Texas State University Vita

I. Academic/Professional Background

A. Name: **Micaela Vargas** Title: Associate Professor of Instruction
Department of Biology Tel: 512-245-5169
Texas State University Fax: 512-245-8713
San Marcos, TX 78666 Email: mv37164@txstate.edu

B. Educational Background

Degree	Year	University	Major Thesis/Dissertation
Ph.D.	2009	University of Texas at San Antonio	Cell and Molecular Biology
M.S.	2004	University of Texas at San Antonio	Biology/Molecular Genetics
B.S.	2000	Texas State University	Biology

C. University Experience

Position	University	Dates
Associate Professor of Instruction	Texas State University	2024- Present
Lecturer, Biology	Texas State University	2018 – 2024
Lecturer, STEM	College of Western Idaho	2017 - 2018
NIH Postdoctoral Research Fellow	University of Illinois, Chicago	2010 – 2014
Lecturer, Biology	Northwest Vista College	2008 – 2009

D. Relevant Professional Experience

Position	Entity	Dates
Panel Reviewer	NSF SBIR/STTR	2023-Present
Faculty Facilitator	TXST FIAP	2022-2025
Faculty Facilitator	NSF-I Corps	2018-2024
Founder/Director	VidaBio, LLC	2015 - Present
Co-Founder/Lab Director	Advanced Genomics, LLC	2015 – 2016
Research Consultant/Startup	Scigofer	2014 - 2017
Consultant/Instructor	Persistent Scientific, Inc.	2014- Present
Teaching Assistant	University of Texas at San Antonio	2007 – 2008

II. Scholarly/Creative Activities

A. Refereed Journal Articles (*Student Authors)

6. Chu, K*, The effect of UV light on the CaCl2/PEF 3350/DMSO transformation buffer for CRISPR *Cas9* edited *E. coli*. Young Scientist Journal. 2019.

5. Tsang, KM, Hyun, JS, Cheng, KT, **Vargas, M**, Mehta, D, Ushio-Fukai, M, Zou, Pajcini, KV Rehman, J,

and Malik, AB, Embryonic Stem Cell Differentiation to Functional Arterial Endothelial Cells through Sequential Activation of ETV2 and NOTCH1 Signaling by HIF1a. Stem Cell Reports 2017.

4. Ansenberger-Fricano, K, Ganini, D, Saquib Baig, M, Hart, P, Mao, M, Thierault, K, Green, P, **Vargas, M**, Kajdacsy-Balla, A, Bera, S, Diamond, AM, Minshall, RD, Santos, JH, and Bonini, MG., SOD2 Promotes the metabolic reprogramming and sustains the Warburg effect via AMPK-dependent signaling in cancer. Nature Communications 2014.

3. Ansenberger-Fricano, K, Ganini, D, Mao, M, Baig, MS, **Vargas, M**, Green, P, Santos, JH, Kajdacsy Balla, A, Stadler, K, and Bonini, MG, MnSOD upregulation in mitochondria activates AMPK and Sustains glycolytic metabolism in breast cancer. Cancer Cell. March 2013.

2. **Vargas, M**, Karamsetty, R, Leppla, SH, and Chaudry, GJ, Broad expression analysis of human ANTXR1/TEM8 transcripts reveals differential expression and novel splice variants. PLoS One. 2012.

1. MacDougall, CA., **Vargas, M**, Soares, CR, Holzer, GR, and Jorcyk, CL, Involvement of HGF/SF-Met signaling in prostate adenocarcinoma cells: evidence for independent mechanisms leading to a metastatic phenotype. The Prostate. 2005.

B. Refereed Journal Articles in Review (* Student Authors)

4. Lopez, G.*, Tat K.*, and **Vargas, M**. Elucidating the Novel Gene KIAA1143 and its Link to the Cell Cycle and Cancer Phenotypes. (Manuscript in preparation)

3. **Vargas, M**, Li, F, Yazbeck, P, Rehman, J, Mehta, D, and Malik, AB, Hypoxia induces mESC differentiation into endothelial cells by modulating HIF1a expression. (Manuscript in preparation)

2. Jimenez, R, Manam, S, **Vargas, M**, Karamsetty, R, Selvaraj, S, Chang, A, Cohen, S, Leppla, SH, and Chaudry, GJ, The carboxyl-terminal divergent peptides of CMG2 are essential for its function as an anthrax toxin receptor. (Manuscript in preparation)

1. **Vargas, M**, Jimenez, R, Manam, S, and Chaudry, GJ, Capillary Morphogenesis Gene 2: A broad expression profile of its splice variants in human tissues. (Manuscript in preparation)

C. Publication Recognition

None

D. Miscellaneous Publications

None

E. Book Reviews

None

F. Papers Presented at Professional Meetings (* Student Authors)

20. G Lopez* and M Vargas. 2024. Elucidating the Novel Gene KIAA1143 and its Link to the Cell Cycle and Cancer Phenotypes. SACNAS National Conference, Phoenix, Arizona.
19. JA Perez* and M Vargas. 2023. Characterization of a novel E3 Ligase, RNF175. SACNAS National Conference, Portland, Oregon.
18. JA Perez* and M Vargas. 2023. Characterization of RNF175, a Novel Ring Finger E3 Ligase. Spring TXST STEM Conference.
17. LA Umali*, M. Resendiz, and M. Vargas. Including Filipino American and Filipino Perspectives in the development of the Nurture Neurodiversity App. SACNAS National Conference, San Juan, Puerto Rico.
16. M Vargas, S Sukriti, P Yazbeck, F Li, J Rehman, D Mehta, and AB Malik. 2012. Hypoxia induces mESC differentiation into endothelial cells by modulating HIF1□□and PKC□□expression. 2012 ICCSR Roddenberry International Symposium on Cellular Reprogramming, San Francisco, California.

15. M Vargas, S Manam, and GJ Chaudry. 2009. Capillary morphogenesis gene 2: A broad expression profile of its splice variants in human tissues. ASCB National Conference.
14. M Vargas, R Karamsetty, and GJ Chaudry. 2009. A broad splice variant-specific expression analysis of human tumor endothelial marker 8 (TEM8;atr1). SACNAS National Conference.
13. M Vargas, and GJ Chaudry. 2008. Analysis of CMG2 expression in normal and cancerous human prostate. ASCB National Conference.
12. M Vargas, and GJ Chaudry. 2008. Analysis of TEM8 and CMG2 transcripts in normal and cancerous prostate tissues. SACNAS National Conference.
11. M Vargas and GJ Chaudry. 2008. TEM8 and CMG2 expression in normal and cancerous prostate tissues. AACR National Conference, San Diego, California.
10. M Vargas and GJ Chaudry. 2007. Tissue-Specific and Developmental Expression of CMG2, A Gene Associated with Neo-Angiogenesis. ASCB National Conference.
9. M Vargas, SH Leppla, and GJ Chaudry. 2007. TEM8: A Gene that is Differentially and Developmentally Expressed. SACNAS National Conference.
8. M Vargas, SH Leppla, and GJ Chaudry. 2007. TEM8: A Gene that is Differentially and Developmentally Expressed. Fall Student Research Symposium. University of Texas at San Antonio.
7. BA Woynarowska, MA Vallejo, MD Losiewicz, and JA Woynarowski. 2005. Targeting of redox-controlling proteins of the thioredoxin family by oxaliplatin. The 96th Annual AACR Meeting.
6. M Munoz, RM Aguilar, M Vargas, AO Martinez, and LS Haro. 2005. Beta-mercaptoethanol resistant 45-kDa human growth hormone inhibits STAT activation in T47-D, MCF-7 and MDA-MB-231 human breast cancer cell lines. The Endocrine Society.
5. M Vargas, R Zamilpa, A Cassill, and RG LeBaron. 2004. Functional Regulation of the Extracellular Matrix Protein Beta-ig. 1st Annual Symposium RISE/MARC. University of Texas at San Antonio.
4. R Zamilpa, M Cormier, M Vargas, and RG LeBaron. 2004. Evidence that beta-ig protein undergoes c-terminal processing by various cell types. 2nd Annual Matrix Biology Meeting.
3. M Vargas, CR Soares, MA Shibata, J Green, and CL Jorcyk. 2002. Characterization of an *in vitro* model of PIN and its use in chemotherapeutic studies. 2002 44th Annual Idaho Academy of Science.
2. M Vargas, CA MacDougall, KD Lindsay, M Jeffers, and CL Jorcyk. 2001. Involvement of the Hepatocyte Growth Factor-Met Receptor Signaling Loop with the Classical "3M" Pathways in Tumor Progression of Mouse Prostate Adenocarcinoma Cells. Inland Northwest Cancer Conference.
1. CA MacDougall, KD Lindsay, M Vargas, M Jeffers, and CL Jorcyk. 2001. Involvement of Hepatocyte Growth Factor and its Receptor, Met in Tumor Progression of Mouse Prostate Adenocarcinoma Cells. The 92nd Annual AACR Meeting.

G. Invited Presentations

27. Pharmacogenomic Molecular Diagnostics: Emerging applications and the potential of KIAA1143 as a cancer biomarker, St Edwards University, October 21, 2025.
27. Minority Association Pre-Health Professions, Guest Speaker, LinkedIn Workshop: Building Your Brand & Your Story (2025)
26. National Association of Migrant Education (AMET) Conference, From the Fields to the Frontiers of Science. Keynote Speaker, (2025)
25. TXST STEM Conference Keynote Panel: One Health Strategies for Global Health Crisis, 2024
24. McNair's Scholars Fall Program Guest Speaker, TXST, 2023
23. Mentoring Graduate Students: Best Practices in Helping Students Soar; Panelist, TXST, 2023
22. Once a First Gen, Always a First Gen; Guest Speaker Graduate College, TXST, 2023
21. Latinas in STEM, Guest Speaker, Palo Alto College, 2022
20. Science of Hip-Hop Panelist, Department of Social Work, TXST, 2022
19. Honoring and Celebrating Latinx Alums at a Central Texas University. American Association of Hispanics in Higher Education. National Conference Oral Presentation, 2021
18. Honoring and Celebrating Latinx Alums at a Central Texas University. Texas Association of Chicanos in Higher Education, Conference Seminar, 2021
17. 1st Generation Panelist, LSAMP Scholars Meeting, Purdue University, 2020
16. The Technology and Science of PGx testing. Texas State University, Materials, Science, Engineering, Commercialization, 2020
15. Texas State University Project Maestros Invited Guest Presenter for Early College High School Girls in STEM 2019

14. Texas State University Women's Entrepreneurship Week Invited and Guest Panelist 2019
13. STEM Entrepreneurship. Texas State University, Microbiology Club, 2019
12. STEM Entrepreneurship. American Society for Microbiology (ASM) Texas Branch – Invited Guest Speaker 2019
11. Miss Diversity of Medicine, Alternatives in STEM careers. Guest Speaker. 2019
10. Texas State University Student Support Services (SSS) Summit Panel Presentation First-Gens Guest Panelist 2019
9. College of Western Idaho Keynote Graduation Address: CWI Nuestra Graduacion 2018
8. Hypoxia induces mESC differentiation into endothelial progenitor cells by activating HIF1a. Purdue University, Department of Biological Sciences, 2013
7. Hypoxia promotes the endothelial differentiation of murine ESCs. University of Illinois at Chicago, Department of Pharmacology, 2012
6. Hypoxia promotes the endothelial differentiation of murine ESCs. University of Texas San Antonio, RISE/MARCU*STAR Seminar Series, 2012
5. Expression analysis of ATRX1 and CMG2, anthrax toxin receptors. Beth Israel Deaconess Medical Center, Harvard Medical School, 2010
4. Expression analysis of anthrax toxin receptors. University of Illinois at Chicago, Department of Pharmacology, 2010
3. Expression analysis of anthrax toxin receptors. University of Cincinnati, Department of Environmental Health, 2010
2. Expression analysis of anthrax toxin receptors. UTSA Cell and Molecular Biology Seminar Series, Spring 2009
1. TEM8, a gene implicated in neo-angiogenesis, shows dramatic tissue-specific and developmental expression SACNAS National Conference, 2007

H. Research Awards

None

I. Grants and Contracts

None

Pending External Grants

None

Funded External Grants

2024-2025	Sloan Foundation, ($75,000)
2022	National Science Foundation, I-Corp ($50,000)
2022	National Science Foundation, I-Corp (Supplement extended)
2021	National Science Foundation, I-Corp, Fall ($3,000)
2021	National Science Foundation, I-Corp, Spring ($3,000)
2019	National Science Foundation, I-Corp, ($3,000)
2012-2014	Post-doctoral Fellowship, NIH NHLBI HL090152-06S1 ($60,000)
2013	Scientist Mentoring & Diversity Award
2010-2012	Post-doctoral Fellowship, NIH Training Grant T32 HL7829-16 ($50,000)
2009	FASEB/MARC Travel Award
2008-2009	Alfred P. Sloan Minority Fellowship ($40,000)
2007	AT&T Foundation Presidential Award ($1000)
2007	American Society for Cell Biology (ASCB) Honorarium Poster Award ($200)
2007-2010	American Society for Cell Biology (ASCB)/Minority Affairs Committee Travel Award (4x

awardee)
2004-2008 Graduate Research Fellowship, NIH
2004-2009 SACNAS Travel Award (6x awardee)
2002-2004 Graduate Research Fellowship, NIH

Submitted but Not Funded External Grants

2023 Irvin, Jennifer A. (Principal), Minifie, Jana R. (Co-Principal), Venumbaka, Reddy (Co-Principal), Villagran, Melinda M. (Co-Principal), Weigum, Shannon E. (Co-Principal), Beverly, Harlan T. (Supporting), Luo, Xiaohua (Supporting), Vargas,Micaela (Supporting), Wang, Feng (Other), Resendiz, Maria D. (Other). ART: Texas State University Innovation Accelerator Program, National Science Foundation,Federal, $5,970,261.00. Not Funded: (Submitted: May 23, 2023).

Pending Internal Grants

None

Funded Internal Grants

None

III. Teaching

A. Teaching Honors and Awards

None

B. Courses Taught

2025 Texas State University

Undergraduate courses:
Honors Thesis (HON 4390B), Honors College
Ecology, Evolution, and Society, (BIO1321), Department of Biology (2 Sections)
Cancer Biology (BIO4311), Department of Biology
Cancer Biology (BIO4311), DO1 online Distance Learning
Accelerated Online Program (AOP)
Ecology, Evolution, and Society (BIO1321) (AOP)
Graduate courses:
Cancer Biology (BIO5311), Department of Biology

2024 Texas State University

Undergraduate courses:
Honors Thesis (HON 4390B), Honors College
Ecology, Evolution, and Society, (BIO1321), Department of Biology (2 Sections) (MULTI Designation)
Cancer Biology (BIO4311), Department of Biology
Cancer Biology (BIO4311), DO1 online Distance Learning
Graduate courses:
Cancer Biology (BIO5311), Department of Biology

2023 Texas State University

Undergraduate courses:
Honors Thesis (HON 4390B), Honors College
Ecology, Evolution, and Society, (BIO1321), Department of Biology (2 Sections) (MULTI Designation)

Cancer Biology (BIO4311), Department of Biology
Cancer Biology (BIO4311), DO1 online Distance Learning
Graduate courses:
Cancer Biology (BIO5311), Department of Biology

2022 Texas State University

Undergraduate courses:
Ecology, Evolution, and Society (BIO1321), Department of Biology (4 Sections)
Cancer Biology (BIO4311), Department of Biology
Cancer Biology (BIO4311), DO1 online Distance Learning
Graduate courses:
Cancer Biology (BIO5311), Department of Biology

2021 Texas State University

Undergraduate courses:
Ecology, Evolution, and Society (BIO1321), Department of Biology (4 Sections)
Cancer Biology (BIO4311), Department of Biology
Graduate courses:
Cancer Biology (BIO5311), Department of Biology

2020 Texas State University

Undergraduate courses:
Ecology, Evolution, and Society (BIO1321), Department of Biology (4 Sections)
Cancer Biology (BIO4311), Department of Biology
Graduate courses:
Cancer Biology (BIO5311), Department of Biology

2019 Texas State University

Undergraduate courses:
Ecology, Evolution, and Society (BIO1321), Department of Biology (4 Sections)
University Seminar (US1100), University College

2018 Texas State University

Undergraduate courses:
Ecology, Evolution, and Society (BIO1321), Department of Biology (4 Sections)

2017 College of Western Idaho

Undergraduate courses:
Microbiology (MMBS111), Department of Biology
Microbiome (MMBS106), Department of Biology
Biology (BIOL111), Department of Biology
Concepts of Biology (BIOL100), Department of Biology

2016 St. Mary's University

Undergraduate courses:
Forensic Science Techniques (CJ), Department of Criminal Justice

2015 Rosetta Institute of Biomedical Research, UCLA, Cal Berkeley

Undergraduate courses:
Molecular Neuroscience

Molecular Biology of Cancer

Molecular Biology of Aging

2010 Northwest Vista College

Undergraduate courses:

General Biology I (BIO1406), Department of Biology

Principles of Biology (BIO1308), Department of Biology

2009 Northwest Vista College

Undergraduate courses:

General Biology I (BIO1406), Department of Biology

Principles of Biology (BIO1308), Department of Biology

Nutrition (BIO1322), Department of Biology

2009 University of Texas at San Antonio

Undergraduate courses:

TA, Biosciences I (BIO1404), Department of Biology

Graduate courses:

Microbial Genetics (BIO5363), Department of Biology

2008 University of Texas at San Antonio

Undergraduate courses:

MBRS undergraduate professional development course

Graduate courses:

Tutor, Biochemistry (BIO5113), Department of Biology

C. Graduate Theses/Dissertations Graduate Students Supervised:

None

D. Supervised Graduate Student Accomplishments (Awards and Scholarships):

None

E. Graduate Student Committees:

7. Tayyaba Tun Nur Tanjum (M.S. exp. 2027). Biology, TXST.
6. Niharika Bhattarai (exp. 2026). Molecular Buoys for early cancer detection through liquid biopsy. Biology, TXST.
5. Salina Malek (exp. 2026). Comparing the sensitivity of Kelly cells to differentiation-inducing MiR-506-3p and Retinoic Acid treatment. Biochemistry and Chemistry, TXST.
4. Patricia A. Gallegos Elias (M.S. 2024). The Mechanism of Mms21-mediated Sumoylation within the holo-Smc5/6 Complex in DNA Damage Repair. Biochemistry and Chemistry, TXST.
3. Lois Umali (M.S. 2024). Neurodivergent Perspectives of Emotional Learning. Communication Disorders, TXST.
2. Samantha Lopez (M.S. 2023). Biology, TXST.
1. Carlos Baca (M.S. 2019). Functional genomics of *Batrachochytrium dendrobatidis.* Biology, TXST.

F. Current Graduate Student Committees:

5. Tayyaba Tun Nur Tanjum (M.S. exp. 2027). Biology, TXST.
4. Niharika Bhattarai (M.S. exp. 2026). Molecular Buoys for early cancer detection through liquid biopsy, TXST.
3. Salina Malek (M.S. exp. 2026). Comparing the sensitivity of Kelly cells to differentiation-inducing MiR-506-3p and Retinoic Acid treatment, TXST.

2. Patricia A. Gallegos Elias (M.S.) Biochemistry and Chemistry, Texas State University
1. Lois Umali (M.S.) Communication Disorders, Texas State University
2. Samantha Lopez (M.S.) Biology, Texas State University
1. Carlos Baca (M.S.) Biology, Texas State University

G. Undergraduate Projects Supervised:

5. Paige E. Coltman (B.S. Biology, 2025-exp. 2026). Undergraduate Honors Thesis.
4. Kevin Tat (B.S. Biology, 2025-exp. 2026). Undergraduate Honors Thesis. KIAA1143, a potential cancer biomarker.
3. Giselle Lopez (B.S. Biology, 2023-2025). Undergraduate Honors Thesis. Elucidating the Novel Gene KIAA1143 and its Link to the Cell Cycle and Cancer Phenotypes.
2. Jennifer Perez (B.S. Biology, 2022-2023). Undergraduate Honors Thesis. Characterization of RNF175.
3. Bryan Cruz (B.S. 2020-2022). Undergraduate Research Program.
2. Jihwan Hwang (H.S. 2017-2018) The Effect of ZFAS1 lncRNA Expression in Prostate Cancer.
1. Katelyn Chu (H.S. 2017-2018). The Effect of UV light on the CaCl2/PEF 3350/DMSO transformation buffer for CRISPR Cas9-edited E. coli.

H. Courses Prepared and Curriculum Development

2026 BIO5316 Graduate Genomics, Texas State University, Department of Biology
2026 BIO4312 Genomics, Texas State University, Department of Biology
2025 Health Informatics, Columbia University
2025 Ecology, Evolution, and Society, Texas State University, Accelerated Online Program (AOP)
2024 Professional Development Workshop in Engaging and Empowering Teaching Methods by the Motivating and Education Research Group of University of Southern California (USC MERG).
2023 Ecology, Evolution, and Society, Texas State University, Department of Biology, MCTRI Syllabus Transformation. MULTI designation.
2018 Ecology, Evolution, and Society, Texas State University, Department of Biology
2017 Molecular Biology of Aging, Rosetta Institute of Biomedical Research, University of California, Berkeley
2016 Bioinformatics of Cancer, Rosetta Institute of Biomedical Research, University of California, Berkeley
2014 Molecular Biology of Cancer, Rosetta Institute of Biomedical Research, University of California, Berkeley
2013 Molecular Biology of Neuroscience, Rosetta Institute of Biomedical Research, UCLA

I. Funded External Teaching Grants

None

K. Submitted but not Funded Internal Teaching Grants

None

IV. Service

A. Committees

University Committees:

18. Texas State FIAP program, Faculty Facilitator, (2022; 2023; 2024; 2025)
17. Texas State I-Corps regional program (2018-2024)
16. Muriel M. Muir Excellence in Mentoring Committee (2023-2024)
15. Texas State University Affinity Group Candidate Interviews; Kevin Collins, Dean, College of Health Professions (2023)
14. Texas State University Affinity Group Candidate Interviews; Gary Sayed, Dean, College of Health Professions (2023)
13. Texas State University Affinity Group Candidate Interviews; Marlene Salas-Provance, Dean, College of Health Professions (2023)

12. Texas State University Naming Task Force Research Subcommittee; Honoring Latina/o/x and Black Communities (2020-2021)
11. Texas State University Naming Task Force Committee; Honoring Latina/o/x and Black Communities (2020-2021)
10. Life Anew Restorative Justice – Faculty of Color Committee Representative (2021)
9. Texas State University Affinity Group Candidate Interviews; Criminal Justice and Criminology Dean (2021)
8. Hispanic Policy Network (HPN) Executive Board Member; Interim Treasurer (2020-2021)
7. Texas State University Affinity Group Candidate Interviews; Vice President Student Affairs (2020)
6. Texas State University Affinity Group Candidate Interviews; McCoy School of Business Dean (2020)
5. Texas State University Affinity Group Candidate Interviews: Equity and Inclusion Analyst (2019)
4. Texas State University Affinity Group Candidate Interviews: Counseling Center Director (2019)
3. Faculty of Color (FoCats); Co-Facilitator (2019 - 2025)
2. Hispanic Policy Network (HPN) Scholarship Committee (2019 - 2023).
1. Hispanic Policy Network (HPN) Executive Board Member; Treasurer (2019-2020).

College of Science Committees:

3. 60th Anniversary COSE Planning Committee (2025-Present)
2. SEU to TXST: STEM Graduate Pathways; Sloan Grant Planning Committee, St. Edwards University and TXST, (2025-Present)
1. COSE Graduate Student Recruitment Committee (2024- Present)

Departmental Committees and other Service:

3. CREST Center for Bioinformatics TXST (2024- Present)
2. Department of Biology, Eben-Elledge Scholarship Committee (2024- Present)
1. Department of Biology Strategic Planning Committee (2021 – 2024)

Departmental Job Search Committees:

3. Department of Biology, Chair Search Committee (2024 – 2025)
2. Department of Biology, Chair Search Committee (2023 – 2024)
1. Department of Biology, Microbiology (microbial functional genomics) Faculty Cluster Search Committee (2023 - 2024)

B. Community Service:

80. Online and Extended Programs: PDF Accessibility (2025)
79. Developing Leadership & Professional Influence: Mastering the Art of Professional Influence (2025)
78. Faculty Development: Promotion for Non-Tenure Line Faculty (2025)
77. US1100 Interview Rylie Pennington (Fall 2025)
76. St. Edwards University Student Visit, TXST Host, (2025)
75. Destination Imagination, Capital Region Board Member, 2023-present)
74. HAYS CISD High Five Award (2025)
73. YWIB Ambassador College Prep Part 3 Workshop, (2025)
72. WIB Sponsorship Impact Workshop, (2025)
72. Destination Imagination Team Manager, Nature Crew, Pfluger Elementary School, State Qualifier (2025)
71. Team Manager of the Year, Destination Imagination, (2024-2025)
70. Destination Imagination, Scholarship Review Committee, (2025)
69. YWIB Ambassador College Prep Part 2 Workshop, (2025)
68. HAYS CISD VIPS Volunteer of the Year (2024)
67. Invited Podcast, Eat Your Greens with Dr. Angela Black (2024)
66. YWIB Ambassador College Prep Part 1 Workshop (2024)
63. 2024 National YWIB Fall STEM Activity, Chair/Speaker (2024;2025)
62. National YWIB Ambassador Recognition Event (2024;2025)

61. Hosted Bay City High School at Texas State University Spring (2024).
60. National DNA Day Workshop 3rd Grade Pfluger Elementary School (2024)
58. Department of Biology Colloquium Judge (2024; 2025)
57. National YWIB STEMinist Conference (2024;2025)
56. National YWIB Conference LinkedIn (Branding) (2024; 2025)
54. Interviewed for -The Buzz (A Vape Documentary) (2023)
53. Hosted Wheatley High School at Texas State University Fall (2023)
52. YWIB Ambassador Suturing Workshop and Career Panel (2023-Present)
51. YWIB National Ambassador Fall Conference, Co-Chair (2023-Present)
50. YWIB National Ambassadors Welcome Meeting, (2023; 2024, 2025)
49. Faculty Advisor to Latinas in Research Texas State University (2023 - Present)
48. Co-Faculty Advisor to Latinas Unidas (LA) Texas State University (2022 – 2023)
47. Faculty Advisor to Minority Association for Pre-Health Organization (MAPP) Texas State University (2020 – Present)
46. Co-Chair: YWIB Texas Careers in Aerospace Panel and CAD Bottle Rocket (2022)
45. Co-Chair: YWIB/WIB Speed Mentoring In STEM Careers, college and high school girls interested in STEM Careers event. (2022)
44. TXST Hosted Eastside Memorial High School Lab Tours (2022)
43. Destination Imagination, Ralph Pfluger Elementary School, Team Manager STEAM Program program (2021 – Present)
42. Spring Into STEM: National Keynote Event, On the Biotech Frontier: Women Pioneers in Gene Therapy (2021)
41. PTA, Ralph Plfuger Elementary School, Parent Volunteer (2021-Present)
40. Invited Speaker Soda Springs High School; How Genes Can (2021)
39. Hosted Eastside Early College High School campus tour and presentation (Summer Institute) (2021)
38. Co-Chaired the Young Women in Bio: Mental Health in Teens Virtual Panel Discussion Event (2021)
37. Young Women in Bio Ambassadors Virtual Conference Chapter Mentor (2020 & 2021)
36. John Jay Science & Engineering Academy High School Research Fair Judge (2020 - 2021)
35. Guest Speaker for University Seminar US1100 (2 sections) (2020-2021)
34. Texas State University: University Seminar Faculty Interviewed by two undergraduate students in different sections (2020-2021).
33. Ralph Pfluger Elementary School, Mrs. Mangelsdorf's Kindergarten Class: Virtual presentation and activity Isolating Strawberry DNA (2021))
32. Women of Color Forum (2020)
31. Hispanic Policy Network (HPN) Research Poster Judge (2020)
30. Women In Science & Engineering (WISE) Poster Judge (2020)
29. Young Women in Bio Texas Chapter Showcase Diversity and Inclusion Latinas in STEM (YWIB TX 1 YWIB TX 2) (2020)
28. California Crosspoint Academy Invited Guest Speaker; Careers in STEM (2020)
27. Young Women in Bio – Texas Chapter; Developed and recorded a teaching module on COVID-19: How Federal Agencies Respond To Emerging Health Threats Via Diagnostics. (2020)
26. Texas State University: University Seminar Faculty Interviewed by three undergraduate students in different sections (2019).
25. Texas State University Department of Biology Colloquium Poster Judge (2019)
24. Alamo Regional Science and Engineering Fair Judge (2019 - Present)
23. Alamo Junior Academy of Science Fair Judge (2019 -2022)
22. Rocky Mountain High School Guest Speaker (2019)
21. Texas State University First-Gen Networking Event, Faculty volunteer (2019)
20. Texas State University Naturalization Ceremony, volunteer (2019)
19. Texas State University Hispanic Policy Network (HPN) Symposium, volunteer (2019 & 2020)
18. Young Women in Bio – Chicago Chapter Spring into STEM event: Facility Tour of Abbott Molecular Diagnostics (AMD) with middle school girls (2019).
17. University of Illinois Early Outreach Program: Interactive Workshops – Glucose, Lactose, Oh' My (2019).
16. Guest Seminar: STEM Entrepreneurship. Texas State University Microbiology Club (2019)
15. Hosted Eastside Early College High School to Texas State University as guest students and campus tour (2019).

14. Faculty Presentation for First-Generation: Eastside Early College High School students (2019).
13. Annual Science Fair Young Women's Leadership Academy, Science Fair Judge (2018 & 2021)
12. Texas State University Faculty Appreciation Dinner Zeta Tau Alpha: nominated by my students. (2018)
11. Syringa Middle School Career Day Speaker (2018)
10. Nominated Bobcat Preview (2018)
9. McKinney Boyd High School Science Club Guest Speaker (2018)
8. Texas State University: University Seminar Faculty Interviewed by four undergraduate students in different sections (2018).
7. University of Illinois Early Outreach Program: Interactive Workshop - How Do Inventors Protect Their Inventions (2018).
6. University of Illinois Early Outreach Program: Interactive Workshops - Decoding DNA (2018).
5. Young Women in Bio – Chicago Chapter and Ladies of Virtue students on a guided tour of Garfield Park Conservatory Alliance. (2018)
4. Young Women in Bio – Chicago Chapter Spring into STEM event: Tour of mHUB: a makerspace of Chicago (2018).
3. St. Edwards 6th grade girls scout troop: STEM workshop leader (2018).
2. University of Texas at San Antonio, Faculty adviser to Sigma Lambda Beta Multicultural Fraternity (2008 – 2009)
1. Texas State Exxon Mobile Science and Engineering Fair, Science Fair Judge (2003 – 2010)

C. Professional Service:

70. TXST McNair Mentor (2023-Present)
69. TXST U-RISE Advisory Board (2024-2025)
68. TXST McNair Scholars Program Advisory Board (2023-Present)
67. NSF SBIR/STTR Phase I Panel Review (2023; 2024; 2025)
66. CAMINOS for Success Summer Institute (2024)
64. Judge Finals Projects for MGT4353 Integrative Field Project course (2024)
63. SACNAS Travel Scholarship Committee (2023-Present)
62. SACNAS Research Presentation Committee (2023-Present)
61. CAMINOS for Success Faculty Mentor (2023-2025)
60. Invited Speaker Series Podcast: Eat Your Greens with Dr. Angela Black.
59. Co-Chair Third Annual 1sr Generation Latinas in STEMpreneur event (2024)
58. Capital Region Board Member Destination Imagination, (2023 – Present)
57. National Co-Chair Young Women In Bio (YWIB), (2023 – Present)
56. Society for the Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS): Mentor Judge for the national conference (2022 - Present).
55. National Science Foundation, I-Corp Business Development workshop (2022)
54. Co-Chair, Second Annual 1st Gen Latinas in STEMpreneurship (2022)
53. Co-Chair, Science of Hip-Hop event symposium (2022)
52. Co-Chair, STEMinitas event symposium (2022)
51. Women in Bio Strategic Planning Committee (2022)
50. Young Women In Bio (YWIB) – Texas Chapter Co-Chair (2021- 2024).
49. Co-Chair STEMinitas Meet STEMinists: Building Bridges Through Partnerships (2022)
48. Careers in Aerospace Panel and CAD Bottle Rocket Competition (2022)
47. TXST Co-Chair 1st Gen Latinas in STEMpreneurs event. Featured three invited panelists from M.D. Anderson Cancer Center, Microsoft, and Baptist Health Hospital. (2021)
46. Women In Bio (WIB) Diversity & Inclusion Spotlight: Highlighted in national press release October (2021).
45. Women In Bio Texas Chapter (WIB) D&I Grant Reviewer (2021)
44. AISD Marketing and Marketing Interview for YWIB Texas Ambassador
43. Univision Spanish Television Interview: YWIB Texas Ambassador Program
42. Women In Bio Strategic Planning Texas Chapter Leadership Meeting (2021)
41. Texas State University Graduate College: Guest Panelist-Once a First Gen, Always a First Gen (2021)

40. Texas State University NSF I-Corp Program Spring/Fall Cohort (faculty facilitator and mentor) (2021)
39. Texas State University NSF I-Corp Faculty Mentor (2021)
38. Women In Bio Strategic Planning Leadership Board Meeting (2020)
37. Young Women In Bio – Texas Chapter; Developed COVID-19 Module Worksheets for YWIB Teachers (2020)
36. Young Women in Bio Spring Into STEM event (2020)
35. Texas State University NSF I-Corp Program Fall Cohort (faculty facilitator) (2020)
34. Texas State Innovation Series: Go To Market Guest Panelist (2020)
33. Purdue University Louis Stokes Alliances Minority Participation (LSAMP) Scholars Meeting; Invited Guest Panelist (2020)
32. College of Science and Engineering (COSE) Undergraduate Research Mentor (2020)
31. (COSE) Trained and mentored undergraduates in molecular biology techniques. Department of Biology (2020)
30. Young Women in Bio (YWIB): collaborated and developed the national e-newsletter for the current year (2019).
29. Young Women in Bio (YWIB) – Texas Chapter Chair (2019-2021).
28. Texas State University Women's Entrepreneurship Week Faculty Mentor (2019)
27. Texas State University faculty interview and video recording for First-Generation College Students (2019)
26. Professional Development: Empowering First Gen College Students (2019)
25. Professional Development: In Limbo: Undocumented Students (2019)
24. Professional Development: LGBTQiA Allies Training (2019)
23. Texas State University KTSW faculty interview for Earth Day 2019 (2019).
22. Nominated: Treasurer, HPN Executive Board FY (2019 – 2020)
21. Nominated: President Elect, HPN Executive Board FY (2019 – 2020)
20. University of Illinois Early Outreach Program, Volunteer Professional Monthly STEM projects. (2019)
19. Texas State University NSF I-Corps Technical Lead for Team Cohort (2019)
18. Texas State University NSF I-Corps Program Cohort 5 (faculty facilitator) (2019)
17. Hispanic Scholarship Consortium, Review Committee (2019 - Present).
16. Women in Bio (WIB) – Texas Chapter Leadership Board (2019 – Present).
15. Texas State Exxon Mobile Science and Engineering Fair, Scientific Review Committee. (2019-2020).
14. Texas State University Women's Entrepreneur Week (WEW) Faculty Mentor (2018).
13. Texas State University McCoy School of Business Faculty Judge: Business Development Plan Pitches (2018).
12. Young Women in Bio (YWIB): collaborated and developed the national e-newsletter (2018).
11. Young Women in Bio (YWIB): collaborated and developed the national website and chapter website for Chicago and Texas Chapters (2018 & 2021).
10. College of Western Idaho Invited Keynote Graduation Address: CWI Nuestra Graduacion (2018).
9. College of Western Idaho Faculty Advisor/Liaison Dual-Credit Teachers (2018 – Present).
8. Society for the Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS): Travel scholarship reviewer for the national conference (2018).
7. Society for the Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS): Research presentation reviewer for the national conference (2018).
6. Society for the Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS): Abstract reviewer for the national conference (2018).
5. University of Chicago Expand Your Horizons Conference; Workshop Leader. (2018)
4. University of Illinois Early Outreach Program, Volunteer Professional Monthly STEM projects. (2018)
3. Trained bioengineering doctoral student, Amelia Zellander (University of Illinois, Chicago) qPCR methods, primer, and assay development. (2012).
2. Young Women in Bio (YWIB) – Chicago Chapter Co-Chair (2012-2018).
1. Texas State Exxon Mobile Science and Engineering Fair, Scientific Review Committee. (2003 – 2010)

D. Field Courses:

None

G. Grant Proposal Reviews:

2. NSF SBIR/STTR Panel Reviewer (2024-2025)
1. Women In Bio, Diversity & Inclusion Grant (2021-2022)

F. Editorial Boards:

None

H. Journal Reviewer for:

3. Genomic Press Brain Medicine (2024)
2. Translational Psychiatry/Nature (2024)
1. Proceedings of the National Academy of Sciences (PNAS NEXUS) (2023)