

Sandhya Das, PhD

Regular/AP/ Dual Credit Biology; PLTW Biomedical Science Teacher and Biomedical Research Scientist

10 years of total teaching experience teaching Biology and Biomedical Science.

Formerly, a Biomedical scientist with over 10 years of small animal based *in vivo* and cell based *in vitro* laboratory experience with publications in cancer genetics, drug discovery, pharmacology and toxicology. Additional publications related to chemokine biology, inflammation, asthma, epigenetics and innovative methods to study animal physiology and lung diseases.

EDUCATION:

DEGREE	INSTITUTION	FIELD
Postdoctoral Training	Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, USA	Asthma, emphysema, lung mechanics, epigenetics
Postdoctoral Training	Johns Hopkins University School of Medicine, Baltimore, MD, USA	Inflammation, lung fibrosis and cancer
Postdoctoral Training	University of Texas Medical Branch, Galveston, TX, USA	Inflammation, Chemokine Biology
Ph.D.	University of Mumbai, Mumbai, India	Life sciences-Radiation and Cancer Biology
MSc.	University of Mumbai, Mumbai, India	Zoology-specialization in Animal Physiology
BSc.	University of Mumbai, Mumbai, India	Zoology

PROFESSIONAL WORK HISTORY AND TEACHING EXPERIENCE:

Aug. 2022- Current Alvin High School, Alvin ISD

Aug. 2021- Current Adjunct Faculty, Lee College

Feb. 2022- May 2022 Biology Interventionist, Clear Creek High School

Aug. 2021- Nov. 2021 Teacher, Goose Creek Memorial High School

2019 – Jan. 2021 Teacher, La Marque High School

2019 Research Investigator, MD Anderson Cancer Center

2017- 2019 Adjunct Faculty, Galveston, College

2014- 2019 Project Lead The Way Biomedical Science Teacher at Ball High School.

2012- 2013 Junior Faculty (Research Associate) at Johns Hopkins University School of Medicine, Baltimore, MD, USA

2010- 2012 Postdoctoral Fellow at Johns Hopkins University, Baltimore, MD, USA

2010-2011 Exhibit guide at the National Aquarium at Baltimore, MD, USA-volunteer

2006- 2010 Postdoctoral Fellow at University of Texas Medical Branch, Galveston, TX, USA

LICENSES/CERTIFICATIONS:

Description of License/Certification	Place of Issuance	Dates of Validity
Texas Educator Certificate- Standard Science Grades (7-12)	Texas	08/07/2015 - 03/31/2027
Texas Educator Certificate- Standard Life Science Grades (7-12)	Texas	05/18/2021 - 03/31/2027
Texas Educator Certificate- Standard English as a second language supplemental Grades (7-12)	Texas	08/07/2015 - 03/31/2027
Project Lead the Way Core Training in Medical Interventions	Tyler, Texas	07/31/2015 – N/A
Project Lead the Way Core Training in Human Body Systems	Tyler, Texas	07/18/2014 – N/A
University of Texas Medical Branch Laboratory Biosafety Level 2 Training Program	Galveston, Texas	01/09/2008- N/A

HONORS:

2018-2019	Top 50 Teacher Award
2017-2018	Top 50 Teacher Award
2017-2018	Texas Project Lead The Way Teacher of the year award (nominated)
2016-2017	Top 50 Teacher Award
2007-2009	The McLaughlin Endowment Fund-Post-doctoral Fellowship, UTMB, TX, USA
2002-2007	Department of Atomic Energy (DAE, India) Fellowship
2002	CSIR-UGC NET Fellowship
2000-2002	Homi Bhabha Centre for Science Education research scholarship, TIFR Mumbai, India

PUBLISHED:

A. ARTICLES IN PEER-REVIEWED JOURNALS (partial list):

1. **Das ST** and Mishra KP. *Radiotoxicity to Tumor Cells Enhanced By Triphala- Cellular and Animal Studies*. *Canc Therapy & Oncol Int J*. 2018; 11(1): 555802. DOI: 10.19080/CTOIJ.2018.11.555802.
2. **Das ST**, MacDonald KA, Chang HS and Mitzner W. *A simple method of mouse lung intubation*. *J Vis Exp.*, 2013; (73):e50318. PMID: 23542122.
3. Tran PT, Shroff EH, Burns TF, Thijagarajan S, **Das ST**, Zabuawala T, Chen J, Cho Y-J, Luong R, Tamayo P, Salih T, Aziz K, Adam SJ, Vicent S, Nielsen CH, Withofs N, Sweet-Cordero A, Gambhir SS, Rudin CM and Felsher DW. *Twist1 suppresses senescence programs and thereby accelerates and maintains mutant Kras-induced lung tumorigenesis*. *PLoS Genetics*, 2012-8(5):e1002650. PMID: 22654667.
4. **Das ST**, Rajagopalan L, Guerrero-Plata A, Sai J, Richmond A, Garofalo RP, and Rajarathnam K. *Monomeric and dimeric CXCL8 are both essential for in vivo neutrophil recruitment*. *PLoS ONE*, 2010-5(7): e11754.
5. **Sandhya T**, Lathika KM, Pandey BN, Bhilwade HN, Chaubey RC, Priyadarsini KI, and Mishra KP. *Protection against radiation oxidative damage in mice by triphala*. *Mutation Res*. 2006; 609: 17. PMID: 16860592.
6. **Sandhya T** and Mishra KP. *Cytotoxic response of breast cancer cell lines, MCF 7 and T 47 D to TPL and its modification by antioxidants*. *Cancer Lett*. 2005; 238: 304. PMID: 16135398.
7. **Sandhya T**, Lathika KM, Pandey BN and Mishra KP. *Potential of traditional ayurvedic formulation, TPL, as a novel anticancer drug*. *Cancer Lett*. 2005; 231: 206. PMID: 15899544.

COMMUNITY SERVICES:

- Philanthropist: TOP AP Biology scholarship awards for deserving college bound seniors at Ball High School.
- Facilitator: ‘Expanding Your Horizons’ to encourage young women to pursue science, technology, engineering, and mathematics (STEM) careers.
- Volunteer at ‘SOURCE’, Johns Hopkins School of Public Health community outreach program to renovate a school in East Baltimore neighborhood.
- Volunteering as an exhibit guide to help visitors appreciate and understand the wildlife and natural environment we share with fellow beings through the exhibits at the National Aquarium at Baltimore.
- Judge: International Science Fair (I-SWEEP 2015), May 7-11, 2015 Houston, Texas

HOBBIES:

Gardening, Painting, Bird watching, Traveling, Reading, Cooking