# **Aritra Bhattacharya**

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#### Education

#### **Texas A&M University**

PhD in Biology

August 2023 – Present College Station, Texas, USA

Maulana Abul Kalam Azad University of Technology, WB November 2020 – June 2022 MSc in Biotechnology

Haringhata, West Bengal, India

Ramakrishna Mission Vivekananda Centenary College BSc in Zoology

July 2016 – October 2020 Khardaha, West Bengal, India

#### Research Experience

## **Evolution of resistance under divergent rate of pathogen selection**

Ashoka University, Sonepat, Haryana, India (February 2022 – June 2022)

• This was my MSc dissertation thesis. I did some experiments to check the rate of evolution of resistance against different pathogens in Tribolium beetles.

# **COPD: Making Sense of Existing GWAS Findings in Indian Context**

MAKAUT, WB, Haringhata, India (December 2021 - February 2022)

• It was a small research project during my MSc, We jotted down the genes and SNPs responsible for COPD in the Indian population from 1456 variants & did pathway analysis to check their functions that might be relevant for COPD development.

#### Temporal diversity of urban butterflies: A case study

RKMVC College, Khardaha, WB, India (November 2016 - January 2020)

• I did this project during my BSc. We sampled butterflies in and around our college campus. We did a checklist of butterflies and also observed how their community is changing across seasons with vegetation pattern.

#### Professional Experience

#### **Graduate Teaching Assistant**

Department of Biology, Texas A& M University

August 2023 – Present College Station, TX, USA

 I have taught the lab courses of BIOL 111 (Introductory Biology) in Fall 2023. I am teaching BIOL 112 in Spring 2024 as well. This role requires me to give a background of the topic of the lab to the undergraduate students, supervise them while they are doing their lab exercises, grade their laboratory assignments, set up questions for Lab exams and grading them.

## **Project Assistant**

July 2022 - March 2023

Evolutionary Immunology Lab, Ashoka University

Sonepat, Haryana, India

• I studied sperm competition abilities of Tribolium beetles and the role of chronic malnutrition in disease transmission in Drosophila as a research assistant after completing my MSc. This position required me to do experiments, record, analyze and present data & maintain populations of the model organisms.

**Computer Languages**: R (intermediate), Python (beginner), Bash (beginner), HTML(intermediate)

**Wet Lab techniques**: Ultracentrifuge, DNA extraction, RNA extraction, PCR, electrophoresis, spectrophotometer, high resolution camera operated microscope, basic microbial techniques, field sampling techniques

**Softwares**: Basic computer applications like Microsoft Office, SPSS, PAST, different bioinformatic tools

Other skills: Digital photography and photo editing, digital art

#### **Presentations**

- 4th Annual Conference of the Indian Society for Evolutionary Biologists, 'Revolutionising Darwinian Synthesis: Fresh Perspectives and Future Challenges.', (02/09/2023-02/11/2023, Ahmedabad, India) Poster
- Manufacturing (Level 1) & COVID-Food Safety Supervisor, (02/20/2021-02/21/2021, Kolkata, India) Poster[Won technical brilliance award]
- 6th Asian Lepidoptera Conservation Symposium, (09/17/2019-09/21/2019, Kolkata, India) Poster
- ALLERCON-2017, The 7th National Conference on Respiratory Allergy and Immunology, (01/14/2018, Kolkata, India) **Poster**[Won best presenter award]
- National Conference on Status of Invasive Alien Species in India, (12/14/2017-12/15/2017, Kolkata, India) **Poster**
- National Seminar on Forest Resources: Conservation Issues and Management, (09/09/2017, Kolkata, India) **Poster**

#### Certifications

AI0101EN: Al for Everyone: Master the Basics 4 weeks Certificate ID: 6fd8789d1ae146348a4bda736f3696d6 Platform: edX **PY0101EN: Python Basics for Data Science** 5 weeks Certificate ID: 5cc9d19334e94a9682fa0bc969f726c0 Platform: edX PH125.2x: Data Science: Visualization 8 weeks Certificate ID: a40f449f0e534960b7ef8fe3f572ed56 Platform: edX LFS101x: Introduction to linux 14 weeks Certificate ID: 4a6c484ebde6412cb68fba71e4ba2828 Platform: edX

#### **Publications**

- Dutta, T., Bhattacharya, A. 2022. Chronic Obstructive Pulmonary Disease (COPD): Making Sense of Existing GWAS Findings in Indian Context. Int J Biomed Clin Anal., 2(1):29-37
- **Bhattacharya, A.**, Chakraborty, S., Das, K.L., Saha, A., Sardar, S., Mandal, B., Murkherjee, A. and Mitra, B. 2018. Temporal diversity of urban butterflies: A case study in the campus of Ramakrishna mission Vivekananda centenary College, Rahara, West Bengal. *The Pharma Innovation Journal*, **7(12)**: 395-400.

#### Publications in abstracts

- **Bhattacharya**, **A.**, Bose, J., Khan, I. 2023/09/02 to 2023/11/02. Linking evolution under chronic malnutrition, costs of infection and disease transmission. 4th Annual Conference, Indian Society of Evolutionary Biologists, 'Revolutionising Darwinian Synthesis: Fresh Perspectives and Future Challenges.' Pp- 87
- **Bhattacharya, A.**, Das, S., Ghosh, D., Sardar, S., Mandal, B., Mukherjee, A., Mitra, B. 2019/17/09 to 2019/21/09. Community foraging of butterflies on *Lantana camara* partition or overlapping. *6th Asian Lepidoptera Conservation symposium*. Pp- 90
- Bhattacharya, A., Chakraborty, S., Das, K.L., Sardar, S., Mandal, B. and Murkherjee, A. 2018/14/01. Alternative proposal for combating the pollen-induced allergy by introducing non allergic butterfly parks in urban area- a case study. ALLERCON-2017, The 7th National Conference on Respiratory Allergy and Immunology. Pp-36
- Chakraborty, S., Das, K.L., **Bhattacharya, A.**, Saha, A., Sardar, S., Mandal, B. and Murkherjee, A. 2017/14/12 & 2017/15/12. Temporal shifting in communities of butterflies in a suburban area and it's relation with social plantation. *National Conference on Status of Invasive Alien Species in India*. Pp-59.
- **Bhattacharya**, **A.**, Saha, A., Chakraborty, S., Das, K.L., Sardar, S., Mandal, B. and Murkherjee, A. 2016/09/09. Small scale social foresting in suburban area for upholding the temporal variations of butterflies. *Nat. Sem. On Forest Resources: Conser. Issues and Mgmt.* Pp- 30.

#### Grants

**EKTA Incubation Centre-TBI (MAKAUT, WB)**: 45000INR for ecological restoration. (*Declined*)