CURRICULUM VITAE

Name : **Kaustuv Dutta Chowdhury**, M.Sc., Ph.D.

Assistant Professor
Department of Zoology
Rammohan College
102/1, Raja Rammohan Sarani,
Kolkata, West Bengal, India
Email : kaustavduttachowdhury@gmail.com

Research experience

Ph.D work (from July, 2005 to September, 2010)

Title : **Studies on the Nitric oxide Dependent Regulatory Modifications in Erythrocytes Associated with the Development of Anemia in Visceral Leishmaniasis.**

Supervisor : **Dr. Tuli Biswas**
Cell Biology and Physiology Division
Indian Institute of Chemical Biology, CSIR
Jadavpur, Kolkata, India

Ongoing research project:

Name of the project	Funded by	Duration	Amount
Study on calcium carbide generated acetylene mediated alteration in pulmonary tissues and its protection by Hexadecanoic acid, ethyl ester -an *in vivo* study	**Department of Science & Technology and Biotechnology, Government West Bengal (198 (Sanc.)/ST/P/ S&T/9G-45/2017)**	**3yrs**	**Rs. 19,99,600/-**

Project fellow: **Ms. Pujita Ghosh, JRF, WB-DST**
Ms. Soumi Banerjee, JRF, WB-DST

Publications in International peer-reviewed journal:

1. Roy SS, **Chowdhury KD**, Sen G, Biswas T. Oxidation of haemoglobin and redistribution of band 3 promote erythrophagocytosis in visceral leishmaniasis. Mol. Cell. Biochem. (2009) 321:53-63. **IF:2.561**

2. **Chowdhury KD**, Sen G, Biswas T. Regulatory role of nitric oxide in the reduced survival of erythrocytes in visceral leishmaniasis. Biochem.Biophys. Acta. (2010) 1800: 964-976. **IF:3.679**

3. Roy DN, Sen G, **Chowdhury KD,** Biswas T. Combination therapy with andrographolide and D-penicillamine enhanced therapeutic advantage over monotherapy with D-penicillamine in attenuating fibrogenic response and cell death in the periportal zone of liver in rats during copper toxicosis. Toxicol. Appl. Pharmacol.(2011) 250:54-68. **IF:3.616**

4. **Chowdhury KD**, Sen G, Sarkar A, Biswas T. Role of endothelial dysfunction in modulating the plasma redox homeostasis in visceral leishmaniasis. Biochem.Biophys. Acta. (2011)1810:652-665. **IF:3.679**

5. Mandal S, Mukherjee S, **Chowdhury KD**, Sarkar A, Basu K, Paul S, Karmakar D, Chatterjee M, Biswas T, Sadhukhan GC, Sen G. S-allyl cysteine in combination with clotrimazole downregulates Fas induced apoptotic events in erythrocytes of mice exposed to lead. Biochim Biophys Acta. (2012) 1820:9-23. **IF:3.679**

6. Sengupta D, **Chowdhury KD**, Sarkar A, Paul S, Sadhukhan GC. Berberine and S allyl cysteine mediated amelioration of DEN+CCl4 induced hepatocarcinoma. Biochem. Biophys. Acta. (2014) 1840: 219-244. **IF:3.679**

7. Sarkar A, Sengupta D, Mandal S, Sen G, **Chowdhury KD**, Sadhukhan GC. Treatment with garlic restores membrane thiol content and ameliorates lead induced early death of erythrocytes in mice. Environ Toxicol. (2015) 30 :396-410.**IF:2.491**

8. Sengupta D, Chatterjee S, Chatterjee T, **Chowdhury KD**, Bhowmick P, Chakraborti U, Sarkar A, Paul S, Sur PK, Sadhukhan GC. SAC and berberine mediated repression of reactive species and hepatoprotection after DEN+CCl4 exposure. Proc. Zool. Soc. (2017) 70:28-41

9. Sengupta D, **Chowdhury KD**, Chatterjee S, Sarkar A, Paul S, Sur PK, Sadhukhan GC. Modulation of adenylate cyclase signaling in association with MKK3/6 stabilization under combination of SAC and berberine to reduce HepG2 cell survivability. Apoptosis (2017) 22: 1362-1379. **IF:3.967**

10. Chakraborty P, Banerjee S, Chatterjee S,Goswami SK, Chattopadhyay R, Ghosh S, **Chowdhury KD**, Sarkar S, Kabir SN, Chakravarty B. Attenuated pyruvate kinase M2

signaling pathway: the missing link in hyperhomocysteinemia-associated pregnancy loss. Hum Reprod (2017) 32: 86. **IF:4.990**

11. **Chowdhury KD**, Sarkar A, Chatterjee S, Patra D, Sengupta D, Banerjee S, Chakraborty P, Sadhukhan GC. Cathepsin B mediated scramblase activation triggers cytotoxicity and cell cycle arrest by andrographolide to overcome cellular resistance in cisplatin resistant human hepatocellular carcinoma HepG2 cells. Environ Toxicol Pharmacol. (2019) 68:120-132. **IF:2.776**

12. Chatterjee S, Patra D, Chakraborti U, Sengupta D, Ghosh P, Basu A, Sadhukhan GC, Chowdhury KD. Association of p38MAPK-p53-Fas aggregation in S-allylcysteine mediated regulation of hepatocarcinoma. Environ Toxicol. (2019) 34:928-940. **IF: 2.649**

Book chapter:

Chatterjee S, Patra D, Ghosh P, Prasad A, **Chowdhury KD**. Terpenoids in treatment of Liver Disease. Editor: Roy DN. Boca Raton:: CRC Press, Taylor and Francis, pp. 61-94, 2019. ebook ISBN: 9781351026697

Publications in National journal

1. Sarkar A, Bhattacharjee D, Sengupta D, Paul S, **Chowdhury KD,** Sur PK, Sadhukhan GC. Delineating the therapeutic effectiveness of allicin on eryptosis during chronic Pb^{2+} exposure in mice. Indian J. Appl. Res. (2015) 5:19-23.

2. Paul S, Misra D, Sengupta D, Sarkar A, **Chowdhury KD,** Sur PK, Sadhukhan GC. Protective impact of Chelerythrine and DADS against chemically induced hepatocarcinoma. Indian J. Appl. Res. (2015) 5:94-96.

3. Sengupta D, Sarkar A, Paul S, **Chowdhury KD,** Sur PK, Sadhukhan GC. Ameliorative role of SAC and berberine against DEN+CCI4 induced hepatocarcinoma. Indian J. Appl. Res. (2015) 5:161-164.

4. Chatterjee S, Pal D, Malakar A, Chakraborti U, Sengupta D, Sarkar A, Paul S, **Chowdhury KD**, Sadhukhan GC. SAC mediated modulation of HepG2 cell survivability-an *in vitro* study. Indian J. Appl. Res. (2015) 5(12): 94-96.

5. **Chowdhury KD**. Dirology: the conceptual importance with endangered animal *Platanista gangetica.* Dirology (2016) 1: 79-81.

6. Roy C, Paul S, **Chowdhury KD**, Dey SR. Population Dynamics on Soil Insects in Greater Kolkata, West Bengal: A Review. Int. J. Exp. Res. Rev. (2017) 11: 35-42.

7. Paul S, Roy C, **Chowdhury KD**, Dey SR. A Review on Ornithology of Kolkata Metropolitan Area. Int. J. Exp. Res. Rev. (2017) 11: 52-55.

Abstract published in journal:

Dutta Chowdhury K., Biswas D., Roy D.N., Sen G., Biswas T., Bhattacharyya M., Ghosh M. Intracellular Ca^{2+} accumulation in transfused erythrocytescontribute to their premature eryptosis raising the need for repeated transfusion in Eβ-thalassemia major patients. Indian J. Hematol. Blood Transfus. (2008) 23:105

Publications communicated:

Original research article:

Chatterjee S, Patra D, Ghosh P, Banerjee S, **Chowdhury KD**, Chakraborty P, Basu A, Sadhukhan GC. (2020). ROCK inhibition governs convergent silencing of Smad2/3 and FAK/Src-STAT3 phosphorylation: encounter strategy against angiogenesis and extracellular matrix degradation in metastatic lung melanoma (Communicated)

Research experience: 13 years on Cell Biology, cancer biology and stress due to heavy metal toxicity

- Research experience as CSIR junior and senior research fellow in Indian Institute of Chemical Biology, Jadavpur, Kolkata
- Research experience as guest worker at Molecular and Tissue culture laboratory, Post Graduate Department, Vidyasagar College, Kolkata
- Guided project work to Graduate and Post Graduate students
- At present two students are working under my supervision on stress associated alterations in tissue biology

Conference attended: 32 National/International conferences/workshops attended and paper presented

Achievements:

- National scholarship in Madhyamik pariksha
- NET LS in June, 2004.
- NET CSIR in December, 2004; enjoying 2 years (21st July 2005 -21st July 2007) CSIR-JRF fellowship and 3 years (21st July 2007 -21st July 2010) CSIR-SRF fellowship.
- Life member of Zoological Society, India
- Reviewer- Genetics and Molecular Research

- Reviewer: Current Nutraceuticals

Collaboration with:

1. Dr. Pratip Chakraborty, Scientist, Departmen of Infertility, Institute of Reproductive Medicine
2. Dr. Antara Banerjee, Assistant Professor, Department of Zoology, Bangabasi College

.**Projects undertaken during M.Sc.:**

1. "Assay of exfoliated cell micronucleus and other nuclear anomalies as biological marker for chromosome breakage and mitotic interference" under the guidance of Dr. Pulak Lahiri and Dr. Sajal Roy, Dept. of Zoology, University of Calcutta, May 2002.
2. "Water surveillance and biodiversity estimates in wetlands" under the National Environmental Awareness Campaign (NEAC), Ministry of Environment & Forest, Government of India: with the help of Zoological Society & Dept. of Zoology, University of Calcutta, March 2003.
3. "The status report on nilgai in Calcutta zoo" under the guidance of Dr. Goutam Saha, Dept. of Zoology, University of Calcutta, March 2003.
4. "Study on fish diversity" under the guidance of Dr. Sumit Homechowdhuri, Fisheries & Aquaculture Unit, Dept. of Zoology, University of Calcutta, Nov-Jan,2002-03.

M.Sc. Dissertation (2003):

"Exclusive economic zone, it's resources-sustainable use and related management" under the guidance of Dr. Samir Banerjee and Dr. Sumit Homechowdhuri, Fisheries and Aquaculture Unit, University of Calcutta.