
Pamela A. Padilla, Ph.D.
Associate Vice President of Research and Innovation
University of North Texas

EDUCATION

Fred Hutchinson Cancer Research Center University of North Texas, Seattle, WA, 1999-2002
NSF Post-Doctoral Fellow, Basic Science Division
Studies of suspended animation, hypometabolism, oxygen deprivation, chromosome biology, mitochondrial function, cell division, embryo development (zebrafish, *C. elegans*)

University of New Mexico, Albuquerque NM, December 1998
Ph.D. Biology, Molecular Genetics; Mentor: Margaret Werner-Washburne
Cell biology and molecular genetics, nutrient deprivation, stress responses, conservation of gene families, transcriptional regulation
Dissertation: Characterization of the SNZ and SNO Gene Families in Saccharomyces cerevisiae

University of New Mexico, 1993
B.S. Biology, Minor in Chemistry, HHMI Student Research Fellow

PROFILE

Pamela Padilla has over 20 years of experience in scientific research, scientific review, research and program management. Padilla developed an internationally recognized research program and rose through the academic and administrative ranks at the University of North Texas main campus. She is an innovative, creative, collaborative research scientist, with leadership, financial, and strategic planning experience across academia and non-profit organizations. In her role as Associate Vice President of Research and Innovation she focuses on research development across the university, manages core research facilities, oversees internal research seed funds, collaborates with Deans to guide research space usage, and works with all units of research administration including commercialization, technology transfer, contracts, sponsored projects grants, and compliance. She works closely with faculty, chairs, deans, central administration, postdoctoral fellows, graduate students, and university staff to catalyze a productive research environment that ensures integrity and safety to build and promote multidisciplinary teams, grow the overall research enterprise and train new researchers. Importantly, she works closely with the Vice President of Research and Innovation to effectively and efficiently manage the Division of Research and Innovation.

The UNT system is, located within the Dallas Fort Worth (DFW) region, is comprised of the UNT main campus in Denton, the Health Science Center in Fort Worth, and Dallas campus. The UNT main campus is a large state university, ranked a Carnegie 1 Research Institute, Hispanic Serving Institute, that serves over 40,000 students including students on the Denton main campus and newly formed Frisco campus. Padilla works closely with the Vice President of Research and Innovation (VPRI) to oversee the UNT main campus Division of Research and Innovation (DRI) that serves over 800 UNT faculty. The Division of Research and Innovation manages sponsored projects (pre- and post-award), contracts, intellectual property and patents, compliance, and research development. The Division currently oversees four research institutes and the center for advanced, agile, additive manufacturing (CAAAM). Padilla directly oversees the core research facilities including the materials research facility (MRF) and nanofabrication clean room, and provides oversight for the BioAnalytics facility, genomics facility, vivarium, and greenhouse facilities. The DRI manages 36% of the Indirect Funds (F&A) brought to the

university. The Division of Research and Innovation provides supportive services for over 78M of research expenditures which includes sponsored projects and institutional support. As AVPRI Padilla chairs the Research Space Adjudication Subcommittee which provides oversight to research space usage. Padilla, on behalf of UNT, has the delegation of authority to approve and execute certain contracts, purchase agreements related to research, and research/grant contracts that are exempt from legal review. Padilla and VPRI have worked closely with the office of the President to develop the strategic plan for UNT with a focus on the research. UNT main campus is an emerging research university that is strategically investing resources to increase research output. Given these aspects of UNT and the fact that the DFW region is one of the fastest growing, economically thriving regions within the country, such provided many career opportunities for Padilla to expand and develop her research and leadership experience.

Prior to her role as AVPRI Padilla was Associate Dean of Research and Graduate Studies for the College of Science (COS). With this role she worked closely with the COS Dean, Department Chairs, Associate Dean of Undergraduate Studies and the Development Director to provide support to the over 100 faculty and ~3500 students within the college. Padilla specifically focused on research services (supervised college research officers) and graduate student programs (supervised graduate student staff support). During her tenure as ADR the college increased the number of grant proposals and awards, increased seed funding for faculty, implemented graduate student recruitment strategies to increase diversity, and increased the tuition benefit support for students.

As a native to New Mexico, Padilla is deeply knowledgeable of the state, history, culture, and educational system, and aware of the federal government, national labs, and industry partnerships. She understands the strengths and opportunities New Mexico has to offer and some of the challenges that the state may face. As a UNM alumni she is familiar with the UNM south campus and north campus health science center. She understands the important aspect of collaborations and unique strengths between main campus, health science campus and other UNM campuses.

Padilla has a deep understanding of non-profit organizations that serve the research community. As President-elect and former board member/treasurer of the Society for Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS) she appreciates and recognizes that the importance of partnerships of non-profits, government, and industry with higher education academic institutes. In her role with SACNAS she works within the SACNAS executive director and staff, SACNAS finance committee and SACNAS board of directors to set the annual budget for the organization. *Padilla is a passionate about higher education, cross-disciplinary research, technology and intellectual property, community building, strategic building, collaborations across sectors, serving societal needs, and the land of enchantment- New Mexico.* She strives to serve in her roles with integrity, empathy, gratitude, intellect, and logic.

ACADEMIC APPOINTMENTS

<i>Associate Vice President of Research and Innovation</i> Division of Research and Innovation, University of North Texas	2018 – present
<i>Associate Dean of Research and Graduate Studies</i> College of Science, University of North Texas	2017 – 2018
<i>Full Professor with Tenure</i> Biological Sciences, University of North Texas Biomedical Engineering, (adjunct) University of North Texas	2017 – present
<i>Associate Professor</i> Biological Sciences, University of North Texas	2008 – 2017

Administrative Fellow Office of the Provost and Faculty Success, University of North Texas	2017
Visiting Scientist Salk Institute La Jolla, CA	2010
Assistant Professor Biological Sciences, University of North Texas, Denton, TX	2002 – 2008
NSF Post-Doctoral Fellow Fred Hutchinson Cancer Research Center, Seattle, WA	1999 – 2002
Research Assistant Department of Biology, University of New Mexico, Albuquerque, NM	1994-1998
Teaching Assistant Department of Biology, University of New Mexico, Albuquerque, NM	1996
Student Trainee Kirtland Air Force Base	1989

ADMINISTRATIVE CHIEF DUTIES AND KEY ACHEIVEMENTS

Associate Vice President of Research and Innovation

Within the Division of Research and Innovation (DRI), Padilla serves as the associate research administrator and principal contact for many research-related efforts.

Chief Duties:

- Supervise core facility research staff – provide fiscal oversight and management of Material Research Facility (3 Engineering staff)
- Supervise the Assistant Director of Research Development
- Chair search committees for Division of Research Pre-award Director and Compliance staff positions (4 positions filled)
- Research Institutes and Centers – provide input on all fiscal related matters, overview, decisions, serve on search committee for research science staff positions
- Signature Authority – aligned with the VPRI duties (secondary to VPRI as needed)
- Internal seed funding – manage process, review, and distribution
- Collaborate with Associate Deans of Research – chair monthly meetings to receive and communicate on research-related activities
- Denton Business and Economic Board – meet monthly with city council members and local business community members; UNT representative (2018-2020)
- Policies and Procedures – Write and review policy and procedures related to research activities
- PI Handbook – Coauthor UNT PI Handbook for faculty
- Postdoctoral Association – provide mentorship to postdoctoral leaders, financial support
- Research Development – communicate with faculty groups to build and strategize research endeavors
- High Performance Computing Center – monthly meeting with director to strategize on building computational infrastructure and improve services
- Sponsored Project Data – Analyze and communicate research data to stakeholders

- COVID-19 Responses – Serve on three committees to mitigate and respond to COVID-19 (risk committee, research committee, academic committee); oversee and communicate aspects related to university-level COVID-19 mitigation responses
- Research Integrity Officer (RIO) – oversee research misconduct process (inquiry and investigative stage)
- Editorial board for North Texan publication – work with university communications for alumni magazine
- Research Communications – work with university communications to develop research stories to highlight achievements from our faculty, students, and research staff
- Foundations – work closely with advancement and foundations to promote and achieve foundation grants
- Hispanic Serving Institute – serve on the HSI Initiative Task Force within the Provost office
- Research Institutes of Excellence – work closely with the directors and staff of the research institutes to optimize research endeavors.
 - Research Institutes include: Advanced Environmental Research Institute, Advance Materials and Manufacturing Processes Institute, Bio Discovery Institute, Jim McNatt Institute for Logistics Research
- Research Space Adjudication Subcommittee (RSAS) – Chair of the RSAS tasked with oversight of research space on campus, semester review of assigned space, productive use of research space, communications with academic units regarding space usage
- Association of Public Land Universities – attend meetings and be engaged with APLU
- College of Science Leadership Group – work closely with the College of Science Dean, and Departmental Chairs/Leaders (Physics, Mathematics, Biological Sciences, Environmental Sciences, Plant Sciences, Chemistry) on research-focused strategies
- Host university level speakers
- Organized university level conference

Key Achievements:

- *Washington DC fellows program* – Led and organized the program that provides assistant professors the knowledgebase and tools to meet directly with federal program officers. Accompanied a group of faculty to Washington DC for meetings with program directors, congressional staff, and local government contacts.
- *Sponsored projects workshops* – Organized, led and presented in workshops focused on grant writing and applications. These programs focus on collaborative grants, NIH opportunities, early NSF career, and student training grants. This initiative led in an increase in sponsored project applications over the past two years.
- *Assistant professor services* – Focused efforts to facilitate NSF CAREER grant applications, trained research staff to assist with grant editing and management; outcome includes a four-fold increase in NSF CAREER awardees this year.
- *NIH Ph.D. student training grant* – Brought together a team of faculty experts and mentors and led student training grant applications; grant is currently pending
- *New research centers* – Worked with VPRI to bring together cross-disciplinary research groups to develop new research centers (focus on water resources, artificial intelligence, health disparities, autonomous vehicles and logistics)
- *Research strategic plan committee* – chaired the research strategic planning process that contributed to the overall UNT strategic plan led by the President
- *Division of Research and Innovation Communications* – Oversaw and led the update to the website update, intentional implementation of communication of our diverse group of researchers (students to faculty, across all areas of research, diverse demographics)

College of Science Associate Dean of Research and Graduate Studies

Chief Duties:

- Hire and supervise college research officer/grant staff, graduate student coordinator, and administrative assistant
- Analyze and present data relevant to research and sponsored projects and graduate student recruitment and progress
- Lead graduate student program success initiatives
- Advise and lead on the COS research strategic plan and graduate programs
- Oversee college level research seed funding program to incentivize collaborations, Ph.D. student graduation
- Lead student training grant activities
- Host and deliver specific research workshops
- Inform faculty on sponsored project opportunities
- Engage in Ph.D. student recruitment activities
- Host speakers at the college level
- Develop yearly objectives and goals that are within the mission of COS; provide framework to assess objective and goal metrics
- Distribute tuition benefits to academic units for Ph.D. student support

Key Achievements:

- First Associate Dean of Research for the College of Science, which was formed in 2017 (College of Arts and Sciences split into COS and College of Liberal Arts and Social Sciences)
- Involved with hiring of staff and logistical set up of the newly formed COS
- Garnered funds to develop a College of Science Women Faculty network
- Led a UNT Women in STEM – Innovation for the Future symposium
- Initiated the Association of Women in Science (AWIS) partnership focused on student scholarship activities
- Garnered and distributed additional funds for student tuition support
- Yearly increase in sponsored project proposals, awards and expenditures
- Co-advise student organizations (UNT SACNAS chapter, Biology graduate student association)

BOARD AND ADVISORY EXPERIENCE

Denton Business and Economic Board

- Represent UNT, provide the perspective of higher education with city council members

Society for Advancement of Chicanos/Hispanics and Native Americans in Science

Duties and Responsibilities (select few mentioned)

- Roles: Board of Director Member (2016-2018), Treasurer (2018), Present-elect (2020), President (2021-2022), Past-President (2023), Volunteer (2002-present)
- Partnership lead the largest STEM diversity non-profit within the nation
- Financial oversight – Finance committee chair (2018) and member (2017-present), work closely with CPA, finance staff, and committee members to review the income, expenditures, develop the annual budget
- Co-lead the board of directors (with current president) and as an executive committee member
- Work closely with the Executive Director, SACNAS staff, volunteer committee chairs and members to provide vision, plan, organize, and implement SACNAS mission
- Hire and review the SACNAS Executive Director; provide guidance and work in partnership to serve the SACNAS community

- Work with strategic communications team to communicate SACNAS programs, perspectives, plans, and initiatives
- Committee membership- historically and presently active in several SACNAS committees including the finance committee, audit committee, nomination committee, conference committee, governance committee, and grants task force committee
- Non-profit organization

Key Achievements (select few mentioned)

- Secured a 2.4M NIH IPERT grant award (as PI) for the organization. The grant focuses on student and postdoctoral research and leadership training, outreach to institutes with Native American student population, SACNAS chapter leadership programs, providing network and mentoring opportunities to the SACNAS community via the SACNAS national conference
- Worked with SACNAS ED, staff, finance officer, external auditor and finance committee to review SACNAS financials, develop yearly budget
- Hired and worked with outside consultant along with chairing the strategic planning task force to develop the 2021-2026 SACNAS strategic plan (ongoing project)
- Development team – work closely with development team to provide SACNAS conference sponsorship with academic
- Co-chaired NIH & SACNAS Hubs for Workforce Development – meeting (led by Hannah Valantine, NIH Chief Officer for Scientific Workforce Diversity, Gabriel Montaña, and myself) to bring together individuals from academia, industry, and government to strategize about workforce diversity initiatives
- Partnered for the development and delivery of fiscally responsible annual budgets
- Facilitated the discussion between UNT and SACNAS conference in Dallas to develop the UNT platinum sponsorship of the SACNAS conference
- Worked within conference committee and board of directors to recruit outstanding and inspirational keynote speakers for the SACNAS national conference (speakers include Nobel Laureates, astronauts, STEM leaders, science communicators)

Texas Woman’s University NSF HSI STEM Award External Advisory Board

- External advisory board member for this 2.45M grant award that focuses on building research capacity for faculty and students

LEADERSHIP TRAINING AND PROFESSIONAL DEVELOPMENT

- APLU Council on Research Webinar Training, 2020
- Participatory Leadership, 2020
- TX Women Leadership Program, 2018
- 360 Leadership Circle, UNT 2018
- Art of Participatory Leadership, UNT, 2018
- Advanced Leadership Institute, Howard Hughes Medical Institute and SACNAS, 2017
- UNT Administrative Fellow, Provost office, 2017
- Critical Conversations Workshop, 2017
- UNT Faculty Leadership Fellow, Office of the Vice Provost for Academic Affairs, 2015-2016
- Leadership Fellows, UNT 2016
- SACNAS Leadership Institute, 2012

GRANT AWARDS AND PATENTS

1. **National Institutes of Health**, R25 IPERT, NIGMS, “Culturally Responsive Academic and Career Trainings to Diversify the Biomedical Workforce”, Role: Lead PI, CoPIs: Corey Welch, Patricia Silveyra (administered through SACNAS organization); (Aug 1, 2020 – July 31, 2025); ~2.4M
2. **National Institutes of Health**, R15 NIDDK, “Molecular consequences of glucose diet and altered ceramide species impacting oxygen deprivation responses”, Role: Lead PI; PI, Rajeev Azad, 4/2016 to 12/2020, \$445,342.
3. **National Science Foundation**, IOS, “Regulation of Mitochondrial Functions by Iron and Ceramides in *C. elegans*”, Role: PI, Mittler, Co-PI, 7/2016 to 6/2021, \$992,743.
4. **National Science Foundation**, “Fostering Outstanding Cohorts in Undergraduate Science II”, PI: Lee Hughes, Role: Co-PI: P. Padilla, U. Philpote, S. Gao, A. Wilson, 8/30/13 to 8/29/18, \$625,235.
5. **National Science Foundation**, “Epigenetic Inheritance of Physiological Phenotypes: Occurrence, Mechanism and Inter- and Intra-Individual Variation”, PI: Warren Burggren, Role: Co-PI, 6/2015-5/2017, \$299,942.
6. **National Science Foundation**, IOS, “CAREER: Use of *C. elegans* to Identify Alleles and Genotypes that Modulate Severe Anoxia Survival”, Role: PI, 2008 – 2014, \$639,556.
7. **National Institutes of Health** (RO1 GM069419), NIGMS, “Genetic/Cell Biology of Anoxia in *C. elegans*”, Role: PI, 2004 -2010, \$894,409.
8. Methods for Inducing Reversible Stasis, **US Patent App.** 13/427,503, 2012, M.B. Roth, P.A. Padilla, Private company (Ikaria, acquired by Mallinckrodt Pharmaceuticals) licensed this patent.
9. Methods for Inducing Reversible Stasis, **US Patent App.** 12/478,677, 2010, M.B. Roth, P.A. Padilla, Private company (Ikaria, acquired by Mallinckrodt Pharmaceuticals) licensed this patent.
10. **National Institutes of Health**, NIGMS, “Supplement Grant to Promote Diversity in the Biomedical Field”, Role: PI, 2005, \$14,000.
11. **National Science Foundation**, IOS, “Genetic and Cellular Analysis of *C. elegans* Exposed to Anoxia”, Role: PI, 2004, \$388,606, *Awarded, declined due to overlap with NIH Grant*
12. **National Science Foundation**, Research Starter Grant, “Analysis of ODS-1 in *C. elegans* Exposed to Anoxia”, Role: PI, 2003-2004, \$50,000.
13. **National Science Foundation**, Post-Doctoral Fellowship “Metazoan Response to Oxygen Deprivation”, Role: PI, 1999-2002, \$150,000.
14. **UNT Faculty Research Grant** (ROP), “Cellular Analysis of Killifish Embryos in Diapause”, Role: PI, 2009-2010, \$7,500.
15. **UNT Internal Application**, “Acquisition of a Spinning Disc Confocal Microscope”, PI: R. Dickstein, Role: CoPI, 2005, \$438,382.
16. **UNT Health Science Center**, American Cancer Society Institutional Research Grant, “Investigate the role the spindle checkpoint has in arresting *C. elegans* embryos exposed to anoxia”, Role: PI, 2003, \$10,000.

(not listed are two grants that are pending at NIH and NSF)

HONORS AND AWARDS

- Texas Women Leadership, 2018
- Howard Hughes Medical Institute and SACNAS Advanced Leadership Institute Fellow, 2017
- SACNAS Summer Leadership Institute Conference, Washington DC (2012)
- Inquiry-Based Science Award, *Science* magazine (2012)
- Glenn Scholar, Center for Aging Program, Salk Institute, La Jolla CA (2010)
- Early Career Award for Research and Creativity, UNT Research Office, 2010
- Kavli Fellow, National Academy of Sciences and Kavli Frontiers, Irving, CA (2008)
- Beckman Frontiers of Sciences Symposium, National Academy of Sciences, Beckman Center, Irving, CA (2006)
- Outstanding Mentor, Siemens Scholarship (2004, 2005)
- Travel Award- Grant Writing, FASEB/NIH MARC (2002)
- Phi Kappa Phi Outstanding Graduate Student, University of New Mexico (1999)
- NIH, MBRS Research Fellow, University of New Mexico (1993, 1998)
- Graduate Student Representative, Science Coalition, U.S. Senate, Washington DC (1996)
- Graduate Travel Award, American Society Cell Biology (1995)
- Graduate Student Presentation Award, Biology Department Research Day (1995)
- Student Travel Award, SACNAS (1995)
- Student Travel Award, La Jolla Cancer Research Institute, La Jolla, CA (1994)
- Patricia Roberts Harris Research Fellow, University of New Mexico (1994-1996)
- Howard Hughes Undergraduate Research Scholarship, University of New Mexico (1993)
- Presidential Scholar, University of New Mexico
- Student Work Scholarship, U.S. Air Force, Kirtland Air Force Base

RESEARCH COMMUNITY SERVICE

- Grant reviewer and panelist for federal agencies:
 - National Institutes of Health, Howard Hughes Medical Institute (Gilliam Grants), National Science Foundation, National Aeronautical Space Agency, Dystonia Medical Research Group, Environmental Protection Agency, (various years from 2006 – 2020)
- Journal Reviewer for over 26 journals including *Science*, *Genetics* (2008 - present)
- Scientific conference organizer (*C. elegans* Stress Conference, 2008)
- Scientific conference chair: *C. elegans* conference (2004, 2008, 20014), SACNAS national conference (2018, 2019)

PROFESSIONAL MEMBERSHIP AND AFFILIATIONS

- Genetics Society of America (GSA)
- Society for Advancement of Chicano/Hispanic and Native Americans in Science (SACNAS) - Lifetime Member
- Association of Public Land-Grant Universities (APLU)
- Council on Governmental Relations (COGR)
- National Council of University Research Administrators (NCURA)
- APLU Aspire iChange Network

PUBLICATIONS (*primary, peer-reviewed*)

1. King, S.D., Gray, C.F., Song, L., Mittler, R., Padilla, P.A. Mitochondria-localized CISD-3.2 is required to maintain normal germline structure and function in *Caenorhabditis elegans*, *in review*.

2. Bautista, N.M., Crespel, A., Crossley, J., Padilla, P., Burggren, W., Parental transgenerational epigenetic inheritance related to dietary crude oil exposure in *Danio rerio*, 2020, July 3, **J Exp Biol**
3. King SD, Gray CF, Song L, Nechushtai R, Gumienny TL, Mittler R, Padilla PA, The *cisd* gene family regulates physiological germline apoptosis through *ced-13* and the canonical cell death pathway in *Caenorhabditis elegans*, **Cell Death and Differentiation**, 2018, April 17 (online), 2019; 26(1):162-178. Role: Corresponding author
4. Sengupta S, Nechushtai R, Jennings PA, Onuchic JN, Padilla PA, Azad RK, Mittler R., Phylogenetic analysis of the CDGSH iron-sulfur binding domain reveals its ancient origin, **Sci Rep**, 2018 Mar 19;8(1):4840, doi: 10.1038/s41598-018-23305-6
5. Inupakutika MA, Sengupta S, Nechushtai R, Jennings PA, Onuchic JN, Azad RK, Padilla P, Mittler R., Phylogenetic analysis of eukaryotic NEET proteins uncovers a link between a key gene duplication event and the evolution of vertebrates. **Sci Rep**. 2017 Feb 16;7:42571. doi: 10.1038/srep42571.
6. Ladage, M. L., S. D. King, D. J. Burks, D. L. Quan, A. M. Garcia *et al.*, 2016 Glucose or Altered Ceramide Biosynthesis Mediate Oxygen Deprivation Sensitivity Through Novel Pathways Revealed by Transcriptome Analysis in *Caenorhabditis elegans*. **G3: Genes, Genomes, Genetics**, Oct 13;6(10):3149-3160, Journal article, JIF 3.189. Role: Corresponding author; 3 of the 4 students listed are from my lab; M. Ladage is a former Ph.D. student, Dr. Azad is my collaborator.
7. Hamilton, J. S., E. L. Gorishek, P. M. Mach, M. L. Sturtevant, M. L. Ladage *et al.*, 2016 Evaluation of a custom single Peltier-cooled ablation cell for spatially resolved elemental imaging of biological samples in laser ablation-inductively coupled plasma-mass spectrometry (LA-ICP-MS). **J Anal. At. Spectrom** 31: 1030-1133. Journal article, 1 citation, JIF 3.379. Role: Collaborating author, one of four PI's in this collaborative technique publication; conducted the *C. elegans* experimental portion with my previous graduate student M. Ladage.
8. Kanteti, R., I. Dhanasingh, E. El-Hashani, J. J. Riehm, T. Stricker *et al.*, 2016 *C. elegans* and mutants with chronic nicotine exposure as a novel model of cancer phenotype. **Cancer Biol Ther** 17: 91-103. Journal article, 1 citation, JIF 3.072. Role: Collaborating author, hosted members of the Salgia lab to learn *C. elegans* biology and conduct experiments, experimental advisor and edited manuscript.
9. Toni, L. S., and P. A. Padilla, 2016 Developmentally arrested *Austrofundulus limnaeus* embryos have changes in post-translational modifications of histone H3. **J Exp Biol** 219: 544-552. Journal article, 1 citation, JIF 2.897. Role: Corresponding author, L. Toni is my previous Ph.D. student.
10. Garcia, A. M., M. L. Ladage, D. R. Dumesnil, K. Zaman, V. Shulaev *et al.*, 2015 Glucose induces sensitivity to oxygen deprivation and modulates insulin/IGF-1 signaling and lipid biosynthesis in *Caenorhabditis elegans*. **Genetics** 200: 167-184. Journal article, 4 citations, JIF 5.963. Role: Corresponding author; 3 of the 4 students listed are from my lab; A. Garcia is a former Ph.D. student, Dr. Azad was co-corresponding author.
11. Padmanabha, D., P. A. Padilla, Y. J. You and K. D. Baker, 2015 A HIF-independent mediator of transcriptional responses to oxygen deprivation in *Caenorhabditis elegans*. **Genetics** 199: 739-748. Journal article, 3 citations, JIF 5.963. Role: Collaborating author, I conducted the hypoxia experiments, wrote methods portions and edited the manuscript.

12. Padilla, P. A., A. M. Garcia, M. L. Ladage and L. S. Toni, 2014 *Caenorhabditis elegans*: an old genetic model can learn new epigenetic tricks. **Integr Comp Biol** 54: 52-60. Review Article, 4 citations, JIF 2.149. Role: Corresponding author, coauthors are former Ph.D. students.
13. Padilla, P. A., and M. L. Ladage, 2012 Suspended animation, diapause and quiescence: arresting the cell cycle in *C. elegans*. **Cell Cycle** 11: 1672-1679. Review Article, 22 citations, JIF 4.087. Role: Corresponding author, coauthors are former Ph.D. students.
14. LaRue, C. C., and P. A. Padilla, 2012 IBI series winner. A mutant search--*Caenorhabditis elegans* and gene discovery. **Science** 338: 487-488. Invited essay, Inquiry-Based Science Award Received, JIF 33.611. Role: Corresponding author, LaRue is a former Ph.D. student.
15. Padilla, P. A., J. M. Goy and V. A. Hajeri, 2011 Anoxia-induced suspended animation in *Caenorhabditis elegans* in **Anoxia**, edited by P. A. Padilla. InTech. Book chapter, accessed >2,000 times. Role: Corresponding author, coauthors are former Ph.D. students, editor for book series.
16. Garcia, A. M., M. L. Ladage and P. A. Padilla, 2011 Use of time lapse microscopy to visualize anoxia-induced suspended animation in *C. elegans* embryos. **JoVE** 3: e4319. <http://www.jove.com/video/4319/use-time-lapse-microscopy-to-visualize-anoxia-induced-suspended>, Method video, 4,449 views, JIF 1.325. Role: Corresponding author, all coauthors are students from my lab.
17. LaRue, B. L., and P. A. Padilla, 2011 Environmental and genetic preconditioning for long-term anoxia responses requires AMPK in *Caenorhabditis elegans*. **PLoS One** 6: e16790. Journal article, 21 citations, JIF 3.234. Role: Corresponding author, LaRue is a former Ph.D. student.
18. Hajeri, V. A., B. A. Little, M. L. Ladage and P. A. Padilla, 2010 NPP-16/Nup50 function and CDK-1 inactivation are associated with anoxia-induced prophase arrest in *Caenorhabditis elegans*. **Mol Biol Cell** 21: 712-724. Journal article, 16 citations, JIF 4.803. Role: Corresponding author, coauthors are former Ph.D. students.
19. Mendenhall, A. R., M. G. LeBlanc, D. P. Mohan and P. A. Padilla, 2009 Reduction in ovulation or male sex phenotype increases long-term anoxia survival in a *daf-16*-independent manner in *Caenorhabditis elegans*. **Physiol Genomics** 36: 167-178. Journal article, 22 citations, JIF 2.615. Role: Corresponding author, coauthors are former Ph.D. students.
20. Hajeri, V. A., A. M. Stewart, L. L. Moore and P. A. Padilla, 2008 Genetic analysis of the spindle checkpoint genes *san-1*, *mdf-2*, *bub-3* and the CENP-F homologues *hcp-1* and *hcp-2* in *Caenorhabditis elegans*. **Cell Div** 3: 6. Journal article, 19 citations, JIF 2.278. Role: Corresponding author, L. Moore is a collaborator, coauthors are former students.
21. Jud, M. C., M. J. Czerwinski, M. P. Wood, R. A. Young, C. M. Gallo *et al.*, 2008 Large P body-like RNPs form in *C. elegans* oocytes in response to arrested ovulation, heat shock, osmotic stress, and anoxia and are regulated by the major sperm protein pathway. **Dev Biol** 318: 38-51. Journal article, 62 citations, JIF 3.481. Role: Collaborating author, one coauthor is a former student, conducted oxygen deprivation experiments, edited manuscript.
22. Mendenhall, A. R., B. LaRue and P. A. Padilla, 2006 Glyceraldehyde-3-phosphate dehydrogenase mediates anoxia response and survival in *Caenorhabditis elegans*. **Genetics** 174: 1173-1187. Journal article, 46 citations, JIF 5.963. Role: Corresponding author, coauthors are former Ph.D. students.

23. Hajeri, V. A., J. Trejo and P. A. Padilla, 2005 Characterization of sub-nuclear changes in *Caenorhabditis elegans* embryos exposed to brief, intermediate and long-term anoxia to analyze anoxia-induced cell cycle arrest. **BMC Cell Biol** 6: 47. Journal article, 24 citations, JIF 2.584. Role: Corresponding author, coauthors are former Ph.D. students.
24. Nystul, T. G., J. P. Goldmark, P. A. Padilla and M. B. Roth, 2003 Suspended animation in *C. elegans* requires the spindle checkpoint. **Science** 302: 1038-1041. Authors were cited as “equal contributors”. Publication includes work from post-doc and as a new assistant professor, Journal article, 83 citations, JIF 33.611. Role: Lead author, completed some work as a new assistant professor, Roth is former post-doctoral mentor.
25. Padilla, P. A., T. G. Nystul, R. A. Zager, A. C. Johnson and M. B. Roth, 2002 Dephosphorylation of cell cycle-regulated proteins correlates with anoxia-induced suspended animation in *Caenorhabditis elegans*. **Mol Biol Cell** 13: 1473-1483. Journal article, 122 citations, JIF 4.803. Role: Lead author, Roth is former post-doctoral mentor.
26. Padilla, P. A., and M. B. Roth, 2001 Oxygen deprivation causes suspended animation in the zebrafish embryo. **Proc Natl Acad Sci U S A** 98: 7331-7335. Journal article, 185 citations, JIF 9.423. Role: Lead author, Roth is former post-doctoral mentor.
27. Padilla, P. A., E. K. Fuge, M. E. Crawford, A. Errett and M. Werner-Washburne, 1998 The highly conserved, coregulated SNO and SNZ gene families in *Saccharomyces cerevisiae* respond to nutrient limitation. **J Bacteriol** 180: 5718-5726. Journal article, 116 citations, JIF 2.688, Role: Lead author, Werner-Washburne is former Ph.D. mentor.
28. Peck, V. M., E. K. Fuge, P. A. Padilla, M. A. Gomez and M. Werner-Washburne, 1997 Yeast *bcy1* mutants with stationary phase-specific defects. **Curr Genet** 32: 83-92. Journal article, 13 citations, JIF 3.385, Role: Coauthor, Werner-Washburne is former Ph.D. mentor.
29. Braun, E. L., E. K. Fuge, P. A. Padilla and M. Werner-Washburne, 1996 A stationary-phase gene in *Saccharomyces cerevisiae* is a member of a novel, highly conserved gene family. **J Bacteriol** 178: 6865-6872. Journal article, 79 citations, JIF 2.688. Role: Coauthor, Werner-Washburne is former Ph.D. mentor.

Not listed above are three publications in progress of submission

PRESENTATIONS (*selected, invited scientific seminars and oral presentations*)

1. **Texas Genetics Society**, “Stress Responses and Germline Function”, Texas A&M, College Station, TX, invited keynote speaker, 2019
2. **SACNAS National Conference**, San Antonio, TX, Session Chair and Organizer, “Environmental and Dietary Impact on Physiology, Gene Expression, and Epigenetic Inheritance”, 2018
3. **Southern Methodist University**, Role of Ceramide Biosynthesis and Iron Sulfur Proteins on Germline Development in *C. elegans*, November 2018
4. **University of Texas Dallas**, Modeling Hyperglycemia and Ischemia in *C. elegans*”, Dallas, TX, Keynote Speaker, Student Research Symposium, 2018.
5. **University of Maryland Baltimore County**, Modeling Hyperglycemia and Ischemia in *C. elegans*”, Baltimore, MD 2018.
6. **University of Texas El Paso**, “Modeling Hyperglycemia and Ischemia in *C. elegans*”, El Paso TX, 2018.
7. **Oklahoma Christian University**, Biology Department, “Glucose Fed, Oxygen Deprived *C. elegans*- A model for Ischemia and Diabetes”, 2016.

8. **SACNAS National Conference**, Washington DC, “Balancing a Scientific Academic Career”, Panel Member, 2015
9. **Woods Hole**, “Fish and Worms- Molecular Models for Stress Responses”, 2015.
10. **UT San Antonio**, “Glucose Fed, Oxygen Deprived *C. elegans*- A model for Ischemia and Diabetes”, San Antonio TX, 2015
11. **Trinity University**, Department of Biology, “Glucose Fed, Oxygen Deprived *C. elegans*- A model for Ischemia and Diabetes”, San Antonio TX, 2015
12. **Society for Integrative and Comparative Biology**, “Genetic, Environmental and Epigenetic Factors in *C. elegans*”, Epigenetic Symposium, Austin, 2014
13. **2013 C. elegans International Conference**, “Using *C. elegans* for inquiry-based learning at large undergraduate institutions”, 2013, UCLA
14. **University of MA, Boston**, “Mechanisms regulating anoxia-induced suspended animation in *Caenorhabditis elegans*”, 2011
15. **MIT, Department of Biology**, “Oxygen Deprivation: A Regulator of a Prophase Checkpoint and Suspended Animation in *C. elegans*”, 2010 (Host: Nobel Laureate Bob Horvitz)
16. **Buena Vista University**, Storm Lake, IA, Molecular mechanisms involved with oxygen deprivation responses and suspended animation in *C. elegans*”, 2010.
17. **UNT Health Science Center**, “Mechanisms regulating anoxia-induced suspended animation in *Caenorhabditis elegans*”, 2010
18. **Larval Fish Conference**, “Cell biological analysis of neuroglobin in *Fundulus heteroclitus*”, 2010.
19. **Baylor University**, “Mechanisms regulating anoxia-induced suspended animation in *Caenorhabditis elegans*”, 2009
20. **International C. elegans Conference**, “Anoxia-induced Suspended Animation Requires a Nucleoporin for Prophase Arrest”, 2009
21. **Texas Woman’s University**, Mechanisms Regulating Suspended Animation in *Caenorhabditis elegans*”, 2008
22. **Beckman Center, National Academy of Sciences, Annual Kavli Frontiers of Science Symposium**, “Mechanisms Regulating Suspended Animation in *Caenorhabditis elegans*”, 2008.
23. **Texas Genetics Society Annual Conference**, San Antonio Texas, 2007
24. **Harding University, Arkansas**, “Analysis of Oxygen Deprivation in *C. elegans*”, 2007
25. **UNTHSC**, Cell Biology and Genetics Dept., “Oxygen Deprivation in *C. elegans*”, 2005
26. **University of New Mexico**, Department of Biology, “Genetic and Cellular Approaches for Studying Oxygen Deprivation in *C. elegans*”, 2005
27. **University of Texas at San Antonio, Department of Biological Sciences MBRs Seminar Speaker**, “Suspended Animation: Anoxia Induced Cell Cycle and Developmental Arrest in *C. elegans*”, 2003
28. **Texas Women’s University, Biology Department Seminar Speaker**, “Anoxia Induced Cell Cycle and Developmental Arrest in *C. elegans*”, 2003
29. **UNT Health Science Center**, Ft. Worth, “Oxygen Deprivation in *C. elegans* and Zebrafish”, 2003. (Invited Seminar by UNTHSC Graduate Students)
30. **University of California Los Angeles**, “Oxygen Deprivation in *C. elegans* and Zebrafish” 2002, Invited talk by MBRs/MARC Students

STUDENT MENTORING

- Chair and Primary Mentor for PhD Students: 11 graduated, 4 current
 - Former students are in tenured-track positions (e.g. University of Washington, University of Colorado Denver, University of Texas Dallas), Industry (genomics, biotechnology industry), or government employees (TX state health services)
- Chair and Primary Mentor for M.S. Students: 4 graduated
- Committee Member for Ph.D./M.S. Students: 48 students
- Undergraduate Research Mentor: ~50 students

Combined – my students have presented over 100 scientific presentations

TEACHING EXPERIENCE

- Eukaryotic Genetics, Biol 5460, 2004-2017, Fall Semesters (Graduate course)
- Stress Physiology, Biol 5005, Various Fall Semesters (Graduate course)
- Topics in Biology- Animal Genetics, Biol 5005, Spring 2018 (Graduate course)
- Genetics, Biol 3451, 2003-2017, Spring Semesters (~227-300 undergraduate students per class, course is required for Biology/Biochemistry/Ecology majors)
- STEM NSF-FOCUS, Fall 2014, undergraduate scholars

FACULTY SERVICE

University Service:

- Member of three President appointed COVID-19 response committees (Research, Safety, and Academic committees)
- COS Leadership team (2017 – present)
- President appointed 40-year Plan Committee (2019-2020)
- Postdoctoral Research Association- Faculty Mentor (2018 – present)
- Search Committee Member for Vice-president for Research and Innovation Position, (2017-present)
- Intellectual Property Committee (2017 – 2018)
- Innovative Enrollment Growth Initiative Proposal Committee (2017)
- Latina/o and Mexican-American Studies (LMAS) program, (2014 – present)
- Faculty Research Committee, (2011 – 2017)
- Faculty Shared Analytical Research Facility Advisory Group, (2014)
- Committee on Ethical Conduct Assessment, (2010)
- UNT Faculty Senate Committee on the Status of Women, (2002 - 2005)

College Committees and Councils:

- College of Science Curriculum Committee, Co-organizer, (2017-present)
- Graduate student programming (2017-present) CAS (*ad hoc* Committee for SACNAS conference)
- External Faculty Member for Faculty Search Committee (Organic Chemistry), 2007
- COS Women Faculty Network (2018-present)

Departmental Service:

- Search Committee (Three positions for Bio Discovery Institute) 2017, 2018
- Search Committee for Aquatic Toxicologist, (2014-2015)
- Space Planning Committee, (2011 to present, chair)
- Personnel Affairs Committee, (2008-2014, 2016)
- Promotion and Tenure Committee, (2008-2014)
- North Texas Molecular Biology Federation, (2006-2012)
- Search Committee for DIB Cluster Search, (2011, chair)
- DPGR Cluster Search, (2 Faculty Hired), (2009-2010, chair)
- Evolutionary Biologist Faculty Search Committee, (2007-2008)
- Search Committee for Ecosystem Ecologist, (2009)
- Developmental Biologist Search Committee, 2 Faculty Hired, (2005-2006)
- Biology Building Committee, (2005-2007)
- Ad Hoc Graduate Affairs Committee, (2004)
- Ad Hoc Beth Baird Gift Committee, (2004)

Additional University Community Service:

- OLLI Lecturer, (2018, 2019)
- UNT Great Conversations Host, Benefit Honors College (2016, 2017, 2018)
- Co-advisor UNT SACNAS Chapter (2009-present)
- UNT Professional Women's Council Student Group (mentor, 2018)
- Participation in UNT advertisement, (2016)
- Participant in Video Marketing for UNT, (2013, 2014, 2020)
- Participant in Video for "State of the University" by President Smatresk, (2014)
- McNair Conference and Mentoring Participation, (2003, 2007, 2011, 2014, 2015, 2016, 2019)
- Session Chair, Global Research Funding Forum Conference, (2013)
- Recruit Graduate Students, Toulouse Graduate School Booth at SACNAS, (2008 to present)
- Biology Graduate Student Association Presentations, Judge (2011)
- UNT Biology Department Undergraduate Alpha Delta Faculty Advisor, (2002-2006)
- Faculty Advisor BGSA, (2003-2006, 2016-2017)