

## Curriculum Vitae

### FULL NAME AND DATE

**Full name:** Shalini Das Gupta

**Date:** 15<sup>th</sup> January 2022.



### PERSONAL AND CONTACT INFORMATION

**Date and place of birth:** 9<sup>th</sup> August 1991, Kolkata, India

**Nationality:** Indian

**Gender:** Female

**Contact:** +91-8910490261, [shalini.dasgupta91@gmail.com](mailto:shalini.dasgupta91@gmail.com)

**Correspondence address:** 100 Thakurbati Street, Serampore, Hooghly, West Bengal, India-712201

### WORK EXPERIENCE

#### **1. IISER-K Postdoctoral fellow (November 2021 – ongoing)**

Supervisor: Prof. Jayasri Das Sarma, Neurovirology and neuroimmunology laboratory, Indian Institute of Science Education and Research (IISER) Kolkata

#### **2. Molecular Biology Technician (December 2020- October 2021)**

Supervisor: Prof. Jayasri Das Sarma, Neurovirology and neuroimmunology laboratory, Indian Institute of Science Education and Research (IISER) Kolkata

### EDUCATION AND DEGREES AWARDED

Institution and Location	Degree	Year	Field of study	Grade (if applicable)
SRM University, Chennai, India	B. Tech	2013	Bioinformatics	CGPA 9.8/10
KTH Royal Institute of Technology, Sweden and Instituto Superior Técnico, Portugal (Erasmus Mundus Master's in Systems Biology – euSYSBIO)	M.Sc.	2015	Systems biology and biotechnology	ECTS grade A
University of Eastern Finland	Ph.D.	2021	Molecular medicine (specialization in neurosciences)	

### EXPERTISE IN RESEARCH TOOLS AND TECHNIQUES

**1.** DNA and RNA extraction from brain tissue and biofluids, **2.** RT-qPCR and droplet digital PCR, **3.** Immunohistochemistry and immunofluorescence, **4.** Western blotting and ELISA, **5.** Deep cervical lymph node extraction from rats, **6.** Brain tissue imaging with light and fluorescent microscopy, **7.** Handling of laboratory rats, **8.** Basics of R programming, **9.** Small RNA-Seq data analysis, **10.** Familiarity with web data repositories of PubMed, UCSC genome browser, RefSeq, PDB and others, **11.** Data analysis and presentation with excel, GraphPad Prism, SPSS and Adobe Photoshop, **12.** Handling and analysis of multi-center small RNA sequencing data from the **EPITARGET** (<https://www.epitarget.eu/>) and **EpiBioS4Rx** (<https://epibios.loni.usc.edu/>) consortia projects.

### LINGUISTIC SKILLS

**Mother tongue:** Bengali. **Other languages:** English (Proficient user-C2, TOEFL score 111/120), Hindi (Proficient user-C2).

### LIST OF PUBLICATIONS

#### First-author articles:

Title of the article	Journal	Year of publication	Impact factor	PMID	Authors
Dynamics of clusterin protein expression in the brain and plasma following experimental traumatic brain injury	Scientific Reports	2019	5.13	31882899	<b>Das Gupta S</b> , Lipponen A, Paldanius KMA, Puhakka N, Pitkänen A.
Elevated acute plasma miR-124-3p level relates to evolution of larger cortical	Neuroscience	2020	3.59	32142864	Vuokila N*, <b>Das Gupta S*</b> , Huusko R, Tohka J, Puhakka N, Pitkänen A.

lesion area after traumatic brain injury					*shared first authorship
Droplet digital polymerase chain reaction-based quantification of circulating microRNAs using small RNA concentration normalization	Scientific Reports	2020	5.13	32488181	<b>Das Gupta S</b> , Nnode-Ekane XE, Puhakka N, Pitkänen A.
Plasma miR-9-3p and miR-136-3p as Potential Novel Diagnostic Biomarkers for Experimental and Human Mild Traumatic Brain Injury	International journal of molecular sciences	2021	5.92	33557217	<b>Das Gupta S</b> , Ciszek R, Heiskanen M, Lapinlampi N, Kukkonen J, Leinonen V, Puhakka N, Pitkänen A.

#### Co-author articles:

Title of the article	Journal	Year of publication	Impact factor	PMID	Authors
Standardization procedure for plasma biomarker analysis in rat models of epileptogenesis: Focus on circulating microRNAs	Epilepsia	2017	6.04	28960286	van Vliet EA, Puhakka N, Mills JD, Srivastava PK, Johnson MR, Roncon P, <b>Das Gupta S</b> , Karttunen J, Simonato M, Lukasiuk K, Gorter JA, Aronica E, Pitkänen A.
Precipitation-based extracellular vesicle isolation from rat plasma co-precipitate vesicle-free microRNAs	Journal of extracellular vesicles	2018	25.84	30574280	Karttunen J, Heiskanen M, Navarro-Ferrandis V, <b>Das Gupta S</b> , Lipponen A, Puhakka N, Rilla K, Koistinen A, Pitkänen A.
Harmonization of pipeline for preclinical multicenter plasma protein and miRNA biomarker discovery in a rat model of post-traumatic epileptogenesis.	Epilepsy research	2019	3.05	30553097	Kamnaksh A, Puhakka N, Ali I, Smith G, Aniceto R, McCullough J, <b>Das Gupta S</b> , Nnode-Ekane XE, Brady R, Casillas-Espinosa P, Hudson M, Santana-Gomez C, Immonen R, Abreu PA, Jones N, Shultz S, Staba RJ, O'Brien TJ, Agoston D, Pitkänen A.
Biomarkers for posttraumatic epilepsy	Epilepsy & Behavior	2020	2.06	32317161	Pitkänen A, Paananen T, Kyyriäinen J, <b>Das Gupta S</b> , Heiskanen M, Vuokila N, Bañuelos-Cabrera I, Lapinlampi N, Kajevu N, Andrade P, Ciszek R, Lara-Valderrábano L, Ekolle Nnode-Ekane X, Puhakka N.
Increased expression of miR142 and miR155 in glial and immune cells after traumatic brain injury may contribute to neuroinflammation via astrocyte activation	Brain Pathology	2020	6.62	32460356	Korotkov A, Puhakka N, <b>Gupta SD</b> , Vuokila N, Broekaart DWM, Anink JJ, Heiskanen M, Karttunen J, van Scheppingen J, Huitinga I, Mills JD, van Vliet EA, Pitkänen A, Aronica E.
Targeting Oxidative Stress with Antioxidant Duootherapy after Experimental Traumatic Brain Injury	International journal of molecular sciences	2021	5.92	34638900	Kyyriäinen J, Kajevu N, Bañuelos I, Lara L, Lipponen A, Balosso S, Hämäläinen E, <b>Das Gupta S</b> , Puhakka N, Natunen T, Ravizza T, Vezzani A, Hiltunen M, Pitkänen A
Transfer RNA-Derived Fragments and isomiRs Are Novel Components of Chronic TBI-Induced Neuropathology	Biomedicines	2022	6.08		Noora Puhakka, <b>Shalini Das Gupta</b> , Niina Vuokila and Asla Pitkänen

## **AWARDS, PRIZES AND RESEARCH FELLOWSHIPS RECEIVED**

1. Best oral presentation at the 11<sup>th</sup> Annual Post-Graduate Symposium of the Doctoral Program in Molecular Medicine (2017)
2. Gold Medal for securing the first rank in B. Tech Bioinformatics (2013), awarded by SRM University, India.

### **Scholarships and research fellowships:**

<b>Funding body</b>	<b>Funding amount</b>	<b>Purpose</b>
SRM University, Chennai, India	Rs. 37 500/year (2009-2013)	Performance based scholarship
Erasmus Mundus Master's scholarship	1000 euros/month (August 2013-July 2015)	Monthly allowance
	8000 euros	Travel and installation costs
Centre for international Mobility, Finland	18000 euros	Personal research grants received for PhD study
Instrumentarium foundation, Finland	6000 euros	
Orion Research foundation, Finland	5000 euros	
Epilepsy Research foundation, Finland	7125 euros	
Maire Taposen foundation, Finland	1500 euros	
Laboratory Medicine Foundation, Finland	3000 euros	
San Servolo course on Bridging basic with clinical epileptology	2145 euros	Travel grants received during PhD study
University of Eastern Finland	1950 euros	
IISER Kolkata – Institute Funded Postdoctoral Fellowship		For Postdoctoral research during the period of 2021-2022

## **SELECTED INTERNATIONAL WORKSHOPS AND CONFERENCES ATTENDED**

<b>Workshop/Conference title</b>	<b>Venue</b>	<b>Year</b>	<b>Mode of presentation (if applicable)</b>	<b>Title of the presentation (if applicable)</b>
EMBO practical course on Regulatory small and long ncRNAs: Durat et lucet	University of Trento, Trento, Italy	2016		
2nd EPITARGET Young Researchers' Symposium	Marseille, France	2016	Oral and poster	Plasma miR-124 as a potential biomarker for early diagnosis of epileptogenic brain damage after TBI.
15th International course on Epilepsy: Advanced San Servolo Summer Course: Bridging Basic with Clinical Epileptology-6	San Servolo, Venice, Italy	2017		
11th Annual Post-Graduate Symposium of the Doctoral Program in Molecular Medicine	Kuopio, Finland	2017	Oral	Circulating miR-124 is a biomarker for predicting cortical lesion size at a chronic post-TBI phase
48th Annual Meeting of the Society for Neuroscience	San Diego, USA	2018	Poster	Chronically altered miRNA signature in the ipsilateral thalamus and perilesional cortex in rats with traumatic brain injury
EMBO EMBL symposia: The Non-Coding Genome	Heidelberg, Germany	2019	Poster	Setup of a droplet digital PCR method for absolute miRNA quantification from non-hemolysed rat plasma with the RNA concentration normalization approach.
FENS 2020 Virtual Forum	Virtual conference	2020	Poster	Dynamics of clusterin protein expression in the brain and plasma following experimental traumatic brain injury.
XXXIX Annual Meeting of Indian Academy of Neurosciences (IAN)	Virtual conference	2021	Invited talk	Circulating plasma biomarkers of traumatic brain injury

I hereby declare that the above information furnished by me is true at best of my knowledge.

Yours sincerely,

*Shalini Dasgupta*