

Faculty Member's Academic Profile

DR. SUTAPA DAS

Designation: Assistant Professor in W.B.E.S.
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Career Objective:

My objective is to enhance my expertise and knowledge in the area of Biomedical Science utilizing my educational and professional qualifications mainly in the field of teaching and research. I am highly enthusiastic to teach different areas of physiology and its clinical approach in modern medical science by exchanging my knowledge and ideas with the students, the future of the nation. I am also very much keen to stick myself attached with research world to update my knowledge along with teaching.

Educational Qualifications:

PhD in PHYSIOLOGY (2012) Vidyasagar University, India

Title of Thesis: "The protective role of Spinacia oleracea in management of experimental rat model of epilepsy".

Master of Science in HUMAN MEDICAL PHYSIOLOGY (2005) University of Calcutta, India

specialization - Endocrinology & Reproductive Physiology.

Bachelor of Science in PHYSIOLOGY (Major) (2003) University of Calcutta, India

Work Experience:

PROFESSIONAL EXPERTISE

Dec. '19 to date: Assistant Professor in West Bengal Education Services (W.B.E.S.), Head of the Department, Department of Physiology, Jhargram Raj College (Girls' Wing), Jhargram, West Bengal, Pin- 721507, India.

PREVIOUS TEACHING EXPERIENCE:

Sep. '10 – March '15: Assistant Professor of Human Physiology, Tripura Institute of Paramedical Sciences (tips) Tripura (West), India [Joint venture with Govt. of Tripura, India], (Affiliated to Tripura University, India).

March '16 – Nov. '19: Guest Lecturer of Human Anatomy and Physiology in Department of Paramedics, Charnock Healthcare Institute, Kolkata [Affiliated to West Bengal University of Health Sciences, India].

April '16 – Nov. '18: Guest Lecturer of Human Physiology (for BSc and MSc in Medical Laboratory Technology) in Sevayatan School of Medical Technology, West Bengal, India [Affiliated to The West Bengal University of Health Sciences, India & State Medical Faculty of West Bengal, India].

Oct. '16 - May '17: Guest Lecturer of Human Physiology in Woodlands College of Nursing, Kolkata (Employer- Woodlands Multispeciality Hospitals Ltd., Kolkata), [Affiliated to West Bengal Nursing Council, India].

Nov. '16 – Nov. '19: Guest Lecturer of Human Physiology in Apollo Gleneagles Nursing College, Kolkata- 700136, (Employer- Apollo Gleneagles Hospitals Ltd., Kolkata), India [Affiliated to West Bengal Nursing Council, India].

Sep. '18 – Nov. '19: Guest Lecturer of Physiology in Department of Physiology, Dr. Kanailal Bhattacharyya College (Accredited with 'B' grade by NAAC), Santragachi, Howrah, West Bengal.

Sep. '18 – Jan. '19: Guest Lecturer of Physiology in Post Graduate Department of Food and Nutrition, Bagbazar Women's College College (Accredited with 'B++' grade by NAAC), Bagbazar, Kolkata.

Oct. '18 – Feb. '19: Faculty at Indira Gandhi National Open University (IGNOU), Baranagar, Kolkata, for the Certificate Course of Food and Nutrition.

Examiner (theory & practical) and Question paper setter (theory & practical) of The West Bengal University of Health Sciences from 2016 till date.

Examiner (theory & practical) and Question paper setter (theory and practical) of Vidyasagar University [both Honours & General] from 2020 till date.

Question paper setter (theory) of Midnapore Autonomous College [both Honours & General] in the year 2022

Question paper setter (theory) of Kazi Nazrul University [both Honours & General] from 2020 till date.

Examiner (theory & practical), Question Paper (theory & practical) setter and moderator of Tripura University Annual Examination from 2011 to 2014.

Visited Lincoln University College, Malaysia as guest Lecturer of Physiology (in Nursing and Paramedical Section) on May, 2011.

Served as a faculty teacher of Biology (for August 2010) in "RICE EDUCATION (Roy's Institute of Competitive Examination Pvt. Ltd.)", Kolkata.

Worked as an Assistant Teacher of Life Science (01.07.2005-15.10.2005) in Srirampur Madhubati Bijon Behari Balika Vidyalaya (10+2 level Govt. School in West Bengal, India).

Took practical classes (demonstration & hand-in teaching on neurophysiology, rat brain stereotaxic surgery, histology) of M.Sc. (Neurosciences) course (2007-2010) at S. N. Pradhan Centre for Neurosciences, University of Calcutta.

RESEARCH EXPERIENCE

PhD Research Project

Dissertation title: "The protective role of *Spinacia oleracea* in management of experimental rat model of epilepsy"
The entire PhD work was performed in S. N. Pradhan Centre for Neurosciences, University of Calcutta, West Bengal, India in collaboration with Dept. of Human Physiology with Community Health, Vidyasagar University, West Bengal, India under the supervision of Prof. Debjani Guha and co-supervision of Prof. Tushar Kanti Ghosh.

Techniques used:

Stereotaxic brain surgery was performed in order to establish experimental epileptic rat models.

Chemically induced (PTZ, PCN, PTX) and electrically stimulated (Electrical Amygdala kindling) Epileptic

Normal rat behavioral study (Locomotor, Rotarod, sleeping time).

Epilepsy related behavioral study (seizure pattern).

Electrode implantation in rat brain to study Electroencephalography (EEG) recordings

Histomorphology and histometry study to analyze structural changes of rat brain tissues. Hematoxylin- Eosin staining was used to study normal cellular status, Cresyl violet staining for nissl granules, Bielchowsky's Silver stain for axonal changes and Golgi cox staining for dendritic arborization.

Spectrophotometric estimation of neurotransmitters and antioxidants.

Power Spectrum Analysis of Electroencephalography in Experimental Alzheimer's disease on rat model (Post PhD Training)

Other Projects

Worked as a Junior Research Fellow (JRF) in a survey based project entitled "Role of *Moringa pterygosperma* in the Therapeutic Management of Epilepsy with Reference to Some Tribals and Backward Classes", funded by Department of Science and Technology (DST), West Bengal, India (Dec. 2005-April 2006).

Worked as a Research Fellow in a project entitled "Does milk blunt the benefits of black tea – a physiological and biochemical study", funded by National Tea Research Foundation (NTRF), Govt. of India (October, 2007- December, 2009).

Techniques used:

Electrocardiography (ECG) recordings.

Heart rate, Blood pressure measurement.

Biochemical study of blood profile and neurotransmitters

MSc Project (University of Calcutta, 2004-2005)

Dissertation title: "Studies on the alteration in uterus and adrenal gland in Bilaterally Ovariectomized

Rats with and without Estrogen Supplementation"

The entire project work was performed under the supervision of Prof. Amar K Chandra, Dept. of Physiology, University of Calcutta, India.

Techniques used:

- Ovariectomy in adult rats.
- Estrous cycle study.
- Biochemical estimation of estradiol.
- Paper chromatography.

PRACTICAL EXPERIENCE ON INSTRUMENT HANDLING

Stereotaxic Apparatus, Electrical Stimulator, EEG Apparatus, Hypoxic Chamber, Centrifuge Machine, UV Spectrophotometer, ECG Apparatus, Microtome, Microscope, Shuttle Box, Y-arm Maze, Rotarod.

List of Publications:

PUBLICATION (RESEARCH PAPERS)

Sutapa Das & Debjani Guha*: Spinacia oleracea retards the development of Amygdala kindled epilepsy in rats. *Al Ameen Journal of Medical Sciences*. Vol. 4(2), 2011, pp- 175-190.

Sutapa Das & Debjani Guha*: CNS depressive role of aqueous extract of Spinacia oleracea leaves in adult male albino rats. *Indian Journal of Experimental Biology*. Vol. 46, 2008, pp.- 185-190.

PUBLICATION AND PRESENTATION (DIFFERENT CONFERENCES)

Sutapa Das (2023), "Impact of Covid 19 on neurodegenerative diseases: a review study" (abstract) published in XXXIIIrd Annual Conference of The Physiological Society of India (PHYSICON-2022) & DRDO, Govt. of India sponsored International Conference on "Research and Technological advancement in Health Sciences and Sustainable Development" (IL-48, page no. 120).

Sutapa Das (2022), "BRAIN FOG" (abstract) published in XXXIst Annual Conference of the Physiological Society of India PHYSICON-2019 AN EXTENSION PROGRAMME on Recent Trends in Physiology and Healthcare Research for Salubrious Society, (IL-29, page no. 63).

Sutapa Das, Tushar Kanti Ghosh & Debjani Guha (2014), "Protective role of Spinacia oleracea against the development of epileptogenesis in albino rats – behavioural, biochemical and morphological correlations" presented in the "Scientific Colloquium of Indian Academy of Neurosciences (IAN)- Kolkata Chapter" [oral presentation].

Sutapa Das, Tushar Kanti Ghosh & Debjani Guha (2013), "The protective role of Spinacia oleracea against the development of penicillin induced chronic epileptogenesis in albino rats – behavioural, biochemical and morphological correlation" (abstract) published in "100th Indian Science Congress" (Page no: 157-158, Medical Science- Including Physiology) (poster presentation).

Sutapa Das, Tushar Kanti Ghosh & Debjani Guha (2011), "GABAergic system may participate in the Spinacia oleracea mediated anticonvulsion against PTZ induced epileptic seizure" (abstract) published in "NATIONAL SEMINAR ON CURRENT TRENDS IN CLINICAL RESEARCH", (21st April) (Page no-48) (poster presentation).

Sutapa Das, Tushar Kanti Ghosh & Debjani Guha (2010), "Protective role of Spinacia oleracea against development of experimental epileptogenesis- Structural and Functional Correlation" (abstract) published in UGC sponsored one day (26th March) national seminar on "Emerging issues in physiology and allied sciences", (page no. 38).

Sutapa Das, Tushar Kanti Ghosh & Debjani Guha (2009), "Herbal management of epilepsy in albino rats: role of Spinacia oleracea" (abstract) published in "International Conference on Integrative Physiology: Modern Perspective & Platinum Jubilee Celebration of the Physiological Society of India", (page no. 161) (oral presentation).

Sutapa Das, Tushar Kanti Ghosh & Debjani Guha (2009), "Herbal strategy for mitigation of generalized epileptic seizures" (abstract) published in UGC sponsored national seminar on "current trends of researches in health & diseases", (page no. 33) (oral presentation).

Sutapa Das & Debjani Guha (2009), "An approach to herbal management of epilepsy in albino rats" (abstract) published in the conference "NEUROCON", (page no. 52) (poster presentation).

Sutapa Das, Monami Mondal, Tushar kanti Ghosh & Debjani Guha (2007), "Intakes of leafy green vegetables like Spinacia oleracea combat the hazard of neural disease: epilepsy" selected for "Prof. S. S. Parmar Research Foundation Award for the best poster presentation" (abstract) published in Silver Jubilee Conference of Indian Academy of Neurosciences (IAN), (pp-06, page no. 79) (poster presentation).

Sutapa Das & Debjani Guha (2007), "Epilepsy- oxidative stress: The herbal management by Spinacia oleracea with antiseizure property" (abstract) published in IVth congress of "Federation of Indian Physiological Societies (FIPS)", (pp-11, page no. 105-106) (poster presentation).

Sutapa Das & Debjani Guha (2006), "The antiseizure property of aqueous extract of Spinacia oleracea leaves in PTZ induced experimental epileptic rat model" (abstract) published in XVIIIth annual conference of "The Physiological Society of India (PSI)", (pp-11, page no. 120) (poster presentation) [Best Poster Award].

Awards:

Awarded Junior Research Fellowship for a survey based project from Department of Science and Technology (DST), West Bengal, India (Dec. 2005-April 2006).

Awarded Research Fellowship for a project from National Tea Research Foundation (NTRF), Govt. of India (October 2007-December, 2009).

Awarded "Labonya Prova Bose Trust Scholarship for Doctoral Work" (for September 2007-August 2008).

Awarded Best Poster prize in XVIIIth annual conference of "The Physiological Society of India (PSI)", 2006 for presenting the poster entitled "The antiseizure property of aqueous extract of Spinacia oleracea leaves in PTZ induced experimental epileptic rat model".

Selected for "Prof. S. S. Parmar Research Foundation Award for the best poster presentation" in Silver Jubilee Conference of Indian Academy of Neurosciences (IAN), 2007 for presenting the poster entitled "Intakes of leafy green vegetables like Spinacia oleracea combat the hazard of neural disease: epilepsy"

Won "A" grade in achievements-cum diagnostic test in mathematics (School level-Std. VII).

CONFERENCE/SEMINAR ATTENDED:**International conference**

Seminar on Molecular Biology Sponsored by DBT Project, Dept. of Microbiology, Govt. of India on November 6, 2011.

International Conference on Integrative Physiology: Modern Perspective & Platinum Jubilee Celebration of the Physiological Society of India, 2009.

'International Symposium On 'Neurodegeneration □ Brain Aging: Basic Science To Therapy' & conference NEUROCON, 2009.

"International symposium on medicinal plants and herbal products in biomedicine and their efficacy in the present era" & XXVI annual conference of the Indian Association of Biomedical Scientists, 2005

National conference

One-Day Seminar organized by Indian Academy of Neurosciences, Annual colloquium, Kolkata Chapter, 2022 on 26th August, 2022.

The Silver Jubilee Congress On Biomedical Laboratory Science, 2017.

24th Congress on Biomedical Laboratory Science, India, 2016.

"Scientific Colloquium of Indian Academy of Neurosciences (IAN)- Kolkata Chapter", 2016.

"Scientific Colloquium of Indian Academy of Neurosciences (IAN)- Kolkata Chapter", 2014.

100th Indian Science Congress, 2013

NATIONAL SEMINAR ON CURRENT TRENDS IN CLINICAL RESEARCH, 2011

UGC sponsored national seminar on "Current trends of researches in health & diseases", 2009

Silver Jubilee Conference of "Indian Academy of Neurosciences" (IAN), 2007

One day conference of "INDIAN ACADEMY OF NEUROSCIENCES (IAN)- KOLKATA CHAPTER", 25th September, 2006

IVth congress of "Federation of Indian Physiological Societies (FIPS)", 2007

One day conference of "INDIAN ACADEMY OF NEUROSCIENCES (IAN)- KOLKATA CHAPTER", 11th December, 2006

XVIIIth annual conference of "The Physiological Society of India (PSI)", 2006

UGC sponsored state level seminar on "Community health-problems and prevention", 2006

XVth annual conference of "Indian Society for Study of Reproduction and Fertility" (ISSRF), 2005

XIVth annual conference of "The Physiological Society of India" (PSI), 2002

Various National and International Webinars from 2020 to 2022.

**SCIENTIFIC WORKSHOP
ATTENDED:**

DST SERB sponsored workshop on "Protein Biology: Techniques and Applications in Modern Research" organized by Vidyasagar University, on 14th – 15th December, 2022.

One Day Mentorship Workshop Programme on DBT-STAR COLLEGE SCHEME organized by Lady Brabourne College, Kolkata, on 29th November, 2022.

One-Day Workshop on "PREPAREDNESS OF NAAC-PROVISIONAL ACCREDITATION FOR COLLEGES (PAC)" held on 19th April, 2022 at Vidyasagar University.

DST Sponsored Workshop on "Recent techniques in neuroscience research" held on 2-7 February, 2009, organized by Department of Biochemistry, IPGMER, Kolkata.

"Dr. Sarada Subramanyam workshop On "Modern Techniques in Neuroscience Research" held on 25 November, 2005, organized by S. N. Pradhan Centre for Neurosciences, University of Calcutta and Department of Home Science, University of Calcutta, Kolkata.

**INVITED LECTURE
DELIVERED:**

Delivered a speech on the topic entitled "Women's Hygiene: Issues and Solutions" as a guest speaker on 26th December, 2022 in the Special Winter Camp, organized by NSS Unit of Jhargram Raj College (Girls' Wing), Jhargram.

Delivered a speech on the topic entitled "AIDS: Awareness and Prevention" as a guest speaker on 1st December, 2022 in World AIDS Day celebration, organized by NSS Unit of Jhargram Raj College (Girls' Wing), Jhargram.

JUDGESHIP:

Judged 30th District level Children's Science Congress, 2022 of Jhargram district on 27.09.2022.

Judged the extempore competition conducted on 26th December, 2022 at Special Winter Camp (21st December, 2022 to 28th December, 2022), organized by NSS Unit of Jhargram Raj College (Girls' Wing), Jhargram.

**SCIENTIFIC SOCIETY
MEMBERSHIP:**

The Physiological Society of India (PSI)
Indian Academy of Neurosciences (IAN)
Indian Science Congress Association (ISCA)

**COMPUTER
KNOWLEDGE:**

MS Office (word, power point, excel, publisher), Adobe Photo Shop
