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Department of Biological Sciences & Border Biomedical Research Center University of Texas at El Paso, TX-79968, USA

### PROFESSIONAL POSITIONS

2019-	Assistant Professor, University of Texas at El Paso (UTEP) & BBRC, TX, USA.
2017-2019	Adjunct Assistant Professor, City University of New York, New York, USA.
2016-2019	Associate (Faculty), Albert Einstein College of Medicine, New York, USA.
2012-2015	Fellow, Howard Hughes Medical Institute & Albert Einstein College of Medicine, New York, USA
2009-2011	Associate Research Scientist, Section of Microbial Pathogenesis, Yale School of Medicine, CT,
2006-2008	Postdoctoral Fellow, Section of Microbial Pathogenesis, Yale School of Medicine, New Haven, CT
1999-2005	Ph.D., Institute of Microbial Technology (CSIR), Jawaharlal Nehru University, New Delhi, Indi

## **Completed and Ongoing Research Support**

- 2020-2022 University of Texas Rising star award (Total Award Amount: \$300,000)
- 2021-2025 NIH-NIGMS (SC1 grant as PI), Arginine biosynthesis: A novel target for Development of Drugs against Mycobacterium tuberculosis (Mtb). Major Goal: The goal of this grant is to identify new compounds to target Mtb persistent cells to shorten existing chemotherapy and identify novel compounds to treat MDR TB. (Total Award Amount: \$1,510,000)
- 2021-2024 NIH-NIAID (R15 grant as Co-I). A novel Quadruple Knockout Mtb vaccine against tuberculosis. Major Goal: The goals of the project are to evaluate the potentials of the quadruple knockout of Mtb in the prevention and treatment of tuberculosis in a mouse model of infection. (Total Award Amount: \$483,701)
- 2023 Pilot grant from Baylor college of Medicine (MPI) Identification and validation of SNP's as Risk factor for IBD in the All of Us Database.
  - (Total Award Amount: \$30,000)
- 2023 Recruitment of faculty to use "All of Us Database" benchwork (subaward from Baylor college of Medicine) (Total Award Amount: \$10,000)

### **HONORS & AWARDS**

NIH Grant Reviewer (2021-Present, total=11): NIH study section ZAG1 ZIJ-I M1, REDI Small Business Review Panel (March15, 2024), , Study section: NIH and the CDC for SBIR Contract Proposals (PHS 2024-1) Phase I: Development of Bacteriophage for Treatment of Mycobacterial Infections (Topic 131) (N01) (Feb21, 2024), NIH (NIAID) Special Emphasis Panel (ZAI1 SAS-W(J1) Nov30-Dec1(2023), Study section: Broad Agency Announcement (BAA): Large-scale T cell Immune Epitope Discovery and Mechanisms of T cell Protection October 25-26 (2023), Reviewer for Maintaining immunity after immunization (UO1, 2023), Center for Scientific review Special Emphasis Panel (ZRG1 DCAI- D(10)) Small Business: Applied Immunology and Vaccine Development study section DCAI-10 (June21-11, 2023), Reviewer for HCAC/NIH (2022), Reviewer in Special Emphasis Panel for R16 grants (2022, 2023), Selected as Early Career Reviewer (ECR) for HCAC/NIH (2021), peer reviewer for Medical Research Council (MRC) funding (2017-)

Journal Editor: Guest Editor for Biomedicines (MDPI), Special Issue: "Tuberculosis Vaccines and Novel Drug Development", (2024-). Associate Editor for Frontiers in Immunology: Adaptive immunity in Infection (2023-), Guest Editor for Tropical Medicine and infectious diseases (2022-), Guest associate editor for Frontiers in Immunology and Frontiers in Microbiology (2021-), Review Editor for Spectrum Microbiology, ASM (2023-), Review Editor for Molecular Bacterial Pathogenesis (2021-), editorial board member for Insights in chest diseases (2017-) and Current trends in Vaccines and Vaccinology (2017-), editor for International journal for Vaccines and Vaccination (2017present).

Journal Reviewer (2012- Present): ASM Microbiology Spectrum (2023-), Biomolecules (2023-), Scientific Reports (2022-), Frontiers in Cellular and Infection Microbiology (2021- present), Environment Research (2019- present), Current Drug Targets (2020- present), Lancet Microbe (2021- present), EMBO Molecular Medicine (2021- present),

Journal of Archives of Microbiology (2018-present), Journal of cellular and Molecular medicine (2018-present), PNAS (2018-present), Journal of Acquired Immune Deficiency Syndromes (2012- Present),

# Invited Talks (2019-2024)

- Invited <u>discussion leader</u> for GRC session "Prospective Immunotherapy and Drug Treatments" : 2025 Tropical Infectious Diseases.
- Invited presentation for "Use of the All of Us Database by UTEP Researchers featuring Drs. Acosta, Tiwari and Wagler" from Baylor college of medicine (26 April 2024)
- Invited Seminar speaker at Louisiana State University Health Center, Shreveport, LA (15 April 2024).
- ASM Rio Grande Branch Treasurer (May, 2023)
- Invited as <u>Co-chair</u> for session "Animal Models and Co-Infections" at 6<sup>th</sup> annual Texas Tuberculosis research symposium (April 13-14,2023)
- Invited Speaker at Myco.Tube-2023, International Virtual Conference on Mycobacterium tuberculosis Research & Drug Development (May 30-31, 2023)
- Invited Speaker at ASM RIO Grande Meeting (May 19, 2023).
- Invited Speaker for Keystone at TB Symposia, Breckenridge, CO, USA (2022)
- Invited Speaker at ASM Rio Grande Branch Meeting 2022, (April 15, 2022), TTHSC, El Paso.
- Travel award and invitation to judge posters at SACNAS conference, Puerto Rico, USA (2022)
- Invited Speaker at Bill Gates foundation meeting, CTVD-2020-21.
- Invited presentation: Talking to the Students 2021, "My Journey to Research and Teaching," UTEP (July 13, 2021).
- Invited Keystone speaker at EBVC-2020 conference 2020, India.
- Invited speaker and travel award for a World Vaccine and Immunotherapy Congress West Coast 2019, SFO.
- Invited presentation as UBR scholar for the "All of Us database" genetics program, Baylor College of Medicine, Houston, USA (Jan 7-8, 2023)
- UBR scholar for the "All of Us database" genetics program, Baylor College of Medicine, Houston, USA (2022).
- Invited Speaker for NRMN Co-recruitment and informational webinar (2021).
- Rising STAR award from University of Texas (2020).
- <u>Awards to students and postdoc</u> at ASM RIO Grande Meeting (May 19, 2023). Best oral presentation-Postdoc (Bhargavi Gunapati, Tiwari Lab); Best Graduate student Poster (Ana M Vargas, Tiwari Lab), Best Undergraduate Poster award (Yoome Han and Eduardo Ibbara, Tiwari Lab).

## • Before 2019

- Human Challenge grant from Bill and Melinda gates foundation with Dr. W.R Jacobs, 2017-2019.
- Council of Scientific and Industrial Research predoctoral fellowship, India (1999-2005).
- Academic excellence fellowship by Government of India for undergraduate and Masters education (1996-1998).
- Invited speaker at collaborative meeting between UTEP and Texas Tech University at El Paso (2019).
- Invited speaker at University of Texas at El Paso (2018).
- Invited speaker and travel award for international conference on Vaccine, San Diego, 2018.
- William R. Jacobs Jr. award for active participation in research in the Department of Microbiology and immunology, Albert Einstein college of Medicine (2018)
- Invited speaker at City University New York, Lehman College, Biological sciences research seminar (2017).
- Travel award for 3<sup>rd</sup> annual CTVD meeting 21-23 June 2017.
- Invited speaker for Microbial Pathogenesis conference, Toronto, Canada 2017.
- Invited speaker at Institute of Microbial Technology, a top ranking CSIR Institute, Chandigarh, India, (2015).

### PRESENT RESEARCH INTEREST AND PAST RESEARCH EXERIENCE

### **2020- Tenure-track** Assistant Professor, UTEP.

### Roles and Responsibilities:

Participate in Departmental/ University committees (Chair search committee 2023, UTEPNIH-First committee for hiring 6 assistant professors 2023-2024, Department Chair Hiring committee 2023-24. Cancer search committee 2021), Speaker invitations (Dr. David Sherman, Dr. Vanessa Sperandio, Dr. Selvakumar Subbian, Dr. Smriti Mehra) and

activities, Member of the faculty senate at UTEP (2022-present), Grant writing and submission, Teaching and mentoring students and fellows in the classroom and in the lab.

<u>Present Research Interests of My Lab</u>: (1) Understanding host-pathogen interactions to develop host-directed therapies against *Mycobacterium tuberculosis* (Mtb) and other intracellular bacteria (2) Development of potential vaccine candidates to protect against *Mycobacterium tuberculosis* (3) Determine molecular mechanisms of persistence to develop bactericidal antimicrobials and identification of novel drug targets against *Mycobacterium tuberculosis* (4) Elucidating the underlying determinants of TB-HIV-1 co-infection and pathogenesis. We employ genetic manipulation of *Mycobacterium tuberculosis* (*Mtb*) to generate gene knockouts, biochemistry, immunology, cell biology, transcriptomics and metabolomic techniques to address these questions. More can be found at Lab Website (<u>Lab</u> website).

**2012- 2019** Associate (Faculty), Albert Einstein College of Medicine. Mentor: Dr. W.R. Jacobs Jr. (NAS Member) Roles and Responsibilities:

Initiate, develop and manage multi organizational TB projects, Represent AECOM vaccine group at vaccine meetings and conferences, Edit and provide Critiques for several federal or private grants, Writing RO1 and R21 NIH grants, Mentor postdoctoral fellows, graduate and undergraduate students.

<u>Research:</u> TB-HIV vaccines and chemotherapy and Utilization of attenuated recombinant mycobacterial vectors to express antigens to generate AIDS and Malaria vaccines.

**2005-2011** *Postdoctoral fellow*, Yale University. Advisor: Dr. J. D MacMicking (HHMI)

<u>Research and Roles:</u> "Understanding of IFN-γ inducible innate immune mechanisms against intracellular Pathogens", a step towards host directed therapy against *Mtb* and other intracellular pathogens.

**1999-2005** *Ph.D. fellow*, Institute of Microbial Technology, CSIR& Jawaharlal Nehru University, New Delhi, India. Advisor: Dr. Pradip K. Chakraborti

<u>Research:</u> "Molecular and biochemical characterization of Mycobacterial virulence factor "Nucleoside Diphosphate Kinase (mNdK)"

### **PUBLICATIONS**

# **Under Revision or preparation**

- 1. Bhargavi G, Chhaya A., Mallakuntla MK, Kale D, <u>Tiwari S</u>\*. (2024). ESX-5 secretion system of *Mycobacterium tuberculosis*. A Pandora box of Virulence effectors. Submitted to Frontiers in Immunology.
- 2. Bhargavi G, Mallakuntla MK, Kale D, <u>Tiwari S</u>\*. (2024). Role of Ferredoxin reductase Rv0688, Mycobacterium tuberculosis survival under stress and in virulence. Submitted to Frontiers in Cellular and Infection Microbiology (\* Corresponding author).

### **Published Manuscripts**

- 3. Bo-young Hong, Chhaya A, Han Y, Robles A., Carventes J., **Tiwari S\***. (2024). Role of *Fusobacterium* in the pathogenesis of Colon Cancer. *The Journal of Investigative Medicine*, Aug22. doi: 10.1177/10815589241277829 (**IF 2.6**). (\* **Corresponding author**).
- 4. Bhargavi G, Mallakuntla MK, Kale D, **Tiwari S\*.** (2024). Rv0687 a Putative Short-Chain Dehydrogenase is indispensable for pathogenesis of Mycobacterium tuberculosis. *International Journal of molecular Sciences*, Jul18; 25(14):7862, PMID39063103 (\* **Corresponding author**).
- 5. Singh S, Kanzin D, Chavez S, Saavedra-Avila NA, Ng TW, Lukose R, Mayer O, Kim J, Chen B, Chen M, Porcelli SA, Jacobs WR, <u>Tiwari S</u>\*. (2023). Boosting bactericidal immunity of a recombinant Mycobacterium smegmatis strain via zinc-dependent ribosomal proteins. *Biomedicine*, Jul 15; 12(7):1571, PMID: 39062144. (\* Corresponding author).
- 6. Saha P., Joshi M.C., <u>Tiwari S</u>, Saxena R. (2023). Editorial: Linkage between membrane composition, cellular functions, and membrane-mediated stress. *Frontiers in Genetics*, *14*: 1216425.PMCID: PMC10237236.
- 7. Mallkunta M.K., Bhargavi G., Santos D.B., <u>Tiwari S</u>.\* (2022). Implications of Fragment-based drug discovery in Tuberculosis and HIV. *Pharmaceuticals*, 15:1415. PMCID: PMC9692459. (\* Corresponding authors).
- 8. Nisa A., Kipper F.C, Panigrahy D., <u>Tiwari S.</u>, Kupz A. and Subbian S. (2022). Different modalities of host cell death and their impact on *Mycobacterium tuberculosis* infection. *American Journal of Physiology-Cell Physiology*.323(5):C1444-C1474. PMCID: PMC9662802

- 9. Togre S.N., Vargas A.M., Bhargavi G., Mallkunta M.K., <u>Tiwari S</u>.\* (2022). Fragment-based drug discovery against Mycobacteria: The Success and Challenges. *International Journal of molecular Sciences*, 23:10669. PMCID: PMC9500838. (\* Corresponding authors).
- 10. Singh S., Saavedra-Avila N.A., <u>Tiwari S.</u>, Porcelli S.A. (2022). BCG turns 100: immune mechanisms, non-traditional routes and implications for COVID-19. *Frontiers in Immunology*, 30: 959656. PMCID: PMC9459386
- 11. Gupta P., Thomas S.E., Zaidan S.A., Pasillas M.A., Cory-Wright J., Sebastián-Pérez V., Burgess A., Cattermole E., Meghir C., Abell C., Coyne A.G., Jacobs W.R. Jr, Blundell T.L., <u>Tiwari S.</u>\* and Mendes V\*. (2021). A Fragment-based approach to assess the ligandability of ArgB, ArgC, ArgD and ArgF in the L-arginine biosynthetic pathway of *Mycobacterium tuberculosis. Computational and Structural Biotechnology Journal*, 19, 3491-3506 (\* Corresponding authors). PMCID: PMC8220418
- 12. Gurovich A.N., <u>Tiwari S.</u>, Kehl S., Umucu E., Penailillo L. (2021). A novel "eccentric" therapeutic approach for individuals recovering from COVID-19. *Cardiopulmonary Physical Therapy Journal*, 32, p S15-S21.
- 13. <u>Tiwari S</u>\*, Dutt T *et al.*, (2020). BCG-Prime and Boost with Esx-5 secretion system deletion mutant leads to better protection against clinical strains of Mycobacterium tuberculosis. *Vaccine*, 38:7156-75 (\*Co-Corresponding authors). PMCID: PMC7755135.
- 14. <u>Tiwari S</u>\*, Casey R, Hingley-Wilson S, Jacobs WR Jr. \* (2019). Inject and infect; How *Mycobacterium tuberculosis* utilizes its major virulence-associated type VII secretion system ESX-1, *Microbiology spectrum*, 7(3):1-14. (\* **Cocorresponding authors**). PMCID: PMC6698389.
- 15. <u>Tiwari S\*,</u> Chen B, Chen M, Vilcheze C, Weinrick B, Malek A, Berney M, Vitor M, Thomas S, Hartman T, Blundell T, and Jacobs WR Jr. \* (2018). Arginine-deprivation-induced oxidative damage sterilizes *Mycobacterium tuberculosis*. *PNAS*, 115 (39): 9779-9784. (\* **Co-corresponding authors**).
  - *This article is highlighted in PNAS.* Mizrahi V, Warner DF. 2018. Death of Mycobacterium tuberculosis by I-arginine starvation. *PNAS* 115(39): 9658-9660
- 16. Zolla V, Nizamutdinova IT, Scharf B, Clement CC, Maejima D, Akl T, Nagai T, Luciani P, Leroux JC, Halin C, Stukes S, <u>Tiwari S</u>, Casadevall A, Jacobs WR Jr., Entemberg D., Zawieja D., Condeelis J., Fooksman D.R., Gashev A.A. and Santambrogio L. (2015). Aging-related anatomical and biochemical changes in lymphatic collectors impair lymph drainage, fluid homeostasis and pathogen transport. *Aging Cell.* 14(4): 582-94.
- 17. Vilchèze C, Molle V, Carrère-Kremer S, Leiba J, Mourey L, Shenai S., <u>Tiwari S.</u>, Weinrick B, Alland D, Guérardel Y, Jacobs WR Jr., Kremer L. (2014). Phosphorylation of KasB Regulates Virulence and Acid-Fastness in Mycobacterium tuberculosis. *PLoS Pathogens*. 10(5): e1004115
- 18. Junqueira-Kipnis AP, Oliveira FM, Trentini MM, <u>Tiwari S</u>, Chen B, Resende DP, Bruna D, S Silva, Chen M, Tesfa L, Jacobs WR Jr., Kipnis A (2013). Prime–Boost with Mycobacterium smegmatis Recombinant Vaccine Improves Protection in Mice Infected with Mycobacterium tuberculosis. *PLos One*, 8(11): e78639.
- 19. Kim BH, Shenoy AR, Kumar P, <u>Tiwari S</u> and MacMicking JD (2011) A Family of IFN- γ –Inducible 65-kD GTPases Protects Against Bacterial Infection. *Science*. 332 (6030): 717-21.
  - *This article is highlighted in:* Olive Leavy. Innate immunity: GBPs coordinate vesicular trafficking for host defense. 2011. *Nature Reviews Immunology*. 11(6): 372-3.
- The Scientist Magazine "Proteins on the prowl, Defensive proteins kill bacteria invading mouse cells by delivering deadly sacs of antimicrobial chemicals".
- MedicalXpress:http://medicalxpress.com/news/2011-05-key-weapons-immunearsenal.html
- 20. Bougnères L<sup>§</sup>, Helft J<sup>§</sup>, <u>Tiwari S</u><sup>§</sup>, et al. (2009). A role for lipid bodies in the cross-presentation of phagocytosed antigens by MHC class I in dendritic cells. *Immunity*. 31(2): 232-44.
  - §Authors contributed equally to this work.
- This article was highlighted in the IMMUNITY PREVIEWS. Michel Desjardins. (2009). The Good Fat: A Link between Lipid Bodies and Antigen Cross presentation. Immunity. 31(2): 176-178.
- 21. <u>Tiwari S</u>, Choi HP, Matsuzawa T, Pypaert M, MacMicking JD (2009). Targeting of the GTPase Irgm1 to the phagosomal membrane via PtdIns(3,4)P(2) and PtdIns(3,4,5)P(3) promotes immunity to mycobacteria. *Nature Immunology*. 10: 907-17.
  - This article is highlighted in NEWS AND VIEWS in Nature Immunology. Kuijl C & Neefjes J (2009). New insight into the everlasting host-pathogen arms race. Nature Immunology. 10(8): 808-809.
- 22. <u>Tiwari S</u>, Macmicking JD (2008). Bacterial phagosome acidification within IFN-gamma-activated macrophages: role of host p47 immunity-related GTPases IRGs), *Methods in Molecular Biology*. 445: 407-15.
- 23. Shenoy AR, Kim BH, Choi HP, Matsuzawa T, <u>Tiwari S</u>, MacMicking JD (2007). Emerging themes in IFN-gamma-induced macrophage immunity by the p47 and p65 GTPase families. *Immunobiology*. 212: 771-84.
- 24. <u>Tiwari S</u>, Kishan KV, Chakrabarti T, Chakraborti PK (2004). Amino acid residues involved in autophosphorylation and phosphotransfer activities are distinct in nucleoside diphosphate kinase from *Mycobacterium tuberculosis*. *J. Biol. Chem.* 279: 43595-603.

# Complete list of my bibliography: Sangeeta Tiwari Bibliography

**Patent:** "Tiwari S<sup>@+</sup>, WR Jacobs Jr<sup>@+</sup> (June 6, 2023). Double auxotrophic Mycobacterium and uses thereof", United States Patent, Patent No. US11,666,648 B2, Albert Einstein College of Medicine, NY.

## MENTORING, SUPERVISION AND TEACHING EXPERIENCE

- 2020- Assistant Professor, UTEP, El Paso, Dept. of Biological Sciences. Teaching Courses: Animal models of the diseases (<u>course developed by me</u>), Advanced Topics in Molecular Biochemistry, General Microbiology, Microbial Physiology (modified), Advanced Immunological Concepts Teaching and Mentoring graduate students, postdoctoral fellows, U-RISE and G-RISE Guest lectures.
- 2018-19 (Spring) Instructor, Clinical Microbiology/Infectious diseases Lab course, Albert Einstein College of Medicine, Dept. of Medicine/Infectious Diseases.
- 2017-19 (Spring) Adjunct Professor, CUNY Lehman College, New York, Dept. of Biology. "Immunology" course.
- 2012-19 Mentored several graduates, undergraduate, high school students and technicians at Albert Einstein college of Medicine, Dept. of Microbiology and Immunology.
- 2008-10 mentored graduate and undergraduate students, Yale University, Section of Microbial Pathogenesis ADDITIONAL RELATED PRESENTATIONS, OUTREACH AND VOLUNTEERING ACTIVITIES

# Student /Postdoc Presentation:

- Ana M Vargas (Graduate), Abraham V. Mundo (Graduate) and Azul Gomez (undergraduate) selected for poster presentation at ASM Rio Grande meeting (2022)).
- Bhargavi Gunapati (fellow) and Ana M Vargas (Graduate) from my lab also had poster at international conference "Tuberculosis Keystone Symposia 2022".
- UG students have presented in COURI symposia 2023 at UTEP
- ASM Rio branch meeting 2023 (Ana M Vargas, graduate student, Eduardo Ibarra & Yoome Han, UG student were awarded best poster award and postdoctoral fellow Gunapati Bhargavi as best oral presentation award.
- Gunapati Bhargavi from my lab received ARCBS travel award (2023)
- Dr. Mohankrishna Mallakuntla received Peggy Cotter Travel award for poster presentation in ASM Microbe, Atlanta (2024)

#### Others

- Fellowships received by Undergraduate students: RISE fellowship to Jordan Watson (2024), Jose A Barraza flores (LSAMP, 2023), Diya A Vanmali (Bridges, 2021), Brandon Zavala (Bridges, 2020), Luisa Dominguez (Building Scholars).
- Peggy Cotter Travel award to Dr. Mohankrishna Mallakuntla for ASM Microbe, Atlanta (2024)
- Poster presentation at Keystone conference, Keystone Colorado (March 25-27, 2024)
- DNA Sequence Data Analysis using R Programming: Bioinformatics Workshop (Jan 20-22, 2024)
- Invited presentation at Baylor College of Medicine\_UTEP "All of Us" research program 2023, (October 10). Rare Genetic Variants Are Candidates for Driving Inflammatory Bowel Disease (IBD) in Ethnic populations.
- Poster presentation at GRC (2023), Barcelona, Spain.
- Invited presentation at Keystone Symposia 2022, (August 2- 4), Breckenridge, Colorado.
- Certification in Human Intestinal Organoid Training. (May10-12,2022) from STEM Cell (Online)
- Invited presentation in international conference on Bio-electronics and informatics in present scenario 2020, "Drug Targeting of De novo arginine biosynthesis pathway for treatment of Tuberculosis," Shobit University, India (June 26, 2020).
- Selected for participation in I-Corp Regional program (NSF funded, August 4, 2021).
- Attended "Next generation Assays for vaccine development", NIH, 16-17 Sep2020.
- Attended Keystone symposia on Tissue Organoids as models. Vancouver. BC. Jan19-22. 2020.
- Presented poster at Keystone Symposium, 2022
- Presented poster at Keystone Symposium, 2021
- Presented poster at Keystone Symposium, Banff, Canada, 17-22 Jan 2019.
- Presented poster at 5<sup>th</sup> global forum on TB vaccines, India, 20-23 Feb 2018.
- Presented poster at 3<sup>rd</sup> annual CTVD meeting, Seattle, 21-23 June 2017.
- Presented Poster at Developing Functional Assays for TB Vaccine R&D: An Aeras / NIAID Workshop, 2016.

- World TB Day Symposium: Countdown to 2015, New York academy of Sciences, 2014.
- Presented Poster at Fourth Annual New England TB Symposium, Broad Institute, Cambridge, MA, 2010
- Presented Poster at Annual Microbiology Retreat, West brook, CT, 2007-2010.
- Presented Poster at Keystone Symposium on Molecular and Cellular Biology, Tuberculosis: From Lab Research to Field Trails (C6), Vancouver, BC, 2007
- Presented Poster at Annual Microbiology Retreat, West brook, CT, 2006

### **Public Services**

- RCMI Abstract Reviewer for 2024 RCMI Consortium National Conference (2024)
- Judge at COURI program at UTEP for poster presentation (22 April 2023)
- Poster Judge in Bioscience symposia 2023
- Poster Judge in Sun County regional Science fair (2023).
- Invited speaker for Osher Lifelong Learning Institute, UTEP (Nov10, 2022)
- Served as Science fair Judge for Socorro Independent School district, high school students, 2022, El Paso.
- Judge for SISD High School Science Fair (2022),
- Faculty Mentor for 2021 NIH DPC, Mentor Judge for National Diversity in STEM Conference SACNAS (2022),
- Virtual Research Symposium (March 28, 2021),
- I was also highlighted in media by a UTEP student Alejandra Sanchez a Student Graphic Designer at the Dean's Office for the College of Science working on UTEP diversity project.

### **Institutional and Department services**

- Department Chair search committee 2023-2024,
- UTEP ambassador for "All of Us Database Program" (2023- present)
- UTEPNIH-First committee for hiring 6 assistant professors 2023-2024,
- Meeting with Seminar speakers for all the searches
- Committee member for University Infrastructure committee (2022-present)
- Cancer search committee 2021,
- Speaker invitations (Dr. David Sherman, Dr. Vanessa Sperandio, Dr. Selvakumar Subbian, Dr. Smriti Mehra)
- Member of the faculty senate at UTEP (2022-present)
- Brought UTEP as member of CTVD (Bill gates foundation 2021-present)
- Started Infectious disease journal club 2020. Funded proposal