatography from University of Calcutta and SPSS from ISI, Kolkata. Interested to dive deep into the world of genetics and human brain.



### **Farzana Begum**

Research Scholar

Department of Physiology, Surendranath College.

Focused, sincere and dedicated research fellow. Completed BSc.Hons. in Physiology and MSc. in Human Physiology from the University of Calcutta. Moreover completed Fellowship Programme and M.Phil. in Regenerative Medicine and Translational Science from Calcutta School of Tropical Medicine. Thesis in MPhil was on “Review Study of Human Amniotic Fluid and its Antibacterial Activity”. Qualified RET 2021 organised by Department of Physiology, University of Calcutta and pursuing Ph.D. under the guidance of Dr. Barnali Ray Basu, Asst. Professor, Surendranath College, University of Calcutta. Immensely interested in Neurodegenerative disorder, stem cells and cancers.

## **COLLABORATORS**



### **Dr. Sudip Kumar Saha**

Professor and HOD,

Department of Gynaecology & Obstetrics, Kolkata Medical College

Passed M.B.B.S from Calcutta University in 1982. With honours & gold Medals. Passed D.G.O. from JIPMER, Pondicherry University in 1987. Passed M.D. (G&O) from JIPMER, Pondicherry University in 1988. Passed D.N.B. (G&O) from National Board of Examination, New Delhi. 1990. Completed post-doctoral studies in the Epidemiology of AIDS, as a fellow in the UCLA, California USA. Acted as a visiting physician UCLA, USA. Acted as Examiner in MBBS, DGO, MS (G&O) examination of various universities in India, DNB and UPSC examination. Published more than 35 Scientific Papers in various national & International Journals. Acted in many national and internal seminars as faculties.



### **Dr. Hrishikesh Kumar**

Head, Department of Neurology

In-charge of Parkinson's Disease and Movement Disorders Program

Director, RGCM Research Center

Vice Chairman

Institute of Neurosciences Kolkata.

Secretary, Movement Disorders Society of India

Member, Education Committee; Movement Disorders Society- AOS.

Founder President, Parkinson's Disease Patient Welfare Society of Kolkata (PDPWSK) Spinocerebellar Ataxia - 12 (SCA 12) Consortium

Completed MD (Medicine) from MGM Medical college, Indore, India. Completed DM (Neurology), from SMS Medical College, Jaipur, India. Completed Diploma in Clinical Neurology from University College, London, UK. Received prestigious Patricia Harris award for best studentship. Clinical attachment with Sobell's Department of Movement Disorders and Motor Neurosciences, Institute of Neurology, Queens Square, London, UK. Completed Fellowship in Parkinson's disease Movement Disorders, University of Western Ontario, Canada. Published more than 25 Scientific Papers in various national & International Journals and 3 book chapters in relevant area.



### **Dr. Sanjita Dey**

Professor

Department of Physiology,

University of Calcutta.