

TEXAS STATE VITA

I. Academic/Professional Background

A. Name: **DANA M. GARCIA** Title: **PROFESSOR**
ORCID 0000-0002-9551-9184

B. Educational Background

<i>Degree</i>	<i>Year</i>	<i>University</i>	<i>Major</i>	<i>Thesis/Dissertation</i>
Ph. D.	1993	University of California, Berkeley	Physiology/ Cell Biology	Pigment Granule Aggregation in Retinal Pigment Epithelium of Green Sunfish
B.S.	1986	Texas A&M University	Zoology	Effects of Lead on C6 Astrogloma; <i>magna cum laude</i>

C. University Experience

<i>Position</i>	<i>University</i>	<i>Dates</i>
Adjunct Professor	Texas State University, Department of Chemistry and Biochemistry	2015
Professor	Texas State University, Department of Biology	2004-present
Guest Professor	Johannes Gutenberg University/ Universität Mainz	2001
Associate Professor	Texas State University-San Marcos (formerly Southwest Texas State University)	1999-2004
Assistant Professor	Southwest Texas State University	1993-1999

D. Relevant Professional Experience

<i>Position</i>	<i>Entity</i>	<i>Date</i>
Advisory Board	P2P Movement	1/2018 - present
Advisory Board	SURE Program	5/2017 – 8/2021
Presidential Fellow	Texas State University	9/2016 – 8/2017
Faculty Senator	Texas State University	5/2015 – 5/2018
Bridges Mentor Faculty	South Texas Doctoral Bridges Program	2014 – 2020?
Associate Chair for Curriculum and Scheduling	Texas State University-San Marcos	2011 – present
Biology Program Director	Texas State University-San Marcos	2011 - present
Materials Science and Engineering Doctoral Program Core Faculty	Texas State University-San Marcos	2011 – 2019?
Director, Integrated Microscopy Facility	Texas State University-San Marcos	2011 - 2014
Associate Doctoral Faculty in Aquatic Biology	Texas State University-San Marcos	2010 - present
Associate Editor	BMC Research Notes	2008-2020

Associate Dean for Research	Texas State University-San Marcos	2006-2009
Advisory Panel for Bridges to the Baccalaureate Program	National Institutes of Health	2006
Core Ph. D. Faculty in Aquatic Biology	Texas State University-San Marcos	2003-2009

E. Other Professional Credentials

- CITI certified for work with human subjects (2020 - present)
- Certified in Transmission Electron Microscopy (2014 & 2021)
- Certified in Ultramicrotomy (2014)
- CITI certified for work with animals (~2012 - present)

II. TEACHING

A. Teaching Honors and Awards:

- 2021 College of Science and Engineering Achievement Award for Excellence in Teaching/ College of Science and Engineering's 2021 Presidential Distinction Award for Excellence in Teaching
- 2005 Nominated for STAR award
- 2001-2002 Honored Member America's Registry, Edition 2001-2002
- 2001 Faculty Senate nominee to serve on Master Teacher Committee
- 2001 AAAS Mentor Award Nominee
- 1996, '97 Alpha Chi National Honor Society Favorite Professor
- 1996 SWT University Mentoring Program Outstanding Mentor

B. Courses Taught (bolded courses are ones I developed and taught; I also developed BIO 4350 as a shell course):

<i>Course Number (Dates taught)</i>	<i>Course Title</i>
Biology 3480 (Fall 2020 – present)	Histology
Biology 3300 (Summer 2010 – 2017)	Cell and Molecular Biology
Biology 1430 (Summer 2005)	Functional Biology (freshman majors)
US 1100 (Fall 2001)	University Seminar
Biology 5110Q (Spring 2000 – Fall 2008)	Cell, Micro and Molecular Biology
Biology 3421 (Fall 1999 – Spring 2005, Spring 2007 - present)	Vertebrate Physiology
Biology 4441/5441 (Spring 1998 – 2002; 2005-2006)	Cell Physiology
Biology 5110Q (Spring 1995)	Biology of Pigmented Cells
Biology 5110Q (Fall 1995)	Last Week in Science
Biology 5110Q (Fall 1997; Fall 2010)	Departmental Seminar
Biology 3351(Spring 1995 – 1997)	General Genetics (non-majors)
Biology 5350 (Spring 1996)	Cell Motility and Cytoskeleton
Biology 5350 (Fall 1996)	Departmental Seminar
Biology 5350 then 4300/5300 (Fall 1997 - present)	Neurobiology
Biology 2460 (Fall 1993 – Spring 1999)	Cell Biology

C. Undergraduate Theses (*Published)

Undergraduate Theses Directed

Student	Date BS	Thesis Title
Amanda Pattillo (SURF recipient)	May 2017	Quantifying the Change in Pigment Position in Dark- and Light-Adapted Retinal Pigment Epithelium in Mouse Retinas*
Melissa Esparza	Aug 2016	I Spy Something Green: Observing the Optic Nerve of Aging Zebrafish for GFAP
Sarah Roark (SURF recipient)	May 2012	Investigation of Unexpected Fluorescence in the Optic Nerve of Zebrafish
Silvy "Gina" Soto (Francis Rose Award recipient)	May 2010	Expression of <i>c-jun</i> following Optic Nerve Injury in <i>Danio rerio</i>
Benjamin McCalip	Dec 1995	Localization of an Intermediate Filament Associated Protein in the Retinal Pigment Epithelium of Bluegill Fish
Thomas A. Keith	May 1995	Retinal Pigment Epithelium of Bluegill Sunfish: Cyclic AMP Induced Pigment Granule Aggregation*

Undergraduate Thesis Committees

Student/Advisor	Date of Graduation	Thesis Title
Marriah Lewis/ Ferrero	Aug 2016	Human Brain Anatomical Connections to Graph Theory (https://digital.library.txstate.edu/handle/10877/5940)
Vanessa Pearson/ McLean	Spring 2004	The Viral Cure: Bacteriophage as a Treatment against Biofilm Infection
Stephanie L. Gray/ Johnson	Spring 2000	Genetic Testing and the Breast Cancer Genes, BRCA1 and BRCA2: Ethical, Psychological and Social Impacts
Amy Primmer/ McLean	Fall 1999	Using Two-Dimensional Electrophoresis to Analyze Antibiotic Resistance in <i>Pseudomonas aeruginosa</i> Biofilms
Kayla Fass/ Koke	Spring 1999	Visualization of α -Actinin and the G.3.5. Antigen in Developing Chick Embryos in Vivo
Gretchen Grundmann/ Ott	Spring 1996	Gene Therapy: Is it the Miracle Cure?
Dana Moore/ Walter	Fall 1995	Nucleotide Sequence, Evolutionary Conservation, and Linkage Map Assignment of the Insulinoma <i>rig</i> Gene Orthologue in <i>Xiphophorus maculatus</i>
Jon Moore/ Koke	Spring 1995	Comparison of the J1-31 Antigen and Heat Shock Proteins

Interns Directed (incomplete list)

Student	Date Internship	Topic
Kimberly Piña	Summer 2016	Osteoporosis in Baboons
Kris Freeman	Fall 2011	Clinical Diagnostic Assays
Carlos Quintanilla	Spring 2011	Clinical Diagnostic Devices

Danae Crumb	Spring 2009	Pediatric Trauma
Alexia Ghazi	Fall 2008	Medical Research on Prostatitis
Lance Harper	Fall 2008	Cardiovascular Heart Disease
Darcy Mick	Fall 2006	Physical Therapy for Lower Back Pain
Leah Hulsey	Fall 2006	Radiology and Sonography

GRADUATE THESES/DISSERTATIONS OR EXIT COMMITTEES

Advisee to PhD

Student	Start Date	Oral Exam Passed; Candidacy; Dissertation Defense	Grad Date	Thesis Title
Richard Nuckels (Project Flowing Waters Fellow)	8/10	8/29/12; 10/18/12; 5/11/18	8/18	Differential Selection Pressure among Duplicated Genes in Teleosts*

* Published

PhD Student Committees

Student/Advisor	Thesis Title	Graduation Date
Starla Thornhill/ McLean	Biofilm Growth and Control in Spaceflight	December 2020
Priscilla Pham/ McLean	Influence of <i>Bifidobacterium longum</i> on Obesity	Dropped out
Praveen Kumar/ Dharmasiri	Functional Characterization of <i>SAUR</i> Genes in Plant Growth and Development	August 2015
Nirmala Karunarathna/ Dharmasiri	Functions of IAA28 in Plant Growth and Development	August 2012

Advisees to MS degree

Student	Date MS	Thesis Title
Alexis Hailey	5/23 (exp)	OAT transporters in Zebrafish RPE
Christian Teague	12/22 (exp)	Mutation of a Conserved Sequence in a Duplicated Myosin Gene May Lead to Significant Functional Alteration
Diana Emely Wiebe (Graduate Thesis Research Fellow)	12/22 (exp)	Localization and Effects of MRP4 and MRP5 on Retinal Cells
Roxanne McIntosh	8/19	Non-thesis
William Wilson	8/18	Non-thesis*
Pedro Gonzalez (2016 CULTIVAR fellow; 2017 Best Graduate Poster, Colloquium; Graduate Thesis Research Fellow)	5/17	GFAP in the Optic Nerve of Zebrafish

Ruben Tovar (winner of 2014 Colene Drace Award)	5/14	Ocular Histology in Three South Central Texas Paedomorphic Salamander Species (<i>Eurycea sosorum</i> , <i>Eurycea nana</i> and <i>Eurycea rathbuni</i>) and Comparative Ocular Development of Two Morphotypes
Kris Freeman	8/13	Proteomic Comparison between MRP4 Knockout and Wild Type Mouse Brain, Liver, Kidney and Serum
Carlos Quintanilla	8/12	Expression and Localization of Mrp4 in the Retinal Tissue of <i>Danio rerio</i>
Iliana Rodriguez	5/12	Non-thesis
Luis Neve	12/11	Identification and Characterization of Reactive Astrocytes following Optic Nerve Injury in Zebrafish**
Shobhit Sharma	5/11	Microarray Analysis of Diurnal Changes in Gene Expression in Zebrafish Retina
Elizabeth Capalbo	12/09	Diurnal Regulation of Expression of Muscarinic and Dopaminergic Receptor Genes*
Katherine Saul (w. Joseph Koke)	8/08	Gene Expression During Optic Nerve Regrowth in Zebrafish*
Elizabeth Crittenden	5/08	Mechanism of Acetylcholine-induced Pigment Granule Dispersion in Bluegill RPE*
Adam Johnson	8/07	Intracellular Messengers Involved in Carbachol-induced Pigment Granule Dispersion*
Varsha Radhakrishnan	5/07	Molecular Characterization and Expression of G _{q/11} Protein in Fishes
Richard Nuckels	12/06	Isolation and Expression Study of Muscarinic Receptors in Zebrafish*
Chad Copeland	5/05	Muscarinic Receptor Subtypes Involved in Pigment Granule Dispersion in Retinal Pigment Epithelium*
Prasad Phatarpekar	8/04	Isolation and Sequencing of Muscarinic Receptor Genes from Fishes*
Jamie D. Dixson	12/01	Evolution of the Alpha-Actinin Gene Family*
Jack N. Needham, Jr.	8/01	Molecular Characterization of Alpha-Actinin
Alfredo González, III	12/00	Muscarinic Regulation of Pigment Granule Dispersion in Teleost Retinal Pigment Epithelium*
Corey Waller (w/D. Feakes)	5/99	Synthesis of Polyhedral Boranes for Use in Boron Neutron Capture Therapy for Cancer
Ernesto Pérez, Jr.	5/99	Characterization of the Intermediate Filament Cytoskeleton in Teleost Retinal Pigment Epithelium
David Zamora	8/97	Localization of Cytoskeletal Elements in Teleost Retinal Pigment Epithelium*

* Published

MS Student Committees

Student/Advisor	Thesis Title	Graduation Date
Fabiola Mancha/ Huertas	Olfactory-Immuno Pathway of Infectious Hematopoietic Necrosis Virus and <i>Yersinia Ruckeri</i> in Rainbow Trout	May 2021 (exp)
Melody Martínez/ Huertas	Environmental Effects of Nitrites on Goldfish (<i>Carassius auratus</i>) Communication	August 2020
Gabriela Solis/ Castro- Arellano	Alternative Splicing of the <i>superkdr</i> Locus in Horn Flies	December 2017
Nick Siepert/ Dharmasiri	Characterization of IBR5.1 Interacting Protein PAD1	December 2017
Katie Kendrick/ Weigum	Specificity of TLS11a Aptamer towards Hepatocellular Carcinoma as a Means of Detection and Targeted Drug Delivery	May 2017
Elia Lopez/ Dharmasiri	Characterization of IBR5-ROP GTPase (ROP2/ROP6) Interaction in Plant Auxin Response	August 2016
Danielle Wilson	Non-thesis	May 2016
Melissa Sutton/ Weigum	Examination of a Specific Aptamer (Tls11a) within Cultured Mammalian Liver Cancer Cell Lines	May 2015
Peter Shepherd	Non-thesis	December 2013
Priscilla Pham/ Maitin	Role of Probiotics in Modulation of Diet-Induced Obesity	August 2012
Sarah Kane/ Koke	Astrocyte Reactivity Characterized with Monoclonal Antibody J1-31: an Evaluation of cAMP Effectors	August 2012
Thilanka Jayaweera/ Dharmasiri	Regulation of Auxin Receptor Gene Family by Hormonal and Abiotic Stress	December 2011
John Stecker/ Koke	Aptamer Interactions and Applications in Cancer Treatment	December 2011
Tesfalem Zere/ McLean	Indole and cAMP Promote <i>Escherichia coli</i> Survival in Mixed Culture	August 2011
Mya Patel/ Koke	Increased J1-31 Labeling due to Cyclic Nucleotide-gated Channels	December 2009
Chamindika Siriwardana/ Dharmasiri	Identification and Characterization of Two Novel <i>Arabidopsis</i> Mutants that are Resistant to Auxin	May 2009
Patricia Collier	Non-thesis MEd	May 2009
Nirmala Karunaratna/ Dharmasiri	Isolation and Characterization of <i>Arabidopsis</i> Mutants with Altered Response to Auxin (Picloram)	Dec 2008
Ali Abedi/ Koke	G3.5 Antigen Appears to be a Form of which Co-isolates and Co-localizes with Type III Intermediate Filaments	December 2005

Greg Ramsey/ Koke	Monoclonal Antibody J1-31 Recognizes an Epitope that Occurs on Both GFAP and Lamin B that Appears to be Phosphorylated during Astrocyte Activation	May 2005
Nina Jaffarзад/ Koke	Ultrastructural Changes in Earthworm (<i>Eisenia fetida</i>) Nephridia Resulting from Symbiotic Association with Bacteria (<i>Acidovorax</i>)	August 2004
Jaci Meyers/ Koke	Glucose-induced Apoptosis of Schwann Cells in Vitro	May 2004
Carlene Worthington/ Koke	Secretion of IL-6 by Astrogloma Cells in Response to Stimulation by TNF	May 2004
Jodi Scott/ Flores (Psychology)	Self-Efficacy as a Factor in Weight-Loss	August 2002
Shannon Kinder/ Koke	Phosphorylated Intermediate Filaments in the Nucleus	May 2002
Brian Corbin/Aron	Biofilm Susceptibility to Bacteriophage Infection	May 2000
Tracy Merkel/Koke	Three Dimensional Cultures of Neuroblastomas	May 2000
Mark Hahn/Koke	Extracellular Matrix Effects on a Neuroblastoma Cell Line	December 1998
Juan Herrera/ Koke	Characterization of the Expression of Intermediate Filament Proteins During Astrogliosis	May 1997
Sandra Bolanos/ Koke	The G.3.5 Antigen, a Novel IFAP, Is Not α -Actinin	May 1997
Haiying Li/ Walter	Inheritance of Parental Methylation Patterns in Interspecies Hybrids of <i>Xiphophorus</i> Fishes	December 1996
Ari Kahn/ Horne	Analysis of Genetic Diversity in the Rice Genus <i>Zizania</i> using RAPD's and rDNA IGS Regions	December 1996
Steve Gilmer/ Walter	Isolation, Sequence Determination, and Mapping of the junB Homologue in <i>Xiphophorus</i> Fishes	August 1996
Gabriel Intano/ Walter	Spontaneous Mutation Frequencies of Spermatogenic Stages in Transgenic Mice	August 1996
Patricia Stevenson/ Koke	Purification of an Astrocyte Specific Protein	May 1996
Fariba Javadi/ Koke	The Angiotensin Receptor (AT1) Inhibitor, Losartan, Slows Post-natal Thickening of the Left Ventricle	Fall 1994
Sullivan Fitzgerald/ Koke	Detection and Localization of Angiotensinogen in Cardiac Muscle	August 1994

NEW COURSES PROPOSED

Neurobiology (Biol 4300/5300/7300)
Cell and Molecular Biology (Biol 3300)
Topics in Biology (Biol 4350 and 4351)

TEACHING WORKSHOPS ATTENDED (INCOMPLETE LIST)

Spring 2019 Empowering First Gen College Students
Spring 2019 Foundations for Online Teaching
Summer 2012 Pacific Crest Teaching Institute
Last century? Multicultural Curriculum Transformation and Research Institute

FUNDED EXTERNAL TEACHING GRANTS AND CONTRACTS (Total = \$992,730)

2000-2002 Texas Higher Education Coordinating Board. Eisenhower Program - A Summer Research Experience for Science Teachers, \$74,838 (PI Julie Westerlund)
1998-2002 Texas Higher Education Coordinating Board. Eisenhower Program - A Summer Research Experience for Science Teachers, \$88,196. (co-PI Joe Koke)
1998-2004 National Science Foundation. Teacher Enhancement Proposal - A Summer Research Experience for Science Teachers, \$728,952 (PI Joe Koke)
1996-1998 National Science Foundation. ILI Grant - An integrated and networked microscopy center for undergraduate education, \$99,994 (PI Joe Koke)
1996 American Society for Cell Biology. Summer Teacher Research Fellowship. Isolation and Characterization of Circumferential Microfilament Bundles from Teleost Retinal Pigment Epithelium, \$750

PENDING EXTERNAL TEACHING GRANTS AND CONTRACTS

SUBMITTED, BUT NOT FUNDED, EXTERNAL TEACHING GRANTS AND CONTRACTS

CUR (3/2017) Preproposal to participate in CUR Transformations project (co-PI Benjamin Martin)
NSF (9/08) Building our Baccalaureates through Community, Academics and Technology, \$1,999,998 (co-PIs Moonis Ali, Bahram Asiabanpour, David Donnelly and Debra Feakes)
HEAF (Spring 98) Scanning Electron Microscope, \$200,000
NSF (10/97) Mobile Microscopy Lab, \$68,000.
GTE FOCUS Program (10/96) Recruitment of Inner-city Minority Students into Bachelor's Programs in Science, \$30,000

III. SCHOLARLY/CREATIVE

A. WORKS IN PRINT

Chapters in Books

García, D. M. 2017. Testimonio 6. In: L. I. Rendón and V. Kangala, eds. *The Latino Student's Guide to STEM Careers*. Denver, CO: Greenwood, pp. 155-158.
Bruno, J. G., J. R. Stecker, M. P. Carrillo, T. Phillips, A. Savage, D. M. García and J. R. Koke. 2013. Chapter 4: Novel aptamer-based therapeutic strategies. In: J. Bruno, ed. *Biomedical Applications of Aptamers*, Hauppauge, NY: Nova Science Publishers, pp. 55-72.

García, D. M. and J. R. Koke. 1996. The cytoskeleton of the retinal pigment epithelium. In: S. K. Malhotra, ed. *Advances in Structural Biology*, vol. 4, Greenwich, Connecticut: JAI Press, Inc., pp. 151-174.

Refereed Journal Articles

- Tovar, R. U. , V. Cantu, B. Fremaux, P. Gonzalez Jr., A. Spikes, D. M. García. 2021. Comparative development and ocular histology between epigeal and subterranean salamanders (*Eurycea*) from central Texas. *PeerJ* 9:e11840
<https://doi.org/10.7717/peerj.11840>
- Wilson, W. W., D. M. García and M. R. J. Forstner. 2021. Examination of single nucleotide polymorphisms from a partial coding region of the melanocortin 1 receptor from melanistic and wild-type white-tailed deer (*Odocoileus virginianus texanus*). *Uttar Pradesh Journal of Zoology* 42(2):34-40.
- Ibarra, D. E., D. E. Wiebe, T. Mireles, A. Pattillo, T. Roberts, T. S. Wood, C. Przybylski, C. Rodriguez and D. M. García. 2020. A method for quantifying pigment position in retinal pigment epithelium. *Experimental Eye Research* 195, published on-line.
<https://doi.org/10.1016/j.exer.2020.108038>
- Ashford-Hanser, S., K. L. Daniel, D. M. García and J. Idema. 2020. Factors that influence persistence of minority students in STEM majors at a Hispanic Serving Institution. *Journal of Research in Technical Careers* 4(1).
<https://doi.org/10.9741/2578-2118.1048>
- Nuckels, R. J., C. C. Nice and D. M. García. 2019. Duplicated myosin V genes in teleosts show evolutionary rate variations among the motor and cargo binding domains. *Genome Biology and Evolution* 11(2): 415-430.
- Villarreal, M. A., N. M. Biediger, N. A. Bonner, J. N. Miller, S. K. Zepeda, B. J. Ricard, D. M. García and K. A. Lewis. 2017. Determining zebrafish epitope reactivity to commercially available antibodies. *Zebrafish* 14(4): 387-389.
<https://doi.org/10.1089/zeb.2016.1401>.
- Stecker, J. R., A. Savage, J. G. Bruno, D. M. García and J. R. Koke. 2012. Dynamics and visualization of MCF7 adenocarcinoma cell death by aptamer-C1q-mediated membrane attack. *Nucleic Acid Therapeutics* 22(4):1-8. doi: 10.1089/nat.2012.0355.
- Neve, L. D., A. A. Savage, J. R. Koke and D. M. García. 2012. Activating transcription factor 3 and reactive astrocytes following optic nerve injury in zebrafish. *Comparative Biochemistry and Physiology, part C*, 155(2):213-218.
doi:10.1016/j.cbpc.2011.08.006.
- Nuckels, R. J., M. R. J. Forstner, E. L. Capalbo-Pitts, D. M. García. 2011. Developmental expression of muscarinic receptors in the eyes of zebrafish. *Brain Res.* 1405:85-94. doi: 10.1016/j.brainres.2011.06.016. Epub 2011 Jun 15. PubMed PMID: 21741623.
- Koke J. R., A. L. Mosier and D. M. García. 2010. Intermediate filaments of zebrafish retinal and optic nerve astrocytes and Müller glia: Differential distribution of cytokeratin and GFAP. *BMC Research Notes* 3:50.
- Saul, K. E., J. R. Koke and D. M. García. 2010. Activating transcription factor 3 (ATF3) expression in the neural retina and optic nerve of zebrafish during optic nerve regeneration. *Comparative Biochemistry and Physiology, part A: Molecular & Integrative Physiology*, 155:172-182.
- Schwartz, R., J. Westerlund, D. García and T. Taylor. 2010. The impact of full immersion scientific research experiences on teachers' views of the nature of science. *Electronic Journal of Science Education* 14:2.

- García, D. M. and J. R. Koke. 2009. Astrocytes as gate-keepers in optic nerve regeneration – a mini-review. *Comparative Biochemistry and Physiology, Part A: Molecular & Integrative Physiology*, 152(2):135-138.
- Johnson, A. S. and D. M. García. 2007. Carbachol-mediated pigment granule dispersion in retinal pigment epithelium requires Ca^{2+} and calcineurin. *BMC Cell Biology* 8:53.
- Keith, T. A., V. Radhakrishnan, S. Moredock and D. M. García. 2006. Uptake of 3H -cAMP by retinal pigment epithelium isolated from bluegill sunfish (*Lepomis macrochirus*). *BMC Neuroscience* 7:82.
- Phatarpekar, P. V., S. F. Durdan, C. M. Copeland, E. L. Crittenden, J. D. Neece and D. M. García. 2005. Molecular and pharmacological characterization of muscarinic receptors in retinal pigment epithelium. *J. Neurochem.* 95(5):1504-1520.
- García, D. M., H. Bauer, T. Dietz, T. Schubert, J. Markl and M. Schaffeld. 2005. Identification of keratins and analysis of their expression in carp and goldfish: comparison to the zebrafish and trout keratin catalog. *J. Cell and Tissue Research.* 322(2):245-256.
- González, A. III., E. Crittenden and D. M. García. 2004. Carbachol-induced pigment granule dispersion in RPE. *BMC Neuroscience* 5:23.
- García, D. M., S. E. Weigum and J. R. Koke. 2003. GFAP and nuclear lamins share an epitope recognized by monoclonal antibody J1-31. *Brain Research* 976(1):9-21.
- Weigum, S. E., D. M. García, T. R. Raabe, N. Christodoulides and J. R. Koke. 2003. Discrete nuclear structures in actively growing neuroblastoma cells are revealed by antibodies raised against phosphorylated neurofilament proteins. *BMC Neuroscience* 4:6.
- Dixson, J. D., M. R. J. Forstner and D. M. García. 2003. Evolutionary history of the alpha-actinin gene family: a phylogenetic study. *J. Molecular Evolution* 56(1):1- 10.
- Glass, T. L., T. R. Raabe, D. M. García and J. R. Koke. 2002. Phosphorylated neurofilaments and SNAP-25 in SH-SY5Y neuroblastoma cells in vitro. *Brain Research* 934(1):34-48.
- Westerlund, J. F., D. M. García, J. R. Koke, T. A. Taylor and D. S. Mason. 2002. Summer scientific research for teachers: the experience and its effect. *J. Science Teacher Education* 13(1):63-83.
- García, D. M. 1998. Carbachol-induced pigment granule dispersion in teleost RPE. *Cytobios* 94:31-37.
- Bolanos, S. H., D. O. Zamora, D. M. García, and J. R. Koke. 1998. An α -actinin isoform that may cross-link intermediate filaments and microfilaments. *Cytobios* 94:39- 61.
- King-Smith, C., P. Chen, D. M. García, H. Rey and B. Burnside. 1996. Calcium-independent regulation of pigment granule aggregation and dispersion in teleost retinal pigment epithelial cells. *Journal of Cell Science* 109:33-43.
- García, D. M. and B. Burnside. 1994. Suppression of cAMP induced pigment granule aggregation by inhibitors of organic anion transport. *Investigative Ophthalmology and Visual Science* 35:178-188.
- Tiffany-Castiglioni, E., D. M. García, J.-N. Wu, J. Zmudzki, G. R. Bratton. 1988. Effects of lead on viability and intracellular metal content of C6 rat glioma cells. *Journal of Toxicology and Environmental Health* 23(2): 267-279.

Conference Proceedings

Ashford-Hanserd, S.N., K.L. Daniel, D. García. 2022. Exploring STEM Success Skills of Minority STEM Majors at an HSI. *Proceedings of the Annual Meeting of the American Educational Research Association*. Career and Technical Education (CTE) Poster Session

Ashford-Hanserd, S.N., K.L. Daniel, D. García, Y. Lerma and R. Pedroso. 2021. Influences on Historically Underrepresented Minority Students' Decisions to Enroll and Persist in STEM Majors. *Proceedings of the Annual Meeting of NARST: A Worldwide Organization for Improving Science Teaching and Learning through Research*.

Idema, J., K.L. Daniel, S. Ashford-Hanserd and D. García. 2020. Factors influencing Biology majors' persistence in their degree. *Proceedings of the Annual Meeting of NARST: A Worldwide Organization for Improving Science Teaching and Learning through Research*. Conference cancelled due to COVID-19.

ABSTRACTS

Peer-reviewed

Ashford-Hanserd, S.N., K.L. Daniel, D. García and B. Lee. 2020. ACCEYSS: An evidence-based informal K-12 STEM curriculum framework for community organizations. Poster presentation at the annual meeting of the Texas Informal Science Education Association. Waco, Texas.

Ibarra, D. E., T. Mireles, A. Pattillo, D. Reimer, and D. M. García. 2019. The role of ABCC4 in pigment granule position in mouse retinal pigment epithelium. Poster presentation at Association for Research in Vision and Ophthalmology, April 28 - May 2, 2019, Vancouver, Canada. (Withdrawn)

Ashford-Hanserd, S. N., K. L. Daniel and D. M. García. 2019. Working collectively to improve ACCEYSS to informal STEM programming. ISEA Conference, February 20-22, 2019, Camp Aranzazu, TX.

Salazar, Jr., D., B. McCormack, J. D. Schuetz, K. A. Lewis and D. M. García. 2017. Investigating the role of Mrp4 in dark adaptive processes. Poster presentation by DS for National Conference for Undergraduate Research, April 6-8, 2017, Memphis, TN. **DS and BM recipients of STAR Travel Award.**

Gonzalez, Jr., P., M. Esparza, A. Horton, CJ Schubert and D. M. García. 2017. Aging, a perspective through the eyes of zebrafish (*Danio rerio*). Poster presentation by PG for Gordon Research Conference on Glial Biology: Functional Interactions Among Glia & Neurons, March 5-10, 2017, Ventura, CA.

Gonzalez, Jr., P., M. Esparza, A. Horton, CJ Schubert and D. M. García. 2017. Aging, a perspective through the eyes of zebrafish (*Danio rerio*). Poster presentation by PG at Biology Colloquium, Texas State University, February 24, 2017, San Marcos, TX. **Winner of Best Graduate Poster award.**

Tovar, R. U. and D. M. García. 2016. Central Texas *Eurycea*, a novel system for the study of evo-devo. Poster presentation by RUT for Evolution 2016, June 17-21, 2016, Austin, TX.

Tovar, R. U. and D. M. García. 2016. Crossing to the dark side: The south central Texas *Eurycea* clade as a novel subterranean model system for the study of evolutionary developmental biology. Platform talk delivered by RUT for 23rd International Conference on Subterranean Biology, June 13-17, 2016, Fayetteville, Arkansas.

- Roberts, T. L., C. D. Przybylski, S. T. Stone and D. M. García. 2016. Exploration of ABCC4's role in inducing pigment aggregation in the RPE of mice. Poster presentation by TR and CP at Biology Colloquium, Texas State University, February 26, 2016, San Marcos, TX.
- Gonzalez, Jr., P., M. Esparza, Z. Flores, C. Schubert and D. M. García. 2016. Optic nerve astrocytes of zebrafish (*Danio rerio*) as a model for aging studies in humans. Poster presentation by PG at Biology Colloquium, Texas State University, February 26, 2016, San Marcos, TX.
- Tovar, R. U. and D. M. García. 2015. Crossing to the dark side: convergent evolution in the development of a vestigial eye. Platform talk delivered by RUT for *Texas Academy of Science*, San Antonio, March 6-8, 2015, San Antonio, TX.
- García, D. M., V. C. Quintanilla, S. Cheepala, F. Weckerly and J. D. Schuetz. 2015. ATP-binding cassette protein C4 (Abcc4) in the retina of zebrafish: Role in regulating melanosome aggregation in the retinal pigment epithelium. Poster presentation at *Association for Research in Vision and Ophthalmology*, May 3-7, 2015, Denver, Colorado.
- Tovar, R. U. and D. M. García. 2015. "All roads lead to Rome" in the development of vestigial eye: Convergent evolution between *Eurycea rathbuni* and *Astyanax mexicanus*. Platform talk delivered by RUT at *Eurycea Research Symposium*, January 9, 2015, Georgetown, TX.
- Tovar, R. U. and D. M. García. 2014. "All roads lead to Rome" in the development of vestigial eye: Convergent evolution between *Eurycea rathbuni* and *Astyanax mexicanus*. Platform talk delivered by RUT for *Evolution 2014*, Durham, North Carolina.
- García, D. M. 2014. On the path to enlightenment through the eyes of a fish. Kick-off platform talk (TED-style) for the "New Horizons in STEM Education" *College and Career Readiness Conference*, March 27-28, 2014, San Antonio, TX.
- Tovar, R. U., B. P. Fremaux and D. M. García. 2013. Shedding light on a subterranean alien: An investigation of eye reduction in the Texas blind salamander and two closely related species. Platform talk delivered by RUT for the *Society for Integrative and Comparative Biology Annual Meeting*, January 3-7, 2014, Austin, TX.
- Tovar, R. U., B. P. Fremaux and D. M. García. 2013. Shedding light on a subterranean alien: an investigation of eye reduction in the Texas blind salamander and two closely related species. Platform talk delivered by RUT for the *Texas Herpetological Society Annual Meeting*, October 11-12, 2013, Wichita Falls, TX.
- García, D. M. and V. C. Quintanilla. 2013. Mrp4 in the photoreceptors of zebrafish: possible role in dark-adaptation. Platform talk for the *Association for Research in Vision and Ophthalmology/ International Society of Ocular Cell Biology 2013 Meeting* September 3-6, 2013, Oxford, England, Great Britain.
- Tovar, R. U., B. P. Fremaux and D. M. García. 2013. Ocular histology of three Texas paedomorphic salamander species; an introduction of the south central Texas *Eurycea* clade as a novel model system for comparative ocular histology. Platform talk delivered by RUT for *Association for Vision and Ophthalmology/ International Society of Ocular Cell Biology 2013 Meeting* September 3-6, 2013, Oxford, England, Great Britain.
- Kane, S. J., D. M. García and J. R. Koke. 2012. Astrocyte reactivity as modeled by F98 cells: the role of cAMP and Epac (exchange protein activated by cAMP). Poster presentation by SJK for *IBIA Ninth Annual World Congress on Brain Injury* March 21-25, 2012, Edinburgh, Scotland, United Kingdom.

- Quintanilla, V. C. and D. M. García. 2011. Expression and localization of multidrug resistance protein 4 (Mrp4) in the retinal tissue of *Danio rerio*. Poster presentation by VCQ for Association for Vision and Ophthalmology/ International Society of Ocular Cell Biology 2011 Meeting September 7-10, 2011, Vancouver, B.C., Canada.
- Koke, J., A. Savage, D. García. 2010. Optic nerve regeneration in zebrafish (*Danio rerio*): Cell-specific responses and expression of activating transcription factor 3 (Atf3). Platform talk delivered by JRK for 2010 5th Aquatic Animal Models of Human Disease Conference, Oregon State University, Corvallis, OR., September 20-22, 2010.
- García, D. M., K. E. Saul, S. G. Soto and J. R. Koke. 2009. Specific genetic signals for optic nerve regeneration in adult zebrafish (*Danio rerio*). Platform talk for the Association for Vision and Ophthalmology/ International Society of Ocular Cell Biology 2009 Meeting September 9-12, 2009, Ericeira, Portugal.
- García, D. M. and E. L. Capalbo. 2009. Diurnal expression of muscarinic and dopaminergic receptors in zebrafish eye. Poster presentation at the Association for Vision and Ophthalmology/ International Society of Ocular Cell Biology 2009 Meeting September 9-12, 2009, Ericeira, Portugal.
- Saul, K. E., J. R. Koke and D. M. García. 2008. Dissection of specific genetic signals from a background of tissue repair and inflammatory response noise during optic nerve regeneration in *Danio rerio*. 17th Biennial Meeting of the International Society for Development Neuroscience June 1-4, 2008, Asilomar, CA, USA

Others

- Wiebe, D. E., D. E. Ibarra, T. Mireles, J. D. Schuetz and D. M. García. 2022. The role of ABCC4 in pigment granule migration in RPE of mice. *Experimental Biology*, Philadelphia, PA, April 2 – 5, 2022.
- Delcid-Morales, E., D. E. Wiebe, R. Tovar, D. Hillis and D. M. García. 2022. The expression of rhodopsin and opsin in epigeal and hypogeal salamander embryos. *Experimental Biology*, Philadelphia, PA, April 2 – 5, 2022.
- Delcid-Morales, E., D. E. Wiebe, R. Tovar, D. Hillis and D. M. García. 2021. The expression of rhodopsin and opsin in epigeal and subterranean salamander embryos. *Honors Research Forum*, Texas State University, San Marcos, TX, November 17 – 19, 2021.
- Dobbins, B., E. Floyd, M. Rehan, E. Wiebe, R. Tovar, D. García and D. Hillis. 2021. Pax6 expression among sighted and blind salamanders of the genus *Eurycea*. *Texas Herpetological Society Fall Symposium*, Austin, TX, October 23, 2021.
- Wiebe, D. E., E. Delcid-Morales, R. Tovar, D. Hillis and D. M. García. 2021. The expression of rhodopsin and opsin in epigeal and subterranean salamander embryos. *Texas Herpetological Society Fall Symposium*, Austin, TX, October 23, 2021.
- Rodriguez, C. J. and D. M. García. 2020. Investigating aging and Alzheimer's disease in zebrafish (*Danio rerio*). 14th Annual Undergraduate Research Conference and Honors Thesis Forum, Texas State University, San Marcos, TX, April 22-24, 2020. **Winner of 3rd Prize.**
- Wiebe, D. E., D. E. Ibarra, T. Mireles and D. M. García. 2020. ABCC4 affects pigment granule migration in RPE of mice. 14th Annual Undergraduate Research Conference and Honors Thesis Forum, Texas State University, San Marcos, TX, April 22-24, 2020.

- Coles-Ruiz, M., R. McIntosh and D. M. García. 2020. Detection of mRNA encoding organic anion transporters in zebrafish eyes. *Experimental Biology 2020*, San Diego, CA, April 4-7, 2020. Cancelled due to COVID19.
- Wiebe, D. E., T. Mireles, D. E. Ibarra, J. Schuetz and D. M. García. 2019. ABCC4, a protein that plays a role for retinomotor movements in mouse retina. *2019 SACNAS: The National Diversity in STEM Conference*, Manoa, HI, October 31 – November 2, 2019. - *Withdrawn*
- García, D. M., R. J. Nuckels and J. Bisbal. 2019. Duplicated myosin V genes in teleost fishes: variation in the motor domain. *Society of Catholic Scientists Conference*, Notre Dame, IN, June 6-9, 2019.
- Rodriguez, C. J. and D. M. García. 2019. Detecting a tumor suppressor protein (p16INK4a) in zebrafish (*Danio rerio*). *Experimental Biology 2019*, Orlando, FL, April 2019.
- Mireles, T., D. E. Ibarra, E. R. Wiebe, A. M. Pattillo, C. J. Rodriguez, J. D. Schuetz and D. M. García. 2019. A role for ABCC4 in regulating pigment granule aggregation in mice. *Experimental Biology 2019*, Orlando, FL, April 2019.
- Ibarra, D. E., T. Mireles, A. Pattillo and D. M. García. 2018. A method for quantifying pigment position in mouse RPE. *2018 SACNAS: The National Diversity in STEM Conference*, San Antonio, TX, October 11-13, 2018.
- Reimer, D. E., D. E. Ibarra, T. Mireles and D. M. García. 2018. Localizing ATP-binding cassette protein C4 (ABCC4) in mouse RPE. *2018 COS Research Conference*, UTSA, San Antonio, TX, October 5, 2018.
- Ibarra, D. E., T. Mireles and D. M. García. 2018. A method for quantifying pigment position in mouse RPE. *2018 COS Research Conference*, UTSA, San Antonio, TX, October 5, 2018.
- Stephens, D., C. Wright, R. McIntosh, K. A. Lewis and D. M. García. 2018. Using molecular techniques to determine protein binding partners. *12th Annual Undergraduate Research Conference and Honors Thesis Forum*, Texas State University, San Marcos, TX, April 18-20, 2018.
- Millford, J. and D. M. García. 2018. Phylogenetic analysis of melatonin receptors in fish. *12th Annual Undergraduate Research Conference and Honors Thesis Forum*, Texas State University, San Marcos, TX, April 18-20, 2018.
- Pender, C. and D. M. García. 2018. Can we use zebrafish to study Alzheimer's? *12th Annual Undergraduate Research Conference and Honors Thesis Forum*, Texas State University, San Marcos, TX, April 18-20, 2018.
- Mireles, T., E. Ibarra, A. Pattillo, D. Reimer-Wiebe, C. Rodriguez and D. M. García. 2018. ABCC4's role in adjusting mouse eyes to darkness. *12th Annual Undergraduate Research Conference and Honors Thesis Forum*, Texas State University, San Marcos, TX, April 18-20, 2018.
- Stephens, D., C. Wright, D. M. García and K. A. Lewis. 2018. Detection of the zebrafish Mrp4 protein using a commercial antibody. *Chemistry & Biochemistry Research Colloquium*, Texas State University, San Marcos, TX, April 6, 2018.
- Ashford, S., K. L. Daniel, D. M. García. 2018. NSF INCLUDES DDLP: ACCEYSS – Association of Collaborative Communities Equipping Youth for STEM Success. *NSF INCLUDES Meeting*, Washington, D. C. January 2018.
- Ibarra, D. E., T. C. Mireles, A. M. Pattillo, C. D. Przybylski, T. L. Roberts, J. D. Schuetz and D. M. García. 2018. Determining the effect of MRP4 knockout on pigment granule position in mouse RPE. *Experimental Biology 2018*, San Diego, CA, April 2018.

- Pattillo, A. M., T. L. Roberts, C. D. Przybylski and D. M. García. 2017. Quantifying pigment positions in the retinal pigment epithelium of dark- and light-adapted mouse retinas. *11th Annual Undergraduate Research Conference and Honors Thesis Forum*, Texas State University, San Marcos, TX, April 20-21, 2017.
- Pattillo, A. M., T. L. Roberts, C. D. Przybylski and D. M. García. 2017. Quantifying pigment positions in the retinal pigment epithelium of dark- and light-adapted mouse retinas. *WISE Conference*, Texas State University, San Marcos, TX, April 28, 2017.
- Gonzalez, P. Jr., M. Esparza, A. Horton, CJ Schubert, D. M. García. 2017. Aging, a perspective through the eyes of zebrafish (*Danio rerio*). *Annual Biology Colloquium*, Texas State University, San Marcos, TX, February 24, 2017. **Best Graduate Poster.**
- Zepeda, S. K., M. A. Villarreal, N. M. Biediger, N. A. Bonner, J. N. Miller, B. J. Ricard, D. M. García and K. A. Lewis. 2017. Determining zebrafish epitope reactivity to commercially available antibodies. *Experimental Biology*, Chicago, April 2017.
- Gonzalez, P. Jr., M. Esparza, A. Horton, CJ Schubert, D. M. García. 2016. Aging, a perspective through the eyes of zebrafish (*Danio rerio*). *International Research Conference for Graduate Students*, Texas State University, San Marcos, TX, November 15, 2016.
- Roberts, T., C. Przybylski, S. Stone and D. M. García. 2016. Exploration of Mrp4's role in the export of cAMP to induce pigment aggregation in the RPE of dark adapted mice. *10th Annual Undergraduate Research Conference and Honors Thesis Forum*, Texas State University, San Marcos, TX, April 24-25, 2016.
- Tovar, R. U. and D. M. García. 2016. Crossing to the dark side: convergent evolution in the development of a vestigial eyes. *The University of Tulsa Student Research Colloquium*, Tulsa, OK, April 6, 2016.
- González, P., Jr., M. Esparza and D. M. García. 2015. Optic nerve astrocytes of zebrafish (*Danio rerio*) as a model for aging studies linked to Alzheimer's disease in humans. Platform talk for *International Research Conference for Graduate Students*, Texas State University, San Marcos, TX, November 17-18, 2015.
- Flores, Z., P. González, Jr., M. Esparza, A. Carr and D. M. García. 2015. Development of Gfap expression in the optic nerve of zebrafish. *Annual Biomedical Research Conference for Minority Students*, Seattle, WA, November 11-14, 2015.
- González, P., Jr., M. Esparza and D. M. García. 2015. Optic nerve astrocytes of zebrafish (*Danio rerio*) as a model for aging studies linked to Alzheimer's disease. *2015 COS Research Conference*, University of Texas-San Antonio, October 9, 2015.
- Flores, Z., P. González, Jr., M. Esparza, A. Carr and D. M. García. 2015. Development of Gfap expression in the optic nerve of zebrafish. *2015 National Conference for the Society for the Advancement for Chicanos/Hispanics and Native Americans in Science*, Washington, D. C., October 20-31, 2015. **Zara Flores, Bridges to the Baccalaureate student, won "the award for an outstanding Poster presentation at the 2015 SACNAS National Conference in Washington, DC."**
- Esparza, M. (UGST/PA) and D. M. García (CO). 2015. I spy something red: Observing the optic nerve of aging zebrafish for GFAP. *9th Annual Undergraduate Research Conference and Honors Thesis Forum*, Texas State University, San Marcos, TX, April 22-24, 2015.
- Ricard, B. J., S. S. Sullivan, J. S. Saavedra, P. Bendiksen, M. A. Villarreal, K. A. Lewis and D. M. García. 2015. A method for examination of the melatonin Mtnr1a receptor subtypes in the retina of *Danio rerio* (zebrafish). *9th Annual Undergraduate Research Conference and Honors Thesis Forum*, Texas State University, San Marcos, TX, April 22-24, 2015.

- Kelly, P. and D. M. García. 2015. Towards a clearer vision of anti-MRP4 antibody specificity in zebrafish eyes. *9th Annual Undergraduate Research Conference and Honors Thesis Forum*, Texas State University, San Marcos, TX, April 22-24, 2015.
- Ricard, B. J., S. S. Sullivan, J. S. Saavedra, P. Bendiksen, M. A. Villarreal, K. A. Lewis and D. M. García. 2015. A method for examination of the melatonin Mtnr1a receptor subtypes in the retina of *Danio rerio* (zebrafish). *20th Annual Biology Colloquium*, Texas State University, San Marcos, TX, April 17, 2015.
- Villarreal, M. (UGST), B. Euhus (UGST), B. Ricard (UGST), D. García and K. Lewis (CO). 2015. Validation of anti-human MT1 antibody binding in zebrafish, a model organism. *20th Annual Biology Colloquium*, Texas State University, San Marcos, TX, April 17, 2015.
- Tovar, R. U. and D. M. García. 2014. Convergent evolution in the development of vestigial eyes. *2014 Texas Herpetology Society Meeting*, Texas State University, San Marcos, TX, November 8, 2014.
- Tovar, R. U. and D. M. García. 2014. Convergent evolution in the development of vestigial eyes. Platform talk for *2014 National Conference for the Society for the Advancement for Chicanos/Hispanics and Native Americans in Science*, Los Angeles, CA, October 5-8, 2014.
- Tovar, R. U. and D. M. García. 2014. “All roads lead to Rome” in the development of vestigial eye: Convergent evolution between *Eurycea rathbuni* and *Astyanax mexicanus*. Platform talk for *EuryceaAlliance* meeting, Austin, TX, June 6, 2014.
- Laird, A., R. U. Tovar and D. M. García. 2014. A comparative ocular histology of three salamander species from south central Texas. Platform talk for *EuryceaAlliance* meeting, Austin, TX, June 6, 2014.
- Laird, A., R. U. Tovar and D. M. García. 2014. A comparative ocular histology of three salamander species from south central Texas. *Biology Colloquium*, Texas State University, San Marcos, April 25, 2014. **Recognized as best undergraduate poster.**
- Stone, T. S. and D. M. García. 2014. Change in pigment position in dark- versus light-adapted mouse eyes. *Biology Colloquium*, Texas State University, San Marcos, April 25, 2014.
- Carr, A. and D. M. García. 2014. Developmental expression of GFAP in zebrafish. *Biology Colloquium*, Texas State University, San Marcos, April 25, 2014.
- Nuckels, R. J. and D. M. García. 2014. Gene and genome duplications in chordates. Platform talk for *Biology Colloquium*, Texas State University, San Marcos, April 25, 2014.
- Tovar, R. U. and D. M. García. 2014. “All roads lead to Rome” in the development of vestigial eye: Convergent evolution between *Eurycea rathbuni* and *Astyanax mexicanus*. Platform talk for *Biology Colloquium*, Texas State University, San Marcos, April 25, 2014.
- Stone, T. and D. M. García. 2013. Examination of mouse retina by electron microscopy. *WISE Conference*, Texas State University-San Marcos, November 21-22, 2013.
- Foster, B., A. Carr, A. Laird and D. M. García. 2013. Developmental expression of GFAP in zebrafish. *WISE Conference*, Texas State University-San Marcos, November 21-22, 2013.
- Fremaux, B. P., C. F. Cerday, R. U. Tovar and D. M. García. 2013. Can the blind see? A histological comparison of three south central Texas *Eurycea* species. *WISE Conference*, Texas State University-San Marcos, November 21-22, 2013.

- Tovar, R. U. and D. M. García. 2013. Development and staging of two phenotypically divergent south central Texas *Eurycea* species: *Eurycea rathbuni* and *Eurycea sosorum*. *WISE Conference*, Texas State University-San Marcos, November 21-22, 2013.
- Tovar, R. U., B. P. Fremaux and D. M. García. 2013. Shedding light on a subterranean alien: An investigation of eye reduction in the Texas blind salamander and two closely related species. Platform talk for *International Research Conference for Graduate Students*, Texas State University, San Marcos, TX, November 6-7, 2013.
- Freeman, K.R., F. Benavides, C. Pérez and D. M. García. 2013. Proteomic comparison between MRP4 knockout and wild type mouse brain, liver, kidney and serum. *World Biotechnology Conference*, Boston, MA, June 2013.
- Nuckels, R. and D. M. García. 2013. Myosin 5 evolution and expression in teleosts. *Biology Colloquium*, Texas State University-San Marcos, March 2013.
- Tovar, R. U. and D. M. García. 2013. Comparative ocular histology of three endemic paedomorphic salamander species (*Eurycea nana*, *E. sosorum*, and *E. rathbuni*). *Biology Colloquium*, Texas State University-San Marcos, March 2013.
- Tovar, R. U. and D. M. García. 2013. Comparative ocular histology of three endemic paedomorphic salamander species (*Eurycea nana*, *E. sosorum*, and *E. rathbuni*). *Hispanic Serving Institution Research Symposium*, Texas State University-San Marcos, March 2013.
- Nuckels, R. and D. M. García. 2013. Myosin 5 evolution and expression in teleosts. *Epigenetics and Chromatin: Interactions and Processes Conference*, March 2013, Harvard Medical School, Boston, MA.
- Quintanilla, V. C. and D. M. García. 2012. Expression and localization of multidrug resistance protein 4 (Mrp4) in the retinal tissue of *Danio rerio*. *WISE Conference*, Texas State University-San Marcos, April 2012.
- Quintanilla, V. C. and D. M. García. 2012. Expression and localization of multidrug resistance protein 4 (Mrp4) in the retinal tissue of *Danio rerio*. *Biology Colloquium*, Texas State University-San Marcos, Spring 2012.
- Neve, L. D., A. A. Savage, J. R. Koke and D. M. García. 2011. Identification and characterization of reactive astrocytes following optic nerve injury in zebrafish. *International Research Conference for Graduate Students*, Texas State University-San Marcos, November 2-3, 2011.
- Quintanilla, V. C. (GST/PA) and D. M. García (CO). 2011. Expression and localization of multidrug resistance protein 4 (Mrp4) in the retinal tissue of *Danio rerio*. *International Research Conference for Graduate Students*, Texas State University-San Marcos, November 2-3, 2011.
- Nuckels, R. J. and D. M. García. 2011. Expression of duplicated pigment transport genes in zebrafish. *International Research Conference for Graduate Students*, Texas State University-San Marcos, November 2-3, 2011.
- Neve, L. D., A. A. Savage, J. R. Koke and D. M. García. 2011. An anti-bystin antibody labels hypertrophic astrocytes in zebrafish following optic nerve injury: possible marker for reactivity. *The FASEB J.* LB524; Abstract ID 9641.
- Hurtado, G. H. and D. M. García. 2011. Analyzing lipocalin-2 expression in zebrafish optic nerve following injury. *Women in Science and Engineering Conference*, Texas State University-San Marcos, April 8, 2011.
- Kane, S. J., J. R. Koke and D. M. García. 2011. Evidence for multiple cAMP-dependent pathways for activation of F98 cells to the reactive state. *Women in Science and Engineering Conference*, Texas State University-San Marcos, April 8, 2011.

- Nuckels, R. J. and D. M. García. 2011. Expression of duplicated pigment transport genes in zebrafish. *Women in Science and Engineering Conference*, Texas State University-San Marcos, April 8, 2011.
- Davidson, M. and D. M. García. 2011. Identification of a Rab27 guanine nucleotide exchange factor homologue in zebrafish. *Women in Science and Engineering Conference*, Texas State University-San Marcos, April 8, 2011.
- Kane, S. J. (GST/PA), D. M. García and J. R. Koke (CO). 2011. Evidence for multiple cAMP-dependent pathways for activation of F98 cells to the reactive state. *The FASEB J.*
- Cardwell, A. S., A. L. Mosier, J. R. Koke and D. M. García. 2010. ATF3 and intermediate filament expression after optic nerve injury (ONI) in zebrafish. *Women in Science and Engineering Conference*, Texas State University-San Marcos, April 30, 2010.
- Hogan, S. and D. M. García. 2010. Nuclear size as a marker for astrocyte reactivity. *Women in Science and Engineering Conference*, Texas State University-San Marcos, April 30, 2010.
- Sharma, S. and D. M. García. 2010. Effect of diurnal variation on melatonin receptor expression in zebrafish eyes. *Women in Science and Engineering Conference*, Texas State University-San Marcos, April 30, 2010.
- Cardwell, A. S., A. L. Mosier, J. R. Koke and D. M. García. 2010. ATF3 and intermediate filament expression after optic nerve injury (ONI) in zebrafish. *The FASEB J.*, Abstract number 1054.1.
- Capalbo, E. L. and D. M. García. 2009. Diurnal rhythms of muscarinic receptor expression in the eye of zebrafish. *The FASEB J.*, Abstract number 7114.
- Patel, M. P., G. R. Ramsey, D. M. García and J. R. Koke. 2009. Phosphorylation of GFAP and lamin B is an early event in reactive astrocytes and may be stimulated by cAMP. *The FASEB J.*, Abstract number 6695.
- Crittenden, E. L., E. L. Capalbo and D. M. García. 2008. Expression of M_{odd} muscarinic acetylcholine receptors in the retinas of bluegill and zebrafish. *The FASEB J.*
- Sharma, S., J. Muñoz and D. M. García. 2008. Exploration of gene changes in circadian rhythm in zebrafish eyes using microarray technology. *The FASEB J.*
- Mosier, A., K. Saul, J. R. Koke and D. M. García. 2008. Optic nerve re-growth in *Danio rerio*. *The FASEB J.*
- Crittenden, E. L. and D. M. García. 2007. Snake venom containing M5 muscarinic receptor activity inhibits carbachol-induced pigment granule dispersion in retinal pigment epithelium isolated from bluegill sunfish. *The FASEB J.*
- Neece, J., D. M. García and J. R. Koke. 2006. Optimal treatment period for forskolin induction of a reactive-like condition in F98 glioma cells. *Molecular Biology of the Cell*. Abstract edition.
- Johnson, A. and D. M. García. 2006. Calcium is required in pigment granule dispersion in bluegill RPE. *Molecular Biology of the Cell*. Abstract edition.
- Nuckels, R. J., J. A. Smith and D. M. García. 2006. Ontogeny of muscarinic receptor expression in zebrafish. *Molecular Biology of the Cell*. Abstract edition.
- Radhakrishnan, V., S. Becerra, P. Nguyen and D. M. García. 2006. Molecular characterization of G-proteins in bluegill. *The FASEB J.* 20(5):A919.
- Radhakrishnan, V. and D. M. García. 2005. Isolation and partial sequencing of protein G α 11 from bluegill. *Neuron Meeting*, Washington, D. C., November 10-11, 2005.
- Abedi, A., D. M. García and J. R. Koke. 2005. The G3.5 antigen appears to be a form of alpha-actinin. *Molecular Biology of the Cell*, abstract edition.

- Neece, J., P. Phatarpekar and D. M. García. 2005. Isolation and sequencing of fugu muscarinic acetylcholine receptor genes. *The FASEB J.* 19(4): A200.
- Copeland, C., E. L. Crittenden and D. M. García. 2005. Muscarinic receptors in *Lepomis macrochirus*: a pharmacological approach. *The FASEB J.* 19(5): A1201.
- Ramsey, G. R., D. M. García and J. R. Koke. 2005. Is reactive astrogliosis mediated by a cAMP-dependent CaMK pathway? *The FASEB J.* Abstract number
- Neece, J., P. Phatarpekar and D. M. García. 2004. Isolation and sequencing of fugu muscarinic acetylcholine receptor genes. *Mol. Biol. Cell* 15: 342A.
- Phatarpekar, P. V., S. Durdan, C. Copeland, E. L. Crittenden and D. M. García. 2004. Activation of muscarinic receptors on fish RPE induces pigment granule dispersion. *Mol. Biol. Cell* 15: 342A
- Ramsey, G.R., D. M. García and J. R. Koke. 2004. Forskolin treatment of F98 glioblastoma cells increases J1-31 nuclear antigen levels. *The FASEB J.* 18(5): A1066.
- Phatarpekar, P. V., J. D. Neece and D. M. García. 2004. Molecular characterization of muscarinic acetylcholine receptor genes in fish. *The FASEB J.* 18(4): A338.
- Westerlund, J. F., D. M. García, R. S. Schwartz and T. A. Taylor. 2004. The effects of summer scientific research experiences with or without Nature of Science (NOS) instruction upon the NOS views of secondary science teachers. Seventh International History, Philosophy, and Science Teaching (IHPST) Conference, Winnipeg, Ontario, Canada.
- Westerlund, J. F., D. M. García, R. S. Schwartz and T. A. Taylor. 2004. The effects of summer scientific research experiences with or without Nature of Science (NOS) instruction upon the NOS views of secondary science teachers. AETS Meeting, Nashville, TN.
- Westerlund, J. F., D. M. García, R. S. Schwartz and T. A. Taylor. 2003. Explicit NOS instruction and authentic science research: Effects on teachers' NOS views. NC-AETS Meeting, Rochester, MN.
- Westerlund, J. F., T. Taylor, D. García, R. Schwartz. 2004. Nature of science learning outcomes of secondary teachers. Southwest Regional Meeting of the Association for the Education of Teachers in Science, Georgetown, TX.
- Schwartz, R. S., J. Westerlund, J. Koke, D. García, T. Taylor. 2003. Explicit/reflective NOS instruction and authentic science research: Effects on teachers' NOS views. NARST meeting, Philadelphia, PA.
- Saleem, S., A. González, E. Crittenden and D. M. García. 2002. Muscarinic receptors in fishes: pharmacological and molecular analyses. Annual meeting of the American Society for Cell Biology, San Francisco.
- Dixson, J. D., M. R. J. Forstner and D. M. García. 2001. Cloning and characterization of rat alpha-actinin 3: a phylogenetic investigation. *Mol. Biol. Cell* 12S:286a.
- Needham, J. N., Jr., M. R. J. Forstner and D. M. García. 2001. Cloning and characterization of rat alpha-actinin 3: structural analysis. *Mol. Biol. Cell* 12S:1564.
- García, D. M. and A. Guerra. 2001. A research-oriented Bridges to the Baccalaureate program. *Mol. Biol. Cell* 12S:525.
- Taylor, T., J. Westerlund, D. M. García and J. R. Koke. 2001. Teachers as researchers: Does a summer research experience improve education in science? *Mol. Biol. Cell* 12S:94a.

- Cen, E. O., Jr. and D. M. García. 2001. Further analysis of vimentin intermediate filaments in teleost retinal pigment epithelial cells. Annual Meeting of the Society for the Advancement of Chicanos and Native Americans in Science, A New Tapestry of Science: Woven across Cultures and Disciplines, p. 133.
- Westerlund, J., J. Koke, D. García. 2001. A model for retention and preparation of teachers. 17th Annual Recruitment and Retention Conference "Closing the Gaps," Austin, Texas.
- García, D. M. and R. J. C. McLean. 2001. NIH Bridges to the Baccalaureate Program at Southwest Texas State University. Bridges Program Directors' Meeting, Ellicott, MD.
- García, D. M. and R. J. C. McLean. 2001. NIH Bridges to the Baccalaureate Program at Southwest Texas State University. Grants Resource Center, American Association of State Colleges and Universities Meeting, Washington DC.
- Dixson, J. D., M. R. J. Forstner, D. M. García and J. R. Koke. 2001. Molecular genetic characterization of alpha-actinin isoforms. Texas Academy of Science Meeting, Southwest Texas State University.
- Needham, J. N., D. M. Garcia, J. R. Koke, and M. R. J. Forstner. 2001. Molecular characterization of a possible alpha-actinin isoform. Texas Academy of Science Meeting, Southwest Texas State University.
- Cen, E. O. and D. M. García. 2000. Localization of vimentin intermediate filaments in light- and dark-adapted RPE from bluegills. *Mol. Biol. Cell* 11S:352a-353a.
- Dixson, J., J. Needham, J. R. Koke and D. M. García. 2000. Molecular characterization of a possible α -actinin isoform. *Molecular Biology of the Cell* 11S:76a.
- González, A., III and D. M. García. 2000. Cholinergic mechanisms of light adaptation in teleost retinal pigment epithelium. *Molecular Biology of the Cell* 11S:412a.
- González, A., III and D. M. García. 2000. Cholinergic mechanisms of light adaptation in teleost retinal pigment epithelium. Presented at ASPET meeting in Boston.
- González, A., III and D. M. García. 2000. Cholinergic mechanisms of light adaptation in teleost retinal pigment epithelium. Proceedings of the 2000 103rd Annual Meeting of the Texas Academy of Sciences, Kingsville, Texas.
- Westerlund, J.F., T. Taylor, D. M. García and J. R. Koke. 2000. Teachers as summer scientific researchers: Transformative experiences. Proceedings of the 2000 103rd Annual Meeting of the Texas Academy of Sciences, Kingsville, Texas.
- Westerlund, J.F., T. Taylor, D. M. García and J. R. Koke. 2000. Teachers as summer scientific researchers: Transformative experiences. Proceedings of the 2000 National Association of Research in Science Teaching Annual Meeting, New Orleans, Louisiana.
- Pérez, Jr., E. and D. M. García. 1999. Teleost retinal pigment epithelial cells express vimentin. *The FASEB Journal* 13(4):A349.
- Pérez, Jr., E. and D. M. García. 1998. Immunolabeling of cytoskeletal elements in teleost retinal pigment epithelial cells. *The FASEB Journal* 12(5):A729.
- Zamora, D., J. R. Koke and D. M. García. 1997. Localization of cytoskeletal elements in teleost retinal pigment epithelium by confocal microscopy. *Mol. Biol. Cell* 8s.
- Zamora, D., E. Pérez, Jr., J. R. Koke and D. M. García. 1996. Localization of cytoskeletal elements in teleost retinal pigment epithelium. *Mol. Biol. Cell* 7s:382a.
- LeMaster, A. and D. M. García. 1995. Uptake of ^3H -cAMP by isolated teleost RPE. *Molecular Biology of the Cell* 6s:130a.

- McCalip, B., D. O. Zamora, E. Pérez, Jr., J. R. Koke and D. M. García. 1995. Localization of an intermediate filament associated protein and identification of intermediate filament proteins in the retinal pigment epithelium of bluegill fish. *Molecular Biology of the Cell*. 6s:377a.
- Zamora, D., J. R. Koke and D. M. García. 1994. Immunolocalization of a putative intermediate filament associated protein in fish retinal pigment epithelium. *Molecular Biology of the Cell* 5:299a.
- García, D. M. and B. Burnside. 1992. Organic anion transport inhibitors block cAMP-induced pigment aggregation in RPE. *Molecular Biology of the Cell* 3:338a.
- Burnside, B. and D. M. García. 1992. Inhibition of cAMP-induced pigment aggregation in green sunfish RPE by an organic anion transport inhibitor probenecid. *Investigative Ophthalmology and Visual Science* 33(4):910.

B. WORKS NOT IN PRINT

INVITED TALKS, LECTURES, PRESENTATIONS

March 22, 2016	When fish turn to the dark side	Distinguished Lecturer Series, San Marcos Academy
March 11, 2016	Tips for navigating the Ph. D.: A semi-autobiographical retrospective	5 th Annual USDA Graduate Fellows Career Preparation Institute
March 13, 2015	Tips for navigating the Ph. D.: A semi-autobiographical retrospective	4 th Annual USDA Graduate Fellows Career Preparation Institute
September 25, 2014	When fish turn to the dark side: A dual role for cyclic AMP in cell signaling	RISE Seminar, University of Texas-Pan American, Edinburg, TX
March 27, 2014	On the path to enlightenment through the eyes of a fish	New Horizons for STEM Education Conference, San Antonio, Texas
October 2, 2013	Vision research in the García lab	USDA-FATE Conference, Texas State University
September 4, 2013	Mrp4 in the photoreceptors of zebrafish: possible role in dark-adaptation	ARVO/ISOCB, Oxford, England
December 5, 2012	Working on the night moves movements: Stunts fish eyes pull in the dark	Aquatic Biology Seminar, Texas State University
November 9, 2012	Working on the night moves movements: cAMP as an extracellular signal in the retina	Colorado College
October 8, 2012	Working on the night moves movements: cAMP as an extracellular signal in the retina	Department of Biology, Texas State University-San Marcos
September 10, 2009	Specific genetic signals for optic nerve regeneration in adult zebrafish (<i>Danio rerio</i>)	ARVO/ISOCB, Ericeira, Portugal

June 26, 2009	FISH & Chips	Life Sciences Research Group, Texas State University-San Marcos
April 4, 2008	Light- and Dark-Adaptation in Fish Retinal Pigment Epithelium	Texas Lutheran University
March 29, 2008	Getting Hooked on Fish Eyes	MAES Science Extravaganza, Texas State University-San Marcos
February 14, 2007	Presentation on Careers in Science	UT-Austin
January 30, 2007	Embryonic Stem Cell Research	Texas State University-San Marcos, SACA debate
October 27, 2005	Faculty Presentation Workshop on Careers in Science	H-LSAMP Program, Texas State -San Marcos
March 18, 2005	Minority Student Recruitment to Biomedical Research	ASM -Texas Branch, John Knox Ranch
February 20, 2003	Light Adaptation in Fishes	San Antonio College, Bridges Program
October 3, 2002	Light Adaptation in Fishes	NMSU, Dept Biology
April 1, 2002	Prions	SWT, Department of Biology
February 22, 2002	Light Adaptation in Fishes	St. Philip's College, San Antonio, Bridges Program
June 19, 2001	A Model for Retention and Preparation of Teachers	17 th Annual Recruitment and Retention Conference "Closing the Gaps"
June 8, 2001	Bridges at Professional Meetings	Bridges Program Directors' Meeting, Ellicott, MD
January 16, 2001	Fish Retinal Pigment Epithelium as a Model for Studying the Function of Intermediate Filaments	Johannes Gutenberg - Universität Mainz, Germany
October 23, 2000	Fish Eye Cells - A Model for Studying Cell Structures and Cellular Communications	St. Philip's College, San Antonio
Sept 16, 2000	Giving Back: How (or Why) I Became a Scientist	St. Mary's University, San Antonio
April 1, 1999	Teleost RPE: Cytoskeleton and Cell Motility	Texas A&M University, Kingsville, Texas
November 9, 1998	Teleost RPE: Cytoskeleton, Cell Motility and Cell Signaling	Southwest Texas State University, San Marcos
January 24, 1997	Pigment Granule Aggregation in the Retinal Pigment Epithelium: A cAMP Story with a Twist	University of Texas at San Antonio
October 28, 1996	Pigment Granule Aggregation in the Retinal Pigment Epithelium: A cAMP Story with a Twist	Trinity University, San Antonio

March 9, 1996	You Want to do What?	Women's History Week, St. Phillip's College, San Antonio
December 5, 1994	Intermediate Filament Associated Proteins in RPE	Toxicology Group, Texas A&M, College Station
February 4, 1994	Pigment Granule Aggregation in the Retinal Pigment Epithelium: A cAMP Story with a Twist	University of Texas Marine Sciences Institute, Port Aransas
December 3, 1993	Cyclic AMP-induced Pigment Granule Aggregation in the Retinal Pigment Epithelium	Department of Zoology, University of Texas, Austin

WORKSHOPS GIVEN

Spring 2009	CAREER Proposal Writing Workshop series (with Carolyn Pate)
Spring 2008	CAREER Proposal Writing Workshop series (with Carolyn Pate)
February 29, 2008	Science Education Grant Proposal Writing Workshop
October 26, 2007	Grant Proposal Writing Workshop presented by Bob McLean and Bob Slocum
October 5, 2007	Grant-Writing Workshop for Math Department (with Carolyn Pate and Steve Wilson)
Spring 2007	CAREER Proposal Writing Workshop series (with Carolyn Pate)
September 30, 2006	Grant Proposal Writing Workshop (with numerous speakers)
August 16, 2006	Grant Proposal Writing Workshop (with numerous speakers)
Spring 2006	CAREER Proposal Writing Workshop series (with Carolyn Pate)
October 27, 2005	Faculty Presentation Workshop on Careers in Science Houston-LSAMP Scholarship Program, Texas State University- San Marcos

C. GRANTS AND CONTRACTS

FUNDED EXTERNAL RESEARCH GRANTS (\$1,887,988 total)

2020 - 2023	National Science Foundation. Collaborative Proposal: Developmental and Genetic Pathways to Phenotypic Convergence in a Radiation of Groundwater Salamanders. (PI Dana M. García for TXS portion; PI David Hillis, co-PI Tom Devitt for UT portion) \$368,942 (for Texas State portion; Award Number DEB 2032633)
2019	National Science Foundation. INCLUDES DDLP - ACCEYSS: Association of Collaborative Communities Equipping Youth for STEM Success. \$14,999 (PI Shetay Ashford, co-PI Kristy Daniel, co-PI Dana García; Award Number OIA 1934453)
2019	American Physiological Society. 2019 Pan-American Congress Travel Award. \$500 (declined)
2017 – 2020	National Science Foundation. INCLUDES DDLP - ACCEYSS: Association of Collaborative Communities Equipping Youth for STEM Success. \$299,536 (PI Shetay Ashford, co-PI Kristy Daniel, co-PI Dana García; Award Number OIA-1764404)

- 2008-2009 National Science Foundation. Major Research Instrumentation Program. Acquisition of a Multiphoton-ready Microscope at Texas State University, \$234,360 (plus \$100,440 in matching funds from the University – not counted in above total) (PI Joseph Koke, co-PI Dana García; award number DBI-0821252)
- 2007-2009 Hope for Vision Award (G), \$15,000 (PI Dana García)
- 2006-2010 National Science Foundation. Career Advancement Award: FISH and chips: Applying microarray technology and in situ hybridization to understanding light-adaptation in zebrafish (G), \$168,646 (PI Dana García; award number IOB-0615762).
- 2006 American Physiological Society, APS Research Career Enhancement Award (G), \$1,580 (PI Dana García).
- 2006 National Science Foundation. REU supplement to RUI: Pigment Dispersion in Teleost Retinal Pigment Epithelium: Cholinergic Mechanisms (G), \$6000 (PI Dana García; award number IOB 06-34704).
- 2005-2006 National Science Foundation. REU supplement to RUI: Pigment Dispersion in Teleost Retinal Pigment Epithelium: Cholinergic Mechanisms (G), \$6000 (PI Dana García; award number IOB 05-33445)
- 2003-2005 National Science Foundation. RUI: Pigment Dispersion in Teleost Retinal Pigment Epithelium: Cholinergic Mechanisms (G), \$152,653 (PI Dana García; award number IOB-0235523)
- 2000-2005 National Science Foundation. International: Role of Vimentin in RPE (G), \$16,000 (PI Dana García; award Number INT-0078261)
- 2000-2003 National Science Foundation. RUI: Pigment Granule Dispersion in Teleost Retinal Pigment Epithelium: Cholinergic Mechanisms (G), \$62,099, including \$11,612 for an REU supplement (PI Dana García; award number IBN-0077666)
- 1999-2003 National Institutes of Health. NIGMS – Research-Oriented Bridges to the Baccalaureate, \$514,773 (total costs) (PI Dana García; co-PI Robert McLean; award GM058375-01A1)
- 1994-1996 National Science Foundation. Minority Research Initiatives Planning Grant, \$26,900, including a Research Enhancement for Undergraduates supplement (PI Dana García)

FUNDED CONTRACT

2012-2013 Operational Technologies. Imaging, \$6000

PENDING EXTERNAL GRANTS FOR RESEARCH

SUBMITTED BUT NOT FUNDED EXTERNAL GRANTS AND CONTRACTS

(Incomplete record)

USDA HSI (1/2020) – *Corredores*: A national thesis competition leading towards career opportunities in the USDA. (co-PI Mar Huertas) \$275,000. This proposal was not recommended for funding, but it was scored as “high priority.”

USDA HSI-Education Collaborative (1/2020) – *Siempre Adelante*: Solving the Maze of Academia. (PI Kristy Daniel, co-PI Jaime Chahin) \$999,008. This proposal was not recommended for funding, but it was scored as “high priority.”

NSF INCLUDES Alliance (4/19) - Expanding the ACCEYSS (Activating Communities of Color to Equip Youth for STEM Success) Alliance in U.S. Mega-States. (PI: Shetay Ashford-Hanserd, co-PI's Kristy Daniel, Amanda Masino) \$2,051,592

NSF AISL (11/18) - ACCEYSS (Association of Collaborative Communities Equipping Youth for STEM Success) Expansion. (PI: Shetay Ashford-Hanserd, co-PI's Kristy Daniel, Amanda Masino) \$1,149,351

NSF RoL (4/19) - Collaborative Research: RoL: Gains and losses of sensory systems: Are convergent subterranean phenotypes produced by a common set of genetic rules? (PI: David Hillis, co-PI Susan Cameron Devitt) \$332,724

NSF MRI (2/18) - Acquisition of Transmission Electron Microscope for Linking Integrated Materials Education and Research (ATELIER) (PI: Mark Wistey, co-PI's Christopher Rhodes, Edwin Piner, Nikoleta Theodoropolou). \$1,526,000

DEPARTMENT OF THE ARMY – MATERIEL COMMAND (5/17) - Center of Excellence in STEM Scholarship. (co-PI Eleanor Close). \$4,314,755

NSF INCLUDES (5/17) - ACCEYSS: Alliance of Churches and Communities Equipping Youth for STEM Success. (PI Shetay Ashford, co-PI Kristy Daniel). \$299,536

NSF INCLUDES (2/17) - Preliminary proposal: NSF INCLUDES: CLASSS- Church Leaders Advocating for Students' Success in STEM. (PI Shetay Ashford, co-PI Kristy Daniel). Invited for full proposal 3/24/17.

NIH AREA (6/13) - Characterization of the optic nerve of zebrafish as an accessible model for aging research, \$389,469.

NSF IOS (1/13) – Preliminary proposal: IOS Preliminary Proposal: Eye development in polymorphic sister species –Texas blind salamander and San Marcos salamander

NSF MRI (1/11) - MRI: Acquisition of a Stand-Alone, Dedicated Multiphoton Excitation Microscopy System at Texas State University, \$799,740

NIH AREA (2/11) - Evolution of spatial and temporal signals in the regulatory regions of genes involved in melanosome transport in zebrafish, \$300,000 direct

NIH AREA (6/09) – Astrocytic Signatures: Dissecting the Pathways that Lead to Astrogliosis, \$221,250

NIH AREA (10/08) – Astrocytes and Optic Nerve Regeneration in Fish and Mammals, \$230,212

NSF (1/06) - Linking G-protein Coupled Receptors to Pigment Granule Movement in Retinal Pigment Epithelium, \$256,790

NSF (7/05) - Pigment Dispersion in Teleost Retinal Pigment Epithelium: Cholinergic Mechanisms, \$531,552

NSF (2/05) - Acquisition of a Multiphoton, Confocal Microscope for Nanotechnology Research, Student Training, and Education in Chemistry, Physics, and Biology, \$749,613

NSF (7/04) – Pigment Dispersion in Teleost Retinal Pigment Epithelium: Cholinergic Mechanisms, ~\$600,000

THECB (7/03) – ATP: An Inexpensive Bioassay System for Testing Alzheimer's Therapeutics, \$205,570

THECB (7/01) - ARP: Molecular Characterization of Muscarinic Receptors in Fish RPE, \$100,000

NSF (1/02) – RUI – Pigment Dispersion in Teleost Retinal Pigment Epithelium: Cholinergic Mechanisms, ~\$200,000
NSF (1/99) – RUI – Pigment Dispersion in Teleost Retinal Pigment Epithelium: Cholinergic Mechanisms, \$66,713
NIH (1/98) - Bridges to the Baccalaureate Proposal - Research-Oriented Bridge to Baccalaureate, \$289,136
NSF (10/97) - Mobile Microscopy Lab, \$68,000
THECB (7/97) - ARP: Regulation of RPE Pigment Movements by Cyclic AMP
NSF RUI (1/97) - Regulation of Pigment Granule Aggregation in Teleost Retinal Pigment Epithelium, \$129,959
NSF RUI (7/96) - Characterization of Intermediate Filaments and an Intermediate Filament Associated Protein in Fish Retinal Pigment Epithelium, \$256,287
GTE FOCUS Program (10/96) - Recruitment of Inner-city Minority Students into Bachelor's Programs in Science, \$30,000
NIH AREA (6/96)- Intermediate Filaments in the Retinal Pigment Epithelium, \$75,000
NSF (1/96) - RUI: Structural and functional characterization of the G.3.5 antigen, an intermediate filament-associated protein, \$242,616
THECB (7/95) - ARP: The cytoskeleton of the fish retinal pigment epithelium, \$200,000
NSF (7/95) - RUI: Regulation of pigment granule aggregation in teleost retinal pigment epithelium, \$216,076
NSF (1/95) - C-RUI: Structure, function, and evolution of neural-specific proteins in fishes, \$1,026,588
NSF (6/94) - RUI: Characterization of novel cytoskeletal proteins, \$859,968
NSERC (4/94) - Novel cytoskeletal proteins: their molecular characteristics, \$356,940

FUNDED INTERNAL GRANTS AND CONTRACTS (\$84,659 total)

2013 Research Enhancement Program Grant. Zebrafish Optic Nerve as a Model for Studying Aging in the Central Nervous System, \$8000 (PI Dana García)
2011 Research Enhancement Program Grant. Does Mrp4-mediated cyclic nucleotide export drive dark-induced pigment granule aggregation in the retinal pigment epithelium of mouse and zebrafish? \$7,996 (PI Dana García)
2006 Research Enhancement Program Grant. FISH and Chips. \$5917.26 (PI Dana García)
2001 Research Enhancement Program Grant. Phylogenetic Characterization of Alpha-Actinin. \$15,990 (PI Mike Forstner; co-PI Dana García)
1999-2000 Faculty Research Enhancement Grant. \$15,996 (PI Dana García; co-PI Joe Koke)
1999-2000 Faculty Research Enhancement Grant. \$7000 (PI Dana García)
1998 Office of Research and Sponsored Programs. Synthesis of Fluoresceinated Cyclic Adenosine Monophosphate, \$1760 (PI Dana García)
1996 Faculty Research Enhancement Grant. \$6000 (PI Dana García)
1994-1995 Faculty Research Enhancement Grant. \$6000 (PI Dana García)
1994 Faculty Research Enhancement Grant. \$6000 (PI Dana García)
1994 Indirect Cost Research Project. \$4000 (PI Dana García)

PENDING INTERNAL GRANTS FOR RESEARCH

2021 The impact of one alcoholic substitution on the ability of a protein to transport cargo, \$7895

SUBMITTED BUT NOT FUNDED INTERNAL GRANTS AND CONTRACTS

(Incomplete list)

2019 Night moves: Signaling between the retina and RPE of mice and fin(fish). \$15,916
(PI Dana M. García, co-PI Joel Bergh)

2018 Research Enhancement Program. Using Mouse Retinal Cell Lines to Illuminate Our
Understanding of Dark-Adaptive Processes, \$15,996 (PI Dana García, co-PI
Joel Bergh)

REP 2010

HEAF (Spring 98) - Scanning Electron Microscope (\$200,000)

D. FELLOWSHIPS, AWARDS, HONORS

2015 Who's Who

2015 Nominated for Excellence in Diversity Award

2008 College Achievement Award in Scholarly and Creative Activity

2007 Nominated for Presidential Award in Scholarly and Creative Activity

2007 Selected to receive Hope for Vision Award

2005 Nominated to give Presidential Seminar

2005 Nominated for STAR award

2005 Nominated for Outstanding Woman Faculty Award

2001-2002 Honored Member America's Registry, Edition 2001-2002.

2001 Nominated for AAAS Mentor Award

1998 College Achievement Award in Service

1997 Bonus Award as member of Integrated Microscopy Facility Team

1997 Merit Raise

1996 Merit Raise

1997 Bonus Award as a member of the Microscopy Project Team

IV. SERVICE

University:

- Served on the Academic Program Review for the Department of Political Science, Fall 2017.
- Served as Mace Bearer at multiple commencement ceremonies, including one in Spring 2017.
- Served as poster judge at the Annual Undergraduate Research Conference at Texas State University, Spring 2017.
- Transported two Honors students to the National Conference on Undergraduate Research in Memphis, TN, April 5-9, 2017.
- Attended webinar entitled "Latino Males in Higher Education" April 20, 2016.
- Served as reviewer for Graduate College's Outstanding Dissertation Award in 2015.
- Faculty senator for College of Science and Engineering (2015 – present)
- Manned Texas State booth at the SACNAS Conference, October 4-5, 2013, San Antonio Texas.
- Served as a reviewer for the Multidisciplinary Internal Research Grant (MIRG) competition, Spring 2013. Reviewed 14 proposals.

- Serve as Institutional Representative to Texas Women in Higher Education (Spring 2011 – Spring 2015). Organized “Pathways to Administration” brown bag lunch series for faculty considering that career alternative.
- Served as judge for 2010 International Research Conference for Graduate Students put on by Graduate College, 11/4/10.
- Served on the Academic Program Review team to review the Department of Anthropology in 2009.
- Served in Dean Flores’s place on graduation platform party in December 2008
- Provided an interview for Youniversity TV (see www.youniversitytv.com/youlife/cvt.php) in January 2008.
- Represented University on Austin Bio (Greater Austin Chamber of Commerce working group to “grow” biotechnology sector in the Austin area).
- Assisted with evaluation of proposals intended to increase interactions between the University and SMCISD while enhancing STEM education for all students, but particularly for traditionally underserved students.
- Visited UTHSCSA’s Peter Fox and Angela Laird with Heather Galloway (Director of Honors) and Larry Price (CoEd) to explore the possibility of starting a neurobiology honors course at Texas State in January 2008.
- Served in Dean Flores’s place on graduation platform party in May 2007
- Debated merits of human embryonic stem cell research for SACA debate January 2007
- Acted as Marshall at May 2005 Commencement
- Made multiple recruitment trips to the Annual Meeting of the Society for the Advancement of Chicanos and Native Americans in Science in an effort to increase the ethnic diversity of our graduate student body. These trips occurred in October of 1996, 1997 and 2004
- Acted as Marshall at August 2004 Commencement
- Participated in panel discussion in the Philosophy Dialogue series about (1) ethics of human embryonic stem cell research in Spring 2002 and (2) women in science in Spring 2003
- Traveled with delegation to NASA and the office Kay Bailey Hutchinson in June 2001
- Acted as Usher at December 2000 Commencement (undergraduate)
- Acted as Marshall at December 1999 Commencement (undergraduate)
- Acted as Marshall at December 1998 Commencement (undergraduate)
- Acted as Marshall at December 1997 Commencement (undergraduate)
- Attended workshop on retention in California to try to figure out ways to improve retention. I formulated an attendance strategy for the meetings that allowed us to have at least two people at each concurrent session while permitting people to attend sessions in which they were interested.
- University Committees

Committee for Summative Review of Dean Welborn (Chair, Spring 2018)	URF Proposal Review Committee (Fall 2018, Fall 2019, Spring 2020)
Honors College Experience Read-Across Committee (Chair, Spring 2017)	Dissertation Selection Committee (Summer 2017)

Faculty Senate Subcommittee on Concealed Carry (Summer 2015)	University Distinguished Professor Award Committee (Spring 2017)
Dean of College of Science and Engineering Search Committee (Spring 2015 – Spring 2016)	Investigative Committee for Academic Dishonesty (Spring 2014)
Vivarium Committee (Summer 2010 – Summer 2011)	Exercise Sports Science Faculty Search Committee (Fall 2008 – Spring 2009)
Dean of College of Science Search Committee (Fall 2008 – Spring 2009)	STEM Task Force (2006 – 2007)
Research Advisory Council (2006 – 2007)	Sponsored Projects Advisory Committee (2006-2007)
Mitte Chair in Water and GIScience Search (2006-2007)	Institutional Animal Care and Use Committee (1995 – 2007)
Department of Biology Chair Search Committee (2004 – 2006)	Suspension Appeals Committee (Don't remember the dates)
President's Council for Women (1995- 1999)	Dean of General Studies Search Committee (1998-1999)
Morning Student Commencement Speaker Committee (1998)	Writing Intensive Committee (1998)

College:

- Reviewed letters of intent for NSF-Improving Undergraduate STEM Education-HSI competition, December 2018
- Organized visit by IDEA school 8th graders to promote STEM (~21 hours of effort)
- Reviewed letters of intent for MIRO competition, October 2018
- Poster judge for Bridges to the Baccalaureate final project presentation on July 30, 2016
- Panelist in STEM Rising Stars Orientation sessions for LBJ Institute June 9, June 21, July 12 and July 26, 2016 for Q&A sessions
- Faculty senator for College of Science and Engineering (2015 – present)
- Worked at the College of Science and Engineering Booth at the 2013 SACNAS conference, meeting students and providing them with information about programs of study at Texas State University
- Participated in Dean's interview with various faculty and chair job candidates throughout the college
- Participated in monthly Materials Science lunches intended to foster research collaborations among materials science researchers in the different departments in the College of Science My participation helps familiarize me with research outside my department, which in turn helps me identify potential funding opportunities for these faculty.
- Began work in Fall 2008 with Associate and Assistant Deans of the College of Education to host a Science, Technology and Engineering Education Event for Spring 2009
- Attended graduation (platform party) in Dean's place in December 2008

- Visited Emerging Technologies with Reddy Venumbaka, Tom Myers and Terry Golding to investigate opportunities for collaboration in December 2008
- Worked individually with faculty interested in submitting CAREER proposals (Spring/Summer 2008)
- Attended workshop on Living Learning Communities (LLC) in November 2008, which helped the team of faculty who had worked on the NSF-STEP proposal move forward on developing an additional LLC for the College of Science which will be focused on premedical students, particularly those eligible for JAMP funding.
- Worked with Reddy Venumbaka (IEIS) to organize an intercollegial, biomedically focused “life sciences” research group, which now (2009) meets monthly to discuss shared research interests and shareable equipment
- Attended ribbon-cutting ceremony for the Ingram School of Engineering in April 2008.
- Attended the Department of Computer Science’s Internal Advisory Board meeting in April 2008.
- Hosted Bruce Leander (former CEO at ABI), who gave a talk to undergraduates on Careers in Biotechnology in April 2008.
- Attended Dean’s List reception on behalf of Dean in February 2008.
- Was a keynote speaker at Science Extravaganza, which was held as a memorial event marking the passing of MAES’s president in a car accident in March 2008.
- Visited Southwest Research Institute with a team from the College of Science in San Antonio to explore possible collaborations.
- Attended Graduate College Information Fair (Fall 2007, 1/07)
- Attended Graduate Student Recruitment Workshop (1/07)
- Function as Media Liaison for the College of Science (2007-present)
- Function as Faculty Advisor (with Jaime Hernández) for MAES
- Function as mentor for a variety of LS-AMP students (~2001 – 2011)
- Arranged and conducted Grant Proposal Writing Workshops (8/06, 9/06, 10/07)
- Arranged and conducted a series of CAREER proposal writing workshops (Spring 2006, 2007)
- Participated as a judge in the Louis Stokes Alliances for Minority Participation Undergraduate Research Conference (July 2001)
- Participated as a judge in the Louis Stokes Alliances for Minority Participation Undergraduate Research Conference (July 2000)
- College Committees

SURE Selection Committee (Spring 2018 – present)	
Materials Advanced Research Center Advisory/Steering Committee (Fall 2017 – present)	SURE Advisory Board (Fall 2017 -
Research Service Center Advisory Board (Fall 2013 – Fall 2017)	College of Science Curriculum Committee (Fall 2011 – present; Chair Fall 2018 - present)

WISE Conference Planning
Committee (Chair, Summer 2009 –
Fall 2013; Fall 2016 - present)

BIOMSE Search Committee for 3
positions (Spring 2010)

Materials Science Chemist Search
Committee (Summer 2007 – Spring
2008)

Promotion and Tenure Task Force
(Fall 2007 – Spring 2008)

WISE Scholarship Committee (Chair,
Spring 2010 – Spring 2016)

Materials Science Chemistry Search
Committee II (Summer 2008 – Spring
2009)

Materials Science and Engineering
Search Committee for Director and 2
Associate/Full Professors (Fall 2007 –
Spring 2008)

College Council (1/06 – 8/09)

Departmental:

- Hosted Biology Seminar speaker Ramona Salcedo in April 2019
- Hosted Biology Seminar speaker Bob McLean in September 2018
- Hosted Biology Seminar speaker Cynthia Luxford in September 2018
- Co-hosted Biology Seminar speaker Julio Soto in April 2017
- Hosted Biology Seminar speaker Tyrone Hayes in February 2017
- Judged Biology Colloquium in February 2016
- Hosted Biology Seminar speaker Isaac Wiegman in February 2016
- Hosted Biology Seminar speaker Margaux Salas in March 2015
- Hosted Biology Seminar speaker Alyson McDonald in February 2015
- Hosted Biology Seminar speaker Michael Persans in March 2014
- Hosted Biology Seminar speaker Shuying Sun in February 2014
- Coordinate Bobcat Day for the Biology Department (Fall 2013 – present)
- Hosted Biology Seminar speaker Harold Zakon in April 2013
- Hosted Biology Seminar speaker Lynne Fieber in April 2013
- Hosted Biology Seminar speaker Fernando Benavides in March 2012
- Hosted Biology Seminar speaker Andres Pires da Silva in March 2012
- Spearheaded nomination of Joseph Koke for Distinguished Professor Emeritus, which he was awarded
- Supported nomination of Paula Williamson for University Distinguished Professor, which she was awarded
- Degree Program Advisor for B.S. in Biology (2011 – present)
- Helped initiate the Joseph R. and Judith A. Koke Cell Biology Award in 2011
- Co-hosted Koke Retirement Party with Shannon Weigum and Joe and Annie Tomasso in 2011
- Participated in Wildlife Ecology search by meeting individually with the job candidates as well as attending their seminars in 2011
- Hosted Biology Department Seminar speaker Matt Gdovin from UTSA in spring 2011
- Co-hosted Annual Physiology Party with Joe Tomasso and Joe Koke in April 2008
- Contributed financially to the Colene Drace Award along with Joe Koke and Nihal Dharmasiri to increase the award from \$100

- Participated in Wildlife Ecology search by meeting individually with candidates and (of course) attending their seminars – except for Dr. Veech’s because I was out of town
 - Hosted Biology Seminar speaker Manuel Torres in March 2008
 - Hosted Biology Seminar speaker Janice Moore in March 2008
 - Hosted Biology Departmental Seminar speaker Nanci Mangini (Indiana University Medical School) – January 2008
 - Using a combination of grant and departmental funds, acquired an Eppendorf RealPlex quantitative PCR machine, which supports not only research in my lab, but also in the Bonner, Hahn, Koke and McLean labs as well as teaching in Cell Physiology (Biol 4441/5441) – January 2008
 - Nominated Joe Koke for Mariel Muir Mentoring Award (January 2008)
 - Co-administer the Biology Department’s Integrated Microscopy Facility with Joe Koke
 - Produced Department of Biology Graduate Brochure with Jim Ott and help from Gloria Maier (Media Relations and Publications) 1996
 - Functioned as mentor in SWT Mentoring Program to Leslie Harper (1995-1996)
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- Departmental Committees

Parasitology Search Committee	Fall 2019 – Spring 2020
Functional Microbial Genomics Search Committee	Fall 2017 – Spring 2018
Organismal Physiologist Search Committee (Chair)	Fall 2015 – Spring 2016
Biology Education Search Committee	Fall 2014 – Spring 2015
Senior Microbiology Lecturer Search Committee	Summer 2013 – Fall 2013
Statistics Substitution Committee (Chair)	Fall 2012 – Fall 2013
Academic Program Review Committee	Summer 2012 – Fall 2013
New Building Committee	Spring 2012 – Summer 2012
Curriculum subcommittee for Changes to the Math Requirements (Chair)	Spring 2012 – August 2012
Mentoring Committee (with Bob McLean and Weston Nowlin) for Shannon Weigum (Chair)	Fall 2011 – Fall 2016
Cell Bio Search Committee (Chair)	Fall 2010 – Summer 2011
Biology Curriculum Committee (Chair, Fall 2011-present)	Fall 2010 - present
Graduate Subcommittee on Journal Status Independence Committee (Chair)	Spring 2010 Fall 2008
Aquatic Toxicologist Search Committee	Spring 2008
General Science Lecturer Search Committee (Chair)	Spring 2006 – Summer 2006
Development Committee	Spring 2006 – Summer 2008
Graduate Committee (<i>ex officio</i> from 1/06-9/08)	Fall 2005 - present
Departmental Space Committee (Chair, Fall 2005)	Fall 2005; Fall 2008-?
Departmental Planning Committee	Summer 2005
Program Review Committee	Fall 2004 – Spring 2007 (?)
Developmental Biology Search Committee (Chair)	Fall 2004 – Spring 2005
Annual Review Committee (Chair)	Fall 2003 – Fall 2004

B3I Liaison Committee	Fall 2003-Spring 2005
Tenure/Promotion/Continuance Committee	Fall 2003 – Fall 2005
Restricted Chemicals Committee (Chair)	Summer 2003 – Fall 2004
Howard D. Schulze Biology Scholarship Committee (Chair)	Spring 2003 – present
Colene Drace Scholarship Committee	Spring 2002 – present
Scholarship CEC (PMC Chair, 2005)	Spring 2003 – Spring 2005
Planning Committee	Fall 2002
Developmental Biology Search Committee	Spring 2002
Developmental Biology Recruitment Task Force (Chair)	Fall 2001
Sally Karnau Scholarship Committee	Fall 2001, Spring 2003
Biology Ph. D. Curriculum Committee (Chair)	Spring 2000 – Fall 2000
Service CEC (Chair, 2002)	Spring 2000 – Spring 2002
Steering Committee for Aquatic Resources Ph. D.	Spring 2000 – Fall 2000
Public Relations Committee	Spring 2000 – Fall 2000
Budget Committee, Chair (Fall 1999-Fall 2005)	Spring 1994 – Fall 2005
Seminar Committee, Chair (May 1996 – Dec 2000)	Fall 1994 – Dec 2000
Safety Committee	Fall 1995 - Spring 1996; Fall 1999 – Spring 2002
Departmental Post-tenure Review Committee	February 1997 - May 1997; Fall 1998 – Spring 1999
Physiologist Search Committee	Fall 1997- Spring 1998
Lecturer Search Committee	Spring 1998

Community:

- Co-authored a talk presented by Ruben Tovar (former MS student) at *Science at the Brewery*, entitled “Crossing to the dark side: what central Texas salamanders can teach us about vision,” at the Barrow Brewing Company, Salado TX. (May 29, 2016).
- Organized visit from St. John Paul II Catholic High School’s Advanced Placement Biology class to Texas State Biology Department to participate in immunology, physiology and microscopy labs February 23, 2015.
- Visited Goodnight Middle School classroom as part of Project Flowing Waters (May 1, 2013)
- Took a 5th grade group from a charter school in San Antonio on a tour of my lab, the darkroom and the Integrated Microscopy Facility (April 30, 2013)
- Served on panel in the Common Experience series about Courage in Religion and Science
- Serve on Board of Directors (formerly the Leadership Council) for Our Lady of Wisdom University Parish (formerly the Catholic Student Center; 2010 – present)

Professional:

- 2021 - Served as panel reviewer for National Science Foundation
- January 2021 – reviewed proposal for Texas Academy of Science
- September 2020 – present - Society of Catholic Scientists Speakers Program Committee
- May 2020 – reviewed manuscript for *BMC Research Notes*

- July 2019 - made recommendations as Associate Editor of *BMC Research Notes* on a manuscript
- May 2019 – reviewed manuscript for *Brain Research*
- February 2019 – made recommendations as Associate Editor of *BMC Research Notes* on a manuscript
- January 2019 – reviewed abstracts for Council of Undergraduate Research’s Posters on the Hill event
- July 2017 – reviewed manuscript for *BMC Research Notes*
- March 2017 – reviewed manuscript for *Fish Physiology and Biochemistry*
- August 2016 – reviewed manuscript for *Microgravity Science and Technology*
- July 2016 - served on a panel for an academic workshop at the University of Texas at Austin.
- June 2016 – March 2020 - Chair of the American Association of Hispanics in Higher Education USDA Outstanding Thesis in Food and Agricultural Sciences Competition
- April 2016 – reviewed manuscript for *Brain Research*
- August 2015 – reviewed manuscript for *BMC Pharmacology and Toxicology*
- October 2014 – Recognized in “The Cultivation and Socialization of Graduate Students in the Food and Agricultural Sciences,” a paper presented at a mentoring conference in New Mexico as a “successful accomplished female role [model] who can speak to balancing career and family....”
- August 2014 - reviewed materials for promotion for Michael Persans, The University of Texas-Pan American
- July 2014 – March 2016 – HACU STEM Task Force
- July 2014 – reviewed manuscript for *BMC Research Notes*
- 2014 – Served as panel reviewer for National Science Foundation
- Summer 2013 – hosted an American Physiological Society Summer Teacher Researcher.
- June 2013 – re-reviewed manuscript for *Brain Research*
- May 2013 – reviewed EDEN proposals for Evo/Devo/Eco Network
- February 2013 – served as a program reviewer for the M.S. in Biology at Texas A&M Corpus Christi
- February 2013 – reviewed student grant proposal for Texas Academy of Science
- December 2012 – reviewed manuscript for *Brain Research*
- July 2012 - Assigned manuscript for review for *BMC Research Notes*
- June 2012 – Reviewed grant proposal for National Geographic
- March 2012 – present - USDA/AAHHE mentor to Diana del Angel (TAMUCC), Martha Ramirez (TAMUK) and Stephanie Ramirez (LSU)
- February 2012 - Assigned manuscript for review for *BMC Research Notes*
- November 2011-March 2016 – judged theses for a USDA-sponsored competition administered through Texas A&M University-Corpus Christi and the American Association for Hispanics in Higher Education (AAHHE) for the Cultivar program to promote entry of Hispanic students into graduate programs in areas of interest to the USDA
- November 2011 – reviewed manuscript for *Brain Research*
- November 2011 – reviewed manuscript for *PLoS ONE*
- October 2011 – reviewed manuscript for *Neurotoxicology*

- September 2011 – reviewed manuscript for *Brain Research*
- August 2011 – reviewed manuscript for *PLoS ONE*
- March 2011 – served as panel reviewer for Ford Foundation Diversity Fellowships.
- August 2010 – nominated two new associate editors for *BMC Research Notes* and they were appointed.
- August 2010 – assigned manuscript for review for *BMC Research Notes*
- August 2010 – reviewed manuscript for *Experimental Eye Research*
- March 2010 – Served as panel reviewer for Ford Foundation Diversity Fellowships
- November 2009 – reviewed manuscript for *Neurotoxicology*
- July 2009 – reviewed manuscript for *American Journal of Physiology: Cell Physiology*
- March 2009 - Served as panel reviewer for Ford Foundation Diversity Fellowships
- January 2009 – reviewed manuscript for *American Journal of Physiology: Cell Physiology*
- Fall 2008 – appointed associate editor for *BMC Research Notes*
- August 2008 - reviewed manuscript for *American Journal of Physiology: Cell Physiology*
- July 2008 – reviewed manuscript for *Comparative Biochemistry and Physiology*
- May 2008 – reviewed materials for promotion for Nancy Mangini, Indiana University
- April 2008 – Served as *ad hoc* reviewer for National Science Foundation
- March 2008 – Served as *ad hoc* reviewer for National Science Foundation
- February 2008 – Reviewed manuscript for the journal *Microgravity Science and Technology*
- January 2008 to December 2009 - in STEM working group organized by the Sloan Foundation and the American Association of Hispanics in Higher Education
- Fall 2007 – Invited to serve on STEM Working Group to increase the number Hispanic Professors at Top Tier Universities, funded by a Sloan Foundation grant to the American Association of Hispanics in Higher Education
- Fall 2007 – Served as *ad hoc* reviewer for National Science Foundation
- Spring 2007 – Reviewed manuscript for the journal *Molecular Biology and Evolution*
- 2006 – NSF Panel review.
- February 2006 – National Institutes of Health Bridges Panel Reviewer. Reviewed 3 proposals as primary reviewer, 2 as secondary and 3 as discussant. As a panel, we reviewed 40 proposals.
- 2005 – NSF Panel Reviewer.
- October 2004 – Served as poster judge at LS-AMP meeting in Houston.
- September 2004 – Served as abstract reviewer for ABRCMS. Reviewed 16 abstracts.
- Summer 2004 – Served on Women in the Natural Sciences Panel at The University of Texas, discussing the tenure process at various types of universities.

- Summer 2004 – Served as abstract reviewer for the Society for the Advancement of Chicanos and Native Americans in Science. Reviewed 5 abstracts.
- Spring 2004 – Wrote test bank questions for Wadsworth Publishing Company’s new physiology textbook (under contract).
- Fall 2003 – Reviewed Purves et al., *Neuroscience* (Sinauer) as a volunteer, making multiple corrections to the text.
- 2003 – Served as a panel reviewer for the National Science Foundation.
- Spring 2003 – Served as a panel reviewer for the National Institutes of Health. Primary reviewer on three grants, secondary on 3 and reader on 3. Overall, 31 proposals were reviewed.
- Fall 2001 – Served as panel reviewer for the National Science Foundation
- Spring 2001 – Reviewed numerous abstracts and manuscripts for German colleagues.
- Summer 2001 – Served as moderator in break-out group to discuss extracting administrative support for Bridges programs while at the Annual Bridges Program Directors' Meeting.
- 8/00 – Wrote questions for the GRE.
- 2000 – Served as panel reviewer for the National Science Foundation
- January 2000 – Served as panelist at Texas Science Summit 2000.
- 1994 – 2000, participated in American Society for Cell Biology Young Scientists Program, in which I wrote letters to primary and secondary school students who had expressed an interest in science, and particularly biology.
- 1998 - served as an *ad hoc* reviewer for the National Science Foundation

EXTERNAL GRANTS FOR SERVICE

Halliburton Foundation (5/12) 2013 Women in Science and Engineering Conference:
Sustainability – Preparing for the Long Haul, \$15,000

PENDING GRANTS FOR SERVICE

SUBMITTED BUT NOT FUNDED GRANTS FOR SERVICE

USDA HSI-Education Grant (1/2020) *Corredores: A National Thesis Competition*
Leading towards Career Opportunities in the USDA (co-PI Mar Huertas), \$275,000

ORGANIZATIONS OF WHICH I AM OR HAVE BEEN A MEMBER

Honorary:

Phi Kappa Phi
Sigma Xi

Professional:

American Association of Hispanics in Higher Education
American Physiological Society
American Society for Cell Biology
Association for Research in Vision and Ophthalmology
Microscopy Society of America
Society for the Advancement of Chicanos and Native Americans in Science

Society of Catholic Scientists
Texas Herpetological Society