# SOUVIK KARMAKAR

### **Current address:-**

Building-1, Ghosh Villa, Gate number-7, IISER Kolkata, Mohanpur Pin code- 741246

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# **EDUCATION DETAILS:**

Year	Degree	Institution and affiliation	Place	Percentage/ CGPA
2013	10 <sup>th</sup> Standard	North Point Senior Secondary Boarding School	Kolkata, WB	8.8/10
		(CBSE)		
2015	12 <sup>th</sup> Standard	North Point Senior Secondary Boarding School	Kolkata, WB	86%
		(CBSE)		
2015~2018	B.Sc. in Microbiology	Maulana Azad College	Kolkata, WB	61%
		(University of Calcutta)		
2018~2020	M.Sc. in Biotechnology	University of Hyderabad	Hyderabad, Telangana	8.91/10
		(University of Hyderabad)		
Present	PhD	Indian Institute of Science education and Research- Kolkata	Mohanpur, WB	-

### **RESEARCH EXPERIENCE:**

- 1. 2020-Present: Understanding the role of neem compounds in ameliorating β-coronavirus infection and spread. Working under Prof. Jayasri Das Sarma at Indian Institute of Science Education and Research Kolkata, India.
- 2. 2019-2020: 1-Year M.Sc. dissertation project titled "Analysis of the effects of knockdown of CG7950 on Drosophila motility and longevity" in University of Hyderabad, Telangana. Performed assays such as survival and flight assays to determine the effect of partial knockdown of CG7950 in flies. The knockdown was confirmed using western blot. Finally designing a fly line with complete knockdown (in both the chromosomes) and inserting a fluorescent marker to track the expression of the proteins in *Drosophila* embryo and larva using fluorescence microscopy.

3. 2017-2018: DBT STAR COLLEGE Student Project titled "Development of an indigenous gradient Gel Electrophoresis system for separation of broad range DNA fragments" in Maulana Azad College, Kolkata.

### **PUBLICATIONS:**

Sengupta Sourodip, Bhattacharyya Debina\*, Kasle Grishma\*, **Karmakar Souvik**\*, Sahu Omkar, Ganguly, Anirban, Addya Sankar, Das Sarma Jayasri.Potential Immunomodulatory Properties of Biologically Active Components of Spices Against SARSCoV-2 and Pan β-Coronaviruses.Frontiers in Cellular and Infection Microbiology Aug 2021,810(11),DOI:10.3389/fcimb.2021.729622

### **CONFERENCE ATTENDED:**

- 1. Student organizing team for XXXIX Annual Meeting of Indian Academy of Neurosciences (IAN) 2021, Theme: "NeuroGlia in Health and Disease".
- 2. Attended **Bilateral Indo-US webinar on COVID biology** held from 16<sup>th</sup> to 19<sup>th</sup> August 2020 organised by IISER-kolkata in collaboration with IISc, Bangalore, University of Pennsylvania, and the University of Colorado, school of medicine, USA.
- 3. Attended UH-CDFD joint "International conference on Biology and Therapeutics of HIV and Associated Infections" held from 19<sup>th</sup> to 21<sup>st</sup> January 2019 at Department of Biotechnology and Bioinformatics, School of Life Sciences, University of Hyderabad.

# **FELLOWSHIPS:**

- 1. CSIR-JRF Fellowship (Present)
- 2. DBT-MSc fellowship (July, 2018 to June, 2020)

# **ACHIEVEMENTS:**

- **1.** Secured All India Rank- 70(General) and 08(OBC) in Combined Entrance Examination For Biotechnology Programs, Conducted by Jawaharlal Nehru University.
- **2.** Secured Rank- 12(General) and 01(OBC-B) in Life sciences entrance examination conducted by Presidency University, Kolkata.
- 3. Qualified JRF (NET)-CSIR which was conducted on December, 2018. (Roll No.- 344378)
- 4. Qualified JRF (NET)-CSIR which was conducted on June, 2019. (Roll No.- 347365)
- **5.** Qualified JGEEBILS which was conducted on December, 2019. (Reference code-GS2020BIOPHD019828).
- **6.** Qualified GATE which was conducted on February, 2020. Secured a rank of 54 and GATE score- 734 and Percentile- 99.47 (Registration number- **BT20S31402453**).

# **TECHNICAL EXPERIENCE:**

Fluorescence microscopy, PCR, SDS PAGE and Western blot, Molecular cloning, RNA isolation, Chromatography techniques, ELISA, DNA and plasmid isolation, Enzyme bead immobilisation using

Agarose gel, Animal tissue culture, Plant tissue culture, and Mouse handling, Immuno-electrophoresis, Ouchterlony assay, radial immune-diffusion assay.

### **SOFTWARE EXPERIENCE:**

Experienced in working with basic bio-informatics tools such as Basic Local Sequence Alignment, GOR (secondary structure prediction tool), Swiss model (tertiary structure prediction) and also gained knowledge about basic commands of LINUX. Basic knowledge of using Microsoft office tools such as Excel, Word, and PowerPoint.

### **EXTRACURRICULAR ACTIVITIES:**

- 1. In my school, I have participated in NCC training and cleared the "A" certificate exam.
- 2. I have completed up to 2<sup>nd</sup> year in "Fine Arts".
- **3.** Like to play cricket and badminton.

### **PERSONAL DETAILS:**

Date of birth: 13<sup>th</sup> October, 1997 Father's name: Sekhar Karmakar

Nationality: Indian

Permanent address: G/c-2 Rabindra Pally, Jyangra, Kolkata-700059

Language proficiency: English, Hindi and Bengali

Marital status: Unmarried

#### **REFERENCES:**

### 1. Professor Jayasri Das Sarma

**Professor** 

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### 2. Dr. G.B. Madhubabu

**Assistant Professor** 

Department of Biotechnology and Bioinformatics, School of Life Sciences

University of Hyderabad, Hyderabad, TS-500046

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## 3. Dr. Rini Roy

**Assistant Professor** 

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