

Name: PROF PRATITI GHOSH

**Designation:** Professor and Head, Department of Physiology,  
West Bengal State University.

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#### **Academic Qualification:**

- ✓ Postdoctoral Research experience on '*Retrotransposition in Yeast (Schizosaccharomyces pombe)*' at The National Institutes of Health, USA.
- ✓ Postdoctoral Research experience on '*P-glycoprotein and Multidrug Resistance*' at Uniformed Services University of Health Sciences.
- ✓ Ph.D. on '*Citric Acid Fermentation by Aspergillus niger*' University of Calcutta, 2002.
- ✓ *ICMR Fellowship 2005, Indian Institute of Chemical Biology*
- ✓ UGC Fellowship, University of Calcutta, India, 2004-9.

✚ **Teaching Experience:** Lecturer at Uluberia College (August 1999 - April 2009)

**Areas of Research Interest:** P-glycoprotein Mediated Multidrug Resistance and Bioavailability, Lifestyle and Stress, Natural therapy & Yoga

#### **Major Publications:**

1. Jana A, Thomas J & **Ghosh P.** P-glycoprotein Expression in Oral Lichen Planus. *Braz. Oral Res.* (2017) 31:e95. (ISSN:1807-3107) (IF=0.937) DOI: 10.1590/1807-3107bor-2017.vol31.0095 (Thomson Reuters group of journal)
2. Chatterjee D. & **Ghosh P.** Sub-cytotoxic Concentration of Aflatoxin B<sub>2</sub> Prevents NO-Mediated Increased Mitochondrial Membrane Potential and Intracellular Killing of *Candida albicans* in Macrophages. *Advances in Life Sciences.* USA (2012). 2(3):52-56. (e-ISSN: 2163-1395. p-ISSN: 2163-1387). (IF=0.765).
3. Ghosh S.K., ...**Ghosh P.**, .... and Choudhury Y. Development of Individual Barcode of Human Race Based on Mitochondrial D-Loop. Homo sapiens clone SGPRG D-loop, partial sequence; mitochondrial *Gene Bank: JN603629.1* (2011).
4. **Ghosh P,** Moitra K and Dey S. Allosteric Modulation of Human P-glycoprotein Involves Conformational Changes Mimicking Catalytic Transition Intermediates. *Archives of Biochemistry and Biophysics.* (2006) 450:1; 100-112. (IF=3.046)
5. Maki N, Moitra K, Silver C, **Ghosh P,** Chattopadhyay AK and Dey S. Modulator-Induced Interference in Functional Cross Talk between the Substrate and the ATP sites of Human P-glycoprotein. *Biochemistry.* (2006) 4a5:8; 2739-2751. (ISSN: 0300-9084) (IF=3.787)

6. Maki N, Moitra K, **Ghosh P.** and Dey S. Allosteric Modulation Bypasses Requirement for ATP Hydrolysis in Regenerating Low Affinity Transition State Conformation of Human P-glycoprotein. *Journal of Biological Chemistry.* (2006) 281:6; 10769 – 10777. (IF=5.328)
7. Moitra K, **Ghosh P,** Maki N and Dey S. The Human P-glycoprotein (ABCB1) undergoes a Distinct Conformational Change upon Allosteric Modulator Interaction. *Proc. Amer. Cancer. Res.* (2006) 47:1;142.
8. **Ghosh P** and Banik A. K. Effect of chemical nutrients on aconitase activity during citric acid fermentation by a mutant strain of *Aspergillus niger*. *ActaMicrobiologicaPolonica.* (1998) 47:3; 253-260. (ISSN: 0137-1320 1999-2003. ISI Impact Factor: 0.407)

❖ *A Text-book of Physiology* (Himalaya Publishing House, India, ISBN: 978-93-5202-472-8, Published 2015)

### **Research Projects/Fellowships:**

Principal investigator: 'Experimental Studies on the Interaction of Carbamate, Stress and Organophosphate', sponsored by DRDE, Govt. of India, DRDO (Completed in 2012)

#### PhD projects:

- ❖ Pathophysiology of Oral Lichen Planus and Expression of P-glycoprotein
- ❖ Bioavailability of Herbal Supplements in Diabetes Mellitus – an *in silico* approach;
- ❖ P-glycoprotein Mediated Bioavailability of Herbs and Spices
- ❖ Yoga and Physical Activities in Diabetes and Hypertension
- ❖ Yoga in Adolescence
- ❖ MSD in Vegetable Cultivators

### **Special Distinctions:**

1. Visiting Fellow, National Institutes of Health, USA, 2003.
2. FABMS (Fellow of Association of Biomedical Scientists, 2011) awarded by Indian Association of Biomedical Scientists.
3. Recipient of Prof P.B. Sen Memorial Oration, 2015, awarded by Physiological Society of India.

### **Other Notable Activities:**

Co-ordinator of Health Care Centre, WBSU.

Executive Member of Indian Association of Biomedical Scientists of Eastern India.

Member of other National and International Bodies.