Namrata Das, Ph. D, MPH, MBBS/MD
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I am a confident and passionate educator, mentor, and researcher with extensive experience in data analysis, communication, writing, and presenting. My advanced expertise in cognition (psychology) and neuroscience empowers me to tackle critical issues related to mental health disorders, substance use disorders, and Alzheimer's disease. I excel at distilling complex information into clear, concise concepts, leveraging my robust background in psychology, neurology, and cognition to enhance understanding and drive impactful discussions in the healthcare industry.

Work permit: Greencard holder

EDUCATION

Postdoctoral Research Certificate-Neurology, *UT Southwestern Medical Center,Dallas,Tx* 2023 -
Ph. D (Cognition and Neuroscience), *University of Texas at Dallas (UTD), Dallas, TX* 2015 – 2020
MPH (Masters in Public Health), *Missouri State University, Springfield, MO* 2007 – 2010
Bachelors – Medicine & Surgery, *Kakatiya Medical College, India* 1999 – 2005

POSTDOCTORAL EXPERIENCE

Department of Neurology, University of Texas at Southwestern Medical (UTSW), Dallas, TX
Alzheimer's Research Disease Center **Present**

Department of Psychiatry, University of Texas at Southwestern Medical (UTSW), Dallas, TX
Substance Use Disorder and Mental Health Subdivision Unit 2023 - 2024

Mclean Hospital at Harvard Medical School, Boston, MA
National Institute of Drug Abuse T32-postdoctoral research fellow 2021 – 2023

TEACHING EXPERIENCE

Spring 2025	Recruited to teach Sensory neuroscience subjects for graduate and undergraduate students at the University of Texas at Dallas.
Fall 2024	Enrolled in delivering lectures to high school and community college students through the mINiTERN program at UTSW on reading articles and developing manuscripts for publication in varied science topics.
Summer 2023	Taught and mentored research for mINiTERN joint program between UTSW and Dallas Community College to create a novel research project by guiding students in developing a hypothesis, experimental design, expected results, and learning the limitations, focusing on developing out-of-the-box critical thinking skills, UTSW.
2018-2021	Research Mentor, Center for BrainHealth, UTD - Trained high school and undergraduate students in the lab every summer on various neuroscience-related subjects and assisted in submitting school projects on neurodegenerative disorders.
2018	Guest speaker to deliver a lecture on "Sleep and its relevance in neurodegenerative disorders." UTD.

Extensive course knowledge for teaching

Medicine-related courses- Anatomy, Physiology, Biochemistry, Pathology, Pharmacology, Preventive Medicine, Medicine, Surgery, Obstetrics, and Gynecology. Certified by the Educational Commission for Foreign Medical Graduates (certified as MD equivalent in USA) in 2011.

Neuroscience-related courses- Functional neuroscience includes neuroanatomy, systems and cellular neuroscience, cognitive psychology, memory, and neurobiology of aging.

Statistical courses and programming language- SPSS package, R studio, and Linux programming language.

Technical skills

Expert in using Microsoft Word, Excel, PowerPoint, and smartboard applications for presentations and handling multimedia teaching platforms.

PUBLICATIONS

Das N, Jha M, Minhajuddin A, Trivedi M Connectomic and behavioral differences between depressed individuals with and without comorbid substance use disorder *manuscript in preparation*.

Das N, Cherise C F, Jha M, Thomas B Bariatric surgery effects on Brain age and Cognition: A non-randomized pilot study *manuscript under review by co-authors.*

Das N, Zuo C, Lukas S Neurochemical Changes in Glutamate and GABA and Cognitive Function in Cocaine Dependent Individuals During Early Withdrawal *manuscript in preparation.*

Schramm P, Das N, Schneiderman E, German Z, Hui J, Wilson D, Spence JS, Moura P, Chapman SB. Snoring Remediation with Oral Appliance Therapy Potentially Reverses Cognitive Impairment: An Intervention Controlled Pilot Study. *Geriatrics*. 2021; 6(4):107. https://doi.org/10.3390/geriatrics6040107

Das, N., Ren, J., Spence, J., & Chapman, S. B. (2021). Phosphate Brain Energy Metabolism and Cognition in Alzheimer's Disease: A Spectroscopy Study Using Whole-Brain Volume-Coil ^{31}Phosphorus Magnetic Resonance Spectroscopy at 7Tesla. *Frontiers in neuroscience*, *15*, 641739. https://doi.org/10.3389/fnins.2021.641739

Das, N., Ren, J., Spence, J. S., Rackley, A., & Chapman, S. B. (2020). Relationship of Parieto-Occipital Brain Energy Phosphate Metabolism and Cognition Using ^{31}P MRS at 7-Tesla in Amnestic Mild Cognitive Impairment. *Frontiers in aging neuroscience*, *12*, 222. https://doi.org/10.3389/fnagi.2020.00222

Das, N., Spence, J. S., Aslan, S., Vanneste, S., Mudar, R., Rackley, A., Quiceno, M., & Chapman, S. B. (2019). Cognitive Training and Transcranial Direct Current Stimulation in Mild Cognitive Impairment: A Randomized Pilot Trial. *Frontiers in neuroscience*, *13*, 307. https://doi.org/10.3389/fnins.2019.00307

POSTER PRESENTATIONS

Das, Namrata (2023) 'Alterations in the cerebello-cerebral attentional resting state functional connectivity in Major Depressive Disorder' presented at Resting State Brain Connectivity conference at the University of Texas at Dallas, Dallas, Texas.

Das, Namrata (2023) 'Neurochemical Changes in Glutamate and GABA and Cognitive Function in Cocaine Dependent Individuals During Early Withdrawal.' presented at College on Problems of Drug Dependence, Denver, Colorado.

Das, Namrata (2019)' Relationship of brain energy phosphate metabolism and cognition using 31P MRS at 7Tesla in preclinical stages of Alzheimer's disease' presented at Texas Alzheimer's Research and Care Consortium (TARCC), Austin, Texas.

Das, Namrata (2019) 'Cognitive Training and Transcranial Direct Current Stimulation in Mild Cognitive Impairment: A Randomized Pilot Trial' presented at Alzheimer's Association International Conference, Los Angeles, California.

Das, Namrata (2018) 'Decoding Brain Energy Metabolism and Investigating the Relationship with Cognition in Mild Cognitive Impairment' presented at the Annual Symposium at Center for BrainHealth, the University of Texas at Dallas, Dallas, Texas.

Das, Namrata (2018) 'High-resolution Magnetic Resonance Spectroscopy to Measure Brain Energy Metabolism in Preclinical Stages of Alzheimer's Disease' presented at the Imaging Metabolism in Brain Disease conference at The University of Texas Southwestern Medical Center, Dallas, Texas.

WORK EXPERIENCE

University of Texas at Southwestern Medical Center (post-doctoral-present)

Working on developing new pipelines for bringing multimodal imaging protocol together especially DTI and resting state fMRI in Alzheimer’s disease cohort for personalized intervention.

Supported pre- and post-launch activities of a longitudinal study in Stimulant use disorder to have a comprehensive battery of screening and clinical markers for drug development.

Implemented clinical trial study for TMS neuromodulation in Stimulant use disorder by assessing eligibility criteria, setting up protocols for university IRB approval, aiding in the development of safety monitoring plan and regulatory filings of IND submissions, preparing presentations for annual national meetings, maintaining ongoing discussion with data quality and data analytical team to maintain ongoing publication record.

Identified stakeholders and established collaborative efforts to support the project with multidisciplinary teams and regional support for a holistic approach to research and care for psychiatric and neurological patients.

Drove the initiative to establish methods of multimodal imaging techniques ranging from fMRI, DTI, structural, and spectroscopy at 3T Siemens magnet.

Established a pipeline for transferring and analyzing DTI data on the BrainLAB portal for developing neural network-driven neurological interventions.

University of Texas at Dallas (part-time Lecturer-present)
Developed and taught a sensory neuroscience course for the Spring semester of 2025.

Implemented a novel instructional approach that translated textbook learning into practical, real-world applications. This method involved critically examining current research theories that describe the sensory nervous system's functionality as an integrated process, rather than addressing each sensory system as an isolated component.

University of North Texas at Dallas (Adjunct faculty-present)

Recruited to teach and manage a newly developed course on Behavioral neuroscience to undergraduate students in the department of psychology.

McLean Hospital, Harvard Medical School (NIDA T32 post-doctoral)
Involved in Cannabis or Marijuana, especially high-spectrum full cannabidiol extract clinical trials and its implication on brain health, cognition, and clinical state in substance misuse, neurological disorders like Alzheimer's disease, and psychiatric disorders such as including bipolar, depression, non-suicidal self-injury, PTSD.
Developed and analyzed a statistical model in consultation with mentors to investigate neurochemical changes in glutamate and GABA in cocaine users during early withdrawal using magnetic resonance spectroscopy sequence at 3T scanner.

Served as a moderator and speaker at a national-level conference at the College on Problems of Drug Dependence on Cocaine Use Disorder.

Program Specialist in Alzheimer's Disease, Center for BrainHealth, University of Texas at Dallas 2017-2021
A key player to launch a novel neuroimaging study using the spectroscopy technique at Ultra High Field 7Tesla MRI magnets to study with precision the neurobiological changes across the spectrum of Alzheimer's disease, including mild cognitive impairment.

Launched activities single-handedly on clinical trial of Brain Energy Metabolism and Sleep in Alzheimer's disease, including protocols submission for IRB approval, development of safety monitoring plan, developing consenting, screening, and cognitive assessment protocol for implementation, regulatory filings on ClinicalTrials.gov and deviation from protocols to IRB board, cross-checking data entry, analyzing and presenting the work at local and national meetings.

Conducted scientific exchanges with scientists and researchers to expand Phase-1 of Brain Energy Metabolism and sleep study to Phase-2 to include MyTAP dental device to improve sleep in patients with mild cognitive impairment and Alzheimer's disease.

Gave presentations at both national and regional levels to the community and leader in the field of Alzheimer's disease about the importance of early diagnostic markers of Alzheimer's disease using imaging technology.

Drove the initiative to educate the community and patients about the importance of sleep to build scientific knowledge about healthy brain habits.

Clinical Doctor Assistant Broadway Medical Clinic. Garland, Texas 2012-2016

As a medical doctor from a foreign country, I assisted licensed physicians with examining patients from different areas of diseases, diagnosis, and formulating treatment plans.

Interacted with medical science liaisons (MSL) and field scientists to learn in-depth about the advancements in the medical field and their application with novel drugs in clinical settings.

Carefully followed patients with any side effects of novel treatment in the field of diabetes, hypertension, and endocrine disorders and discussed with MSL to understand the depth of the treatment landscape.

LEADERSHIP EXPERIENCE

Leadership Education Academy for Postdocs (LEAP) certificate at UTSW, 2024.
Executive board member of Postdoc Association (PDA) at UTSW, 2023-2024.

AWARDS & RECOGNITION

2019	AWARE grant recipient award
2019	Student travel award to International Alzheimer's association conference
2018	Friends of BrainHealth New Scientist Award, CBH, UTD
2017	Linda and Joel Robuck Distinguished New Scientist Award, CBH, UTD
2016	Aging Mind Foundation Fellowship, CBH, UTD
1996	Math National Olympiad Championship recipient, India

PRESENTATIONS

Regional

2020 Frontier's lecture series presentation "Brain Energy Metabolism and Cognition in Alzheimer's disease-A spectroscopy study at 7-Tesla."

2019 AWARE conference presentation "Alzheimer's Disease- Mind, Molecular and Sleep Relationship."

2017 Aging Mind Foundation presentation "Early Alzheimer's Detection and Treatment Tracking Using New Imaging Technology."

National

2023 College on Problems OF Drug Dependence (CPDD), Denver, Colorado "Neurochemical Changes in Glutamate and GABA and Cognitive function in Cocaine Dependent Individuals During Early Withdrawal."

2020 Annual Art and Science of BrainHealth Conference, Virginia "Brain Energy Metabolism, and Cognition in Alzheimer's disease."