

Dr. Alejandro Fierro Cabo

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Education

PhD, Universite Laval, 1998

Major: Plant Biology

MSc, University Laval, 1991

Major: Plant Biology

BS, Instituto Tecnológico y de Estudios Superiores de Monterrey, 1986

Major: Agronomy

Employment

Academic - Post-Secondary

Academic - Post-Secondary, Associate Professor, The University of Texas Rio Grande Valley, (2018)

Academic - Post-Secondary, Assistant Professor, The University of Texas Rio Grande Valley, (2015 - 2018)

Academic - Post-Secondary, Assistant Professor, The University of Texas at Brownsville and Texas Southmost College, (2012 - 2015)

Academic - Post-Secondary, Lecturer, The University of Texas at Brownsville and Texas Southmost College, (2009 - 2012)

Academic - Post-Secondary, Professor, tenured, Universidad Autonoma de Tamaulipas, (2005 - 2009)

Government

Government, Director, Department of the Environment, City of Tampico, Tamaulipas, Mexico, (2002 - 2004)

Professional

Professional, Project director, CEDES-IEST, (2001 - 2002)

Professional, General manager, Sabino Gordo ranch and Gran Alado ostrich farm, (1998 - 2002)

Professional, Consultant, various shrimp farms in Tamaulipas, (2000 - 2001)

Professional, Production manager, in-vitro and greenhouse commercial plant production, Genesis Integral, (1991 - 1992)

Licensures and Certifications Start

Multilingual Pedagogy Certification, UTRGV, ()

Professor National Certification, Federal Ministry of Education(PROMEP-SEP, Mexico), (June 2009)

Professor National Certification, Federal Ministry of Education (PROMEP-SEP, Mexico), (June 2006)

Publications

Book Chapters

Alejandro Fierro-Cabo and Carlos Zamora-Tovar and Leonardo Arellano-Mendez and Carlos Cintra Buenrostro. Laguna Madre de Tamaulipas.: *Texas A&M University Press*. (March)

Carlos Zamora-Tovar and Agustin de Jesus Basanez-Munoz and Juana Manzano-Banda and Alejandro Fierro-Cabo. Manglares.: *CONABIO*. 1, : 385-400.

Alejandro Fierro and Alfredo Vite. Plants and salt. Brownsville, Texas: *Gorgas Science Foundation*.

S. Jimenez-Hernandez and D. Vazquez and Alejandro Fierro-Cabo and V. Vargas-Tristan and V. Alvarado-Gutierrez and A. Jimenez-Cordoba. Ordenamiento ecológico regional de la cuenca del río Guayalejo-Tamesí. Madrid, Barcelona: *Universidad de Barcelona*. 1, : 107-117.

Alejandro Fierro-Cabo. Sustentabilidad e indicadores ecológicos en el desarrollo regional. Madrid, Barcelona: *Universidad de Barcelona*. 1, : 132-137.

Alejandro Fierro and Denis Angers and Chantal Beauchamp. Paper mill sludge as a revegetation tool in an abandoned sandpit. Boca Raton, FL: *Lewis Publishers*. 1, : 89-95.

Jeffrey Norrie and Alejandro Fierro. Paper sludges as soil conditioners. New York, NY: *Marcel Dekker, Inc*. 1, : 97-118.

Journal Article, Academic Journal

Simen Kaalstad and Michael Osland and Donna Devlin and Edward Proffitt and Laura Feher and Anna Armitage and Richard Day and Kathleen Swanson and Gordon Anderson and Brigid Berger and Just Cebrian and Karen Cummings and Kenneth Dunton and Ilka Feller and Alejandro Fierro Cabo and Elene Flores and Andrew From and Randall Hugues and David Kaplan and Amy Langston and Melinda Martinez and Briana Martiinez and Christopher Miller and Nathan Reaver and Colt Sanspree and Caitlin Snyder and Andrew Stetter and Jamie Thompson and Carlos Zamora-Tovar. Temperature thresholds for leaf damage from two extreme freeze events (2018 and 2021) near the northern range limit of black mangroves (*Avicennia germinans*) in southeastern North America.: *Estuaries and Coasts*. (September)

Melinda Martinez and Michael Osland and James Grace and Nicholas Enwright and Camille Stagg and Simen Kaalstad and Gordon Anderson and Anna Armitage and Just Cebrian and Karen Cummings and Richard Day and Donna Devlin and Kenneth Dunton and Laura Feher and Alejandro Fierro Cabo and Elena Flores and Andrew From and Randall Hugues and David Kaplan and Amy Langston and Briana Martinez and Christopher Miller and Charles Proffitt and Nathan Reaver and Colt Spanspree and Caitlin Snyder and Andrew Stetter and Katie Swanson and Jamie Thompson and Carlos Zamora-Tovar. Integrating remote sensing with ground-based observations to quantify the effects of an extreme freeze event on black mangroves (*Avicennia germinans*) at the landscape scale.: *Ecosystems*. (August)

Luisiana Morales-Zamudio and Alejandro Fierro Cabo and MD Rahman and Miguel Dominguez-Crespo. Metal contents in house geckos (Squamata: Gekkonidae) from industrial and urban areas of southern Tamaulipas, Mexico and western Andalucía, Spain may reflect airborne metal pollution.: *Journal of Toxicology and Environmental Health, Part A*. (January (1st Quarter/Winter)) 86, : 103-118.

Carlos Cintra Buenrostro and Alejandro Fierro Cabo. Stability of fishes assemblage structure over a lustrum in coastal wetlands under different disturbances in an industrial zone of the central Gulf of Mexico coast .: *Regional Studies in Martine Science - Elsevier*. (October (4th Quarter/Autumn))

Carlos Zamora Tovar and Alejandro Fierro Cabo and Roberto Lindig-Cisneros and Ilka Feller. First report of *Avicennia germinans* (Acanthaceae) as a larval host of *Junonia litoralis* (Nymphalidae) causing higher foliar damage in seedlings than trees.: *Plant Species Biology*. (April (2nd Quarter/Spring)) 37, : 231-342.

Faeqa Moshin and Arias Mylen and Clifton Albrecht and Kimberly Wahl and Alejandro Fierro Cabo and Bradley Christoffersen. Species-specific responses to restoration interventions in a Tamaulipan thornforest.: *Forest Ecology and Management*. (March) 491, : 13.
<https://www.sciencedirect.com/journal/forest-ecology-and-management>

Ashley Murphy and Carlos Cintra-Buenrostro and Alejandro Fierro-Cabo. Identifying nitrogen source and seasonal variation in a Black Mangrove (*Avicennia germinans*) community, south Texas coast.: *Aquatic Botany*. (December)

Alejandro Fierro-Cabo and August Plamann. Enhancing the seed germination process of Montezuma cypress (*Taxodium mucronatum* Ten.): *Journal of Forest Research*. (November)

Tianna Picquet and Alejandro Fierro-Cabo and Ilka Feller. Invasive antelope heavily browsing on mangrove: effects of a novel interaction in a subtropical coast.: *Estuaries and Coasts*.

Leah McInstosh and Alejandro Fierro-Cabo and Jude Benavides. Macroinvertebrate assemblages from two sampling methods similarly discriminated freshwater wetlands with different ecosystem status in south Texas.: *Aquatic Ecosystem Health & Management*. (May)

Shelby Bessette and David Hicks and Alejandro Fierro-Cabo. Biological assessment of dune restoration in south Texas.: *Ocean and Coastal Management*. (August) 163, : 466-477.

Alejandro Fierro-Cabo and Carlos Cintra. Fish assemblage structure indicates limited restoration progress over a lustrum of a severely degraded estuary in southern Tamaulipas, México.: *Environment and Ecology Research*. (April (2nd Quarter/Spring)) 5, : 312-324.

Leticia Contreras and Alejandro Fierro-Cabo and Carlos Cintra. Early drivers of Black Mangrove (*Avicennia germinans*) leaf litter decomposition in the water column.: *Hydrobiologia*. (April (2nd Quarter/Spring))

Monica Delgado and Carlos Cintra and Alejandro Fierro-Cabo. Decomposition and nitrogen dynamics of turtle grass (*Thalassia testudinum*) in a subtropical estuarine system.: *Wetlands Ecology and Management*. (April (2nd Quarter/Spring))

Mario Marquez and Alejandro Fierro-Cabo and Carlos Cintra-Buenrostro. Can ecosystem functional recovery be traced to decomposition and nitrogen dynamics in estuaries of the Lower Laguna Madre, Texas?.: *Restoration Ecology*. (November) 25, : 618-628.

Alejandro Fierro-Cabo and August Rentfro. First record of the african house gecko (*Hemidactylus mabouia* Moreau de Jonnés, 1818) in Texas: is an earlier gecko invader about to be displaced?.: *Bioinvasions Records. International Journal of Field Research on Biological Invasions* . (October (4th Quarter/Autumn)) 3, : 309-312.

Piedad Mayagoitia-Gonzalez and Alejandro Fierro-Cabo and Raul Valdez and Mark Andersen and David Cowley and Robert Steiner. Habitat use of the neotropical otter (*Lontra longicaudis*) and human attitudes in southern Tamaulipas, Mexico.: *Therya*. (August) 4, : 243-256.

Alejandro Fierro-Cabo. Indicadores funcionales y estructurales para evaluar el estado de conservación de humedales costeros en el sur de Tamaulipas. Cd. Victoria, Tamaulipas: *Ciencia UAT*.: 61-63.

Pedro Rodriguez-Espinoza and D Chazaro-Mendoza and J Montes de Oca and Gerardo Sanchez-Torres and Alejandro Fierro-Cabo. Study of metals in leached soils of a municipal dumpsite in Tampico, Tamaulipas, Mexico. *Wessex: Environmental Toxicology. WIT Transactions on Biomedicine and Health*. 10, : 263-269.

Alejandro Fierro and Denis Angers and Chantal Beauchamp. Decomposition of paper deinking sludge in a sandpit minesoil during its revegetation.: *Soil Biology and Biochemistry*. 32, : 143-150.

Alejandro Fierro and Denis Angers and Chantal Beauchamp. Dynamics of physical organic matter fractions during deinking sludge decomposition. Madison, WI: *Soil Science Society of America Journal* . 63, : 1013-1018.

Alejandro Fierro and Denis Angers and Chantal Beauchamp. Restoration of ecosystem function in an abandoned sandpit: plant and soil responses to paper deinking sludge. London: *Journal of Applied Ecology*. 36, : 244-253.

Alejandro Fierro and Jeffrey Norrie and Andre Gosselin and Chantal Beauchamp. Deinking sludge influences growth and nitrogen and phosphorus status of several grass and legume species. Ottawa, Ontario: *Canadian Journal of Soil Science*. 77, : 693-702.

Alejandro Fierro and Nicolas Tremblay and Andre Gosselin. Supplemental carbon dioxide and light improved tomato and pepper seedling growth and yield. Alexandria, VA: *HortScience* . 29, : 152-154.

Conference Proceedings

Leticia Contreras and Alejandro Fierro-Cabo and Carlos Cintra. Decomposition of black mangrove (*Avicennia germinans*) leaf litter: calibrating estuarine indicators of functional recovery.: *NOAA*. (November)

Refugio Castro-Grajales and Alejandro Fierro-Cabo and Sergio Jimenez-Hernandez and Luis Zavala-Guerrero. Evaluación ambiental de la línea de costa de Tamaulipas usando un método rápido de campo.: *ASOCEAN*.

Alejandro Fierro-Cabo. Uso de indicadores ecológicos para evaluar el estado de conservación de humedales costeros en el sur de Tamaulipas.: *ASOCEAN*.

Periodicals

Alejandro Fierro-Cabo. Coyotes as super seed dispersers are keystone species in the fragmented habitat of the lower Rio Grande Valley.: *Society for Ecological Restoration Texas Chapter*. (March) 24,

Others

Alejandro Fierro-Cabo and Carlos Zamora-Tovar and F Gonzalez-Medrano and Adriana Vazquez-Lule and Y Saenz-Aguilar and G Amador-Cano and M Rodriguez-Zuniga. Caracterización del sitio de manglar GM31 Barra de Ostiones,. Mexico City: *CONABIO*. 1, : 47.

Alejandro Fierro-Cabo and Carlos Zamora-Tovar and F Gonzalez-Medrano and Adriana Vazquez-Lule and Y Saenz-Aguilar and G Amador-Cano and J Alcantara-Maya and S Velasquez-Salazar and M Rodriguez-Zuniga. Caracterización del sitio de manglar GM32 Barra del Tordo. Mexico City: *CONABIO*. 1, : 55.

Alejandro Fierro-Cabo and Carlos Zamora-Tovar and R Garcia-Soriano and F Gonzalez-Medrano and Adriana Vazquez-Lule and Y Saenz-Aguilar and G Amador-Cano and J Alcantara-Maya and M Rodriguez-Zuniga. Caracterización del sitio de manglar GM37 Delta del Río Bravo. Mexico City: *CONABIO*. 1, : 49.

Alejandro Fierro-Cabo and R Garcia-Soriano and Carlos Zamora-Tovar and F Gonzalez-Medrano and Adriana Vazquez-Lule and Y Saenz-Aguilar and G Amador-Cano and J Alcantara-Maya and E Villeda-Chavez and M Rodriguez-Zuniga. Caracterización del sitio de manglar GM41 La Pesca. Mexico City: *CONABIO*. 1, : 58.

Alejandro Fierro-Cabo and Carlos Zamora-Tovar and F Gonzalez-Medrano and Adriana Vazquez-Lule and Y Saenz-Aguilar and G Amador-Cano and J Alcantara-Maya and M Rodriguez-Zuniga. Caracterización del sitio de manglar GM47 Lomas del Real. Mexico City: *CONABIO*. 1, : 64.

Alejandro Fierro-Cabo and Carlos Zamora-Tovar and F Gonzalez-Medrano and Adriana Vazquez-Lule and Y Saenz-Aguilar and G Amador-Cano and J Alcantara-Maya and M Rodriguez-Zuniga. Caracterización del sitio de manglar GM49 Miramar. Mexico City: *CONABIO*. 1, : 66.

Alejandro Fierro-Cabo and R Garcia-Soriano and Carlos Zamora-Tovar and F Gonzalez-Medrano and Adriana Vazquez-Lule and Y Saenz-Aguilar and G Amador-Cano and J Alcantara-Maya and E Villeda-Chavez and M Rodriguez-Zuniga. Caracterización del sitio de manglar GM52 Rancho Nuevo. Mexico City: *CONABIO*. 1, : 57.

Media Contributions

Internet

The Nature Conservancy's webpage. Montezuma Cypress (August 2022)

The Newsroom - UTRGV (April 22, 2022)

VOA News (Voice of America News). Biodiversity and the border wall. (April 24, 2017)

NBC News Latino. Environmental effects of a border wall. (April 13, 2017)

TV

Telemundo. The new Center for Coastal and Marine Ecosystems (November 02, 2016)

Contracts, Grants and Sponsored Research

Engil Pereira and Chu-Lin Cheng and James Kang and Thang Pham and Wendi Williams and Thanh Thuy Vu and Joanne Nadia Rampersad-Ammons and Alejandro Fierro Cabo and Wan-Lin Chang and Debasish Bandyopadhyay and Veerachandra K Yemmireddy and Robin Alan Choudhury. Grant Pathways to NRCS and Academic Careers to Civil Engineering and Agriculture Students (PANACEAS) USDA-NIFA-EWD-REEU Federal , 750000\$ (December 2021 - December 2027)

David W Hicks and Alejandro Fierro-Cabo and Carlos E Cintra and John A Breier and Owen Frederick Temby and Erin Elizabeth Easton. Grant NOAA Cooperative Science Center for Coastal and Marine Ecosystems - II NOAA Federal , 4379639\$ (September 2021 - August 2026)

Alejandro Fierro Cabo. Contract USFWS RE-VEG Program, Container Grown Seedling Contract - III US Fish and Wildlife Service Federal , 7389.6\$ (March 2023 - December 2023)

Carlos E. Cintra-Buenrostro and Alejandro Fierro and Brandon Jones and Sergio J. Vazquez. Grant Is the Bahia Grande currently functioning as a fishes nursery, and what are the associated resource management implications? NOAA-RESTORE Federal , 126663\$ (December 2020 - August 2023)

Jongsun Kim and Alejandro Fierro Cabo. Grant Potential impacts of sea level rise on soil biochemistry and greenhouse gases fluxes in low-elevation lands UTRGV-Office of Faculty Success & Diversity The University of Texas Rio Grande Valley , 10000\$ (October 2022 - December 2022)

Alejandro Fierro-Cabo. Grant Thornforest Restoration Research at The Nature Conservancy Southmost Preserve - II The Nature Conservancy Other , 37000\$ (October 2021 - December 2022)

Alejandro Fierro Cabo. Contract USFWS RE-VEG Program, Container Grown Seedling Contract - II US Fish and Wildlife Service Federal , 14600\$ (September 2021 - December 2022)

David W Hicks and Alejandro Fierro-Cabo and Carlos E Cintra and John A Breier and Owen Frederick Temby. Grant NOAA Center for Coastal and Marine Ecosystems NOAA Federal , 2975000\$ (July 2016 - August 2022)

Alejandro Fierro-Cabo. Grant Thornforest Restoration Research at The Nature Conservancy Southmost Preserve - I The Nature Conservancy Other , 39651\$ (October 2020 - December 2021)

Alejandro Fierro Cabo. Contract USFWS RE-VEG Program, Container Grown Seedling Contract - I US Fish and Wildlife Service Federal , 12495\$ (September 2020 - November 2021)

Julie Ann Mustard and Alejandro Fierro Cabo. Grant Expanding and enhancing an educational pollinator garden in the Rio Grande Valley USDA Federal , 3000\$ (June 2019 - August 2021)

Alejandro Fierro-Cabo. Grant Sabal Palm Forest Restoration Research at The Nature Conservancy Southmost Preserve The Nature Conservancy Other , 103833\$ (May 2017 - December 2020)

Lucia Beatriz Carreon Martinez and Alejandro Fierro-Cabo and Julie Ann Mustard and Rupesh Ram Kariyat Ramachandr and Sara Curran Black. Grant Establishing a butterfly garden at UTRGV Brownsville Office of the Provost/EVP for Academic Affairs, UTRGV The University of Texas Rio Grande Valley , 12060\$ (October 2017 - December 2018)

David W. Hicks and Carlos E. Cintra-Buenrostro and Alejandro Fierro. Grant A regional ecosystem approach for the conservation and sustainable management of coastal and marine resources National Oceanic and Atmospheric Administration (NOAA) - Florida A&M University, Lead Institution Federal , 15000000\$ (August 2011 - August 2016)

Jude A. Benavides and Alejandro Fierro. Grant Resaca Rangers: Establishing a School-based Network to Monitor Ecosystem Health of the Lower Rio Grande Valley Resacas and Estuaries NOAA Federal , 99402.00\$ (June 2014 - June 2016)

Alejandro Fierro Cabo. Grant Key plant-animal interactions in the natural propagation of sabal palm (*Sabal mexicana*) and the conservation of palm forests in Texas and Tamaulipas CSMT The University of Texas Rio Grande Valley , 7400\$ (December 2013 - January 2015)

Alejandro Fierro. Contract Amphibian and Reptile Monitoring at Palo Alto National Historical Park Gulf Coast Cooperative Ecosystem Studies Unit Federal , 9536.00\$ (December 2012 - December 2014)

Alejandro Fierro. Fellowship Frances Rusteberg Faculty Fellowship UTB The University of Texas Rio Grande Valley (October 2012 - November 2013)

Alejandro Fierro. Contract Environmental assessment and monitoring of Garrapatas estuary, Tamaulipas, Mexico Iberdrola Energía Altamira Corporate , 48000\$ (December 2006 - December 2010)

Alejandro Fierro. Contract Wetlands assessment and monitoring of conservation/degradation status in Altamira Industrial Port, Tamaulipas, Mexico Puerto Industrial de Altamira Corporate , 105000\$ (December 2005 - December 2010)

Alejandro Fierro. Sponsored Research Ecological assessment of a rehabilitating estuary: developing an integrative tool for evaluating conservation status and sustainability of coastal wetlands PROMEP-SEP (Mexico) Federal , 40000\$ (December 2005 - December 2008)

Awards and Honors

Scholarship/Research

STEM Champion. UTRGV (October 2015)

Frances Rusteberg Faculty Fellowship. University of Texas-Brownsville (January 2013)

Research Excellence Award. Universidad Autónoma de Tamaulipas (November 2008)

Programme Quebecois de Bourses d'Excellence. Award for Scholarship. Ministere de l'Education du Quebec (March 1997)

Rotary International Award for Scholarship. Rotary International (August 1987)

Teaching

Service Learning Faculty. Center for Civic Engagement, UTB (April 2015)

Service Learning Faculty. Center for Civic Engagement, UTB (April 2014)

Presentations

Jorge Martinez and Jorge Kim and Alejandro Fierro Cabo."An analytical approach to study greenhouse gas fluxes in coastal wetlands affected by sea level rise".Engaged Scholar Symposium (ESS), UTRGV, (April 20, 2023)

Lizbet Salcedo and Jacob Resendiz and Alejandro Fierro Cabo."Determination of seed germination parameters of nursery-grown thornforest species used in reforestation in the lower Rio Grande valley".Subtropical Agriculture and Environments Society 77th Annual Meeting, Subtropical Agriculture and Environments Society, South Padre Island, Texas. (February 10, 2023)

David Lecusay and Alejandro Fierro Cabo and Carlos E Cintra and Jude Benavides."A Multimetric Index of Ecosystem Health for Fluvial Tributaries & Deltaic Wetlands".The Gulf of Mexico Conference 2022, National Oceanic and Atmospheric Administration, Baton Rouge, LA.2022)

Elizabeth Mogus-Garcia and Carlos E. Cintra Buenrostro and Alejandro Fierro Cabo."Trophic web reconstructions of *Sciaenops ocellatus* in the northwestern Gulf of Mexico".152nd Annual Meeting of the American Fisheries Society, American Fisheries Society, Spokane, Washington. (August 21, 2022)

Douglas Mainhart and Alejandro Fierro Cabo and Bradley O'Donnell Christoffersen and Charlotte Reemts."Nursery treatments may improve restoration outcomes by reducing seedling transplant shock".Joint Meeting of the Ecological Society of America and the Canadian Society for Ecology and Evolution, ESA and CSEE, Montreal, Canada. (August 17, 2022)

David Lecusay Jr. and Alejandro Fierro Cabo and Carlos E Cintra-Buenrostro and Jude Benavides."A multimetric index of ecosystem health for fluvial tributaries and deltaic wetlands".Gulf of Mexico Conference 2022, Baton Rouge, Louisiana. (April 27, 2022)

Dora Hernandez and William Yanez and Leticia Contreras and Alejandro Fierro Cabo."Assessing early mangrove leaf litter decomposition and the litterbag technique ".Engaged Scholar Symposium 2022, University of Texas Rio Grande Valley, Brownsville. (April 19, 2022)

Gaspar Najera and Leticia M. Contreras and Alejandro Fierro Cabo and Carlos E. Cintra-Buenrostro."Flooding influence on soil greenhouse gas emissions of vegetated wind tidal flats".NOAA EPP/MSI 10th Biennial Education & Science Forum, National Oceanic and Atmospheric Administration, Tallahassee, FL. (April 5, 2022)

Elena Flores and Alejandro Fierro Cabo."Influence of nutrient enrichment on dwarf black mangrove (*Avicennia germinans*) of South Texas".NOAA EPP/MSI 10th Biennial Education & Science Forum, National Oceanic and Atmospheric Administration, Tallahassee, FL. (April 5, 2022)

Sandra A. Leal and Carlos E. Cintra-Buenrostro and Alejandro Fierro Cabo."Population structure of Red Drum (*Sciaenops ocellatus*) in two systems in the northwestern Gulf of Mexico".NOAA EPP/MSI 10th Biennial Education & Science Forum, National Oceanic and Atmospheric Administration, Tallahassee, FL. (April 5, 2022)

Elizabeth Mogus Garcia and Carlos E. Cintra-Buenrostro and Alejandro Fierro Cabo."Red Drum (*Sciaenops ocellatus*) stomach contents trophic web reconstruction in the Gulf of Mexico".NOAA EPP/MSI 10th Biennial Education & Science Forum, National Oceanic and Atmospheric Administration, Tallahassee, FL. (April 5, 2022)

Leticia Contreras and Alejandro Fierro-Cabo and Elena Flores and David De La Garza."Ecological factors in estuarine vegetation zones influence variability of soil Carbon emissions".Ocean Sciences Meeting 2022, Association for the Sciences of Limnology and Oceanography, virtual. (February 24, 2022)

Elena Flores and Alejandro Fierro-Cabo and Edward Proffitt and Ilka C Feller."Effects of nitrogen and phosphorus enrichment on dwarf black mangrove (*Avicennia germinans*): aboveground growth and plant structure".Ocean Sciences Meeting 2022, Association for the Sciences of Limnology and Oceanography, virtual. (February 24, 2022)

- Elizabeth Mogus-Garcia and Carlos E. Cintra-Buenrostro and Alejandro Fierro-Cabo."Reconstruction of Red Drum (*Sciaenops ocellatus*) trophic web using stable isotopes in the Northwestern Gulf of Mexico".Ocean Sciences Meeting 2022, Association for the Sciences of Limnology and Oceanography, virtual. (February 24, 2022)
- Alejandro Fierro Cabo."Thorn forest restoration research with The Nature Conservancy".Private Grant Funding Forum , UTRGV - Division of Institutional Advancement, McAllen, TX. (November 28, 2021)
- Emily Mullins and Alejandro Fierro Cabo."Allelopathic Native Plants: A Novel Tool in Forest Restoration".9th World Conference on Ecological Restoration, Society for Ecological Restoration, virtual. (June 22, 2021)
- Edgar Vasquez and Alejandro Fierro Cabo and Sonia Najera."Positive Plant-Plant Interactions Increase Restoration Success for Thorn Scrub/Thorn Forest Plant Communities in Semi-Arid South Texas".9th World Conference on Ecological Restoration, Society for Ecological Restoration, virtual. (June 22, 2021)
- Alejandro Fierro Cabo."Managed resacas: insights on diversity and health of a novel aquatic ecosystem".Biology Research Seminar, University of Texas Rio Grande Valley, virtual. (April 22, 2021)
- Aylin Caballero and Abigail Lorenzi and Leticia Contreras and Alejandro Fierro Cabo."Decomposition of sargassum in a south Texas coastal dune environment".Engaged Scholar Symposium 2021, University of Texas Rio Grande Valley, Brownsville. (April 19, 2021)
- Gaspar Najera and Leticia Contreras and Alejandro Fierro Cabo."Greenhouse Gas Soil Emission Fluxes in a south Texas Coastal Saltmarsh".College of Sciences Annual Research Conference, University of Texas Rio Grande Valley, Online. (November 20, 2020)
- August Plamann and Alejandro Fierro Cabo."Montezuma cypress (*Taxodium mucronatum* Ten.): what is needed to optimize the seed germination process?".Texas Plant Conservation Conference 2020, Botanical Research Institute of Texas, virtual. (August 14, 2020)
- Gaspar Najera and Leticia Contreras and Alejandro Fierro-Cabo and Carlos E Cintra."Potential Effect of Sea Level Rise on Soil Carbon Fluxes in a Mangrove-Marsh-Mudflat Sequence of the Lower Laguna Madre, Texas".ASA-CSSA-SSSA International Annual Meeting, ASA-CSSA-SSSA, San Antonio, TX. (November 12, 2019)
- Edgar Vasquez and Alejandro Fierro-Cabo."High density planting: positive interactions in thorn forest restoration".24th Annual Conference Meeting Society for Ecological Restoration Texas Chapter, TXSER, Galveston, TX. (November 9, 2019)
- Emily Mullins and Alejandro Fierro-Cabo."Identifying native plants for use in thorn forest restoration".24th Annual Conference Meeting Society for Ecological Restoration Texas Chapter, TXSER, Galveston, TX. (November 9, 2019)
- Romeo Segura and Emily Mullins and Alejandro Fierro-Cabo."Invasive African grasses in south Texas: are they allelopathic?".24th Annual Conference Meeting Society for Ecological Restoration Texas Chapter, TXSER, Galveston, TX. (November 9, 2019)
- A. Elizabeth Murphy and Carlos E. Cintra-Buenrostro and Alejandro Fierro Cabo."Assessing nitrogen transfer in a south Texas Black Mangrove (*Avicennia germinans*) forest".25th Biennial Conference of the Coastal and Estuarine Research Federation, CERF, Mobile, AL. (November 5, 2019)
- Jaqueline Ruiz and Alejandro Fierro-Cabo."Is cold stratification needed for the germination of the native and symbolic Montezuma Cypress (*Taxodium mucronatum*)?".Engaged Scholar Symposium 2019, UTRGV, Brownsville, TX. (April 16, 2019)
- Leslie Hernandez and David Lecusay Jr. and Monica Delgado and Carlos E Cintra and Alejandro Fierro Cabo."Sediment carbon storage in a mangrove-marsh-mudflat continuum of the Laguna Madre, Texas".Engaged Symposium 2, UTRGV, Brownsville, TX. (April 16, 2019)
- Gaspar Nájera and Leticia Contreras and Alejandro Fierro Cabo and Carlos E Cintra."Soil carbon fluxes in a mangrove-marsh-mudflat continuum of the lower Laguna Madre".Engaged Symposium 2, UTRGV, Brownsville, TX. (April 16, 2019)
- Edgar Vasquez and Alejandro Fierro-Cabo and J. Andrew McDonald."Exploring nutrient manipulation as a tool for thorn forest restoration".College of Sciences Annual Research Conference, College of Sciences UTRGV, Edinburg, Texas. (March 29, 2019)
- Kassandra Aguilera and Anita C Hernandez and Alejandro Fierro-Cabo and J. Andrew McDonald."Varying Growth Inhibition by Native South Texas Tree Species on Invasive African Grasses".73rd Annual Meeting Subtropical Agriculture and Environments Society, Subtropical Agriculture and Environments Society, Weslaco, TX. (February 8, 2019)
- Alejandro Fierro-Cabo and Tianna Picquet and Ilka C Feller."An invasive ungulate may restrain mangrove range expansion on the south Texas coast".23rd Annual Conference Meeting Society for Ecological Restoration Texas Chapter, Society for Ecological Restoration Texas Chapter, San Antonio, TX. (November 10, 2018)
- Jennifer Baez and Edgar Vasquez and Alejandro Fierro-Cabo."Exploring allelopathy of native woody species as potential approach for thorn forest restoration: a test on inhibition of germination and emergence".23rd Annual

Conference Meeting Society for Ecological Restoration Texas Chapter, Society for Ecological Restoration Texas Chapter, San Antonio, TX. (November 10, 2018)

Javier Navarro and Alejandro Fierro-Cabo and Carlos E Cintra."Facilitative interaction between *Batis Maritima* and *Avicennia germinans* seedlings: a look at microenvironmental parameters and implications for mangrove restoration".23rd Annual Conference Meeting Society for Ecological Restoration Texas Chapter, Society for Ecological Restoration Texas Chapter, San Antonio, TX. (November 10, 2018)

Shelby Bessette and David W Hicks and Alejandro Fierro-Cabo."Successful dune restoration using foundation species: the case study of South Padre Island".23rd Annual Conference Meeting Society for Ecological Restoration Texas Chapter, Society for Ecological Restoration Texas Chapter, San Antonio, TX. (November 10, 2018)

Tianna Picquet and Alejandro Fierro-Cabo and Ilka Feller."Novel interactions may affect range expansions: is heavy ungulate browsing restraining mangrove advance on the south Texas coast?".12th International Symposium on Biogeochemistry of Wetlands, University of Florida, Coral Springs, Florida. (April 25, 2018)

Rene Barrientos and Javier R Navarro and Alejandro Fierro-Cabo."Investigating seed germination of the native and symbolic *Montezuma cypress* (*Taxodium mucronatum*)".UTRGV Engaged Scholar Symposium, UTRGV, Brownsville, TX. (April 10, 2018)

Jennifer Lopez and Angela O'Neil and Alejandro Fierro-Cabo."Native shrubs as restoration nurse plants in south Texas".UTRGV Engaged Scholar Symposium, UTRGV, Brownsville, TX. (April 10, 2018)

Ashley E. Murphy and Carlos E Cintra and Alejandro Fierro-Cabo."Assessing and quantifying nitrogen transfer through black mangrove (*Avicennia germinans*) communities".9th Biennial Education and Science Forum, NOAA Educational Partnership Program with Minority Serving Institutions, Washington DC. (March 20, 2018)

Sally E Camacho and Shelby M Bauer and Tianna Picquet and Alejandro Fierro-Cabo."Browsing effects of nilgai antelope on mangroves along the lower Laguna Madre".UTRGV Engaged Scholar Symposium, UTRGV, Brownsville, TX. (April 2017)

Leticia M Contreras and Alejandro Fierro-Cabo and Carlos E Cintra and David W Hicks and Crystal Martinez and Claudia A Tamez and Mario A Marquez."Ecosystem functional and structural characteristics affected by freshwater inflow in negative estuaries".Aquatic Sciences Meeting, Association for the Sciences of Limnology and Oceanography (ASLO), Association for the Sciences of Limnology and Oceanography (ASLO), Honolulu, Hawaii. (February 26, 2017)

Alejandro Fierro-Cabo."Looking for disturbance effects and indicators in the estuarine lagoon system of the lower Laguna Madre".NOAA-ECSC Webinar Series, NOAA, webinar. (February 24, 2017)

Leticia M Contreras and Alejandro Fierro-Cabo and Carlos E Cintra."Calibrating estuarine indicators of functional recovery derived from mangrove leaf litter decay".21th Annual Conference Meeting Society for Ecological Restoration Texas Chapter, Society for Ecological Restoration Texas Chapter, Livingston, TX. (November 13, 2016)

Alejandro Fierro-Cabo."Thorn forest restoration in south Texas: the need for a 'novel ecosystem' approach at the landscape level".21th Annual Conference Meeting Society for Ecological Restoration Texas Chapter, Society for Ecological Restoration Texas Chapter, Livingston, TX. (November 13, 2016)

Mario A Marquez and Stefany Salinas and Buford Lessley and Alejandro Fierro-Cabo and Carlos E Cintra and Charles Jagoe."Evaluation of mercury concentrations in harvestable-sized fish from freshwater resacas in south Texas, USA".7th World Congress Society of Environmental Toxicology and Chemistry, Society of Environmental Toxicology and Chemistry, Orlando, FL. (November 6, 2016)

Leticia M Contreras and Alejandro Fierro-Cabo and Carlos E Cintra."Decomposition of black mangrove (*Avicennia germinans*) leaf litter: calibrating estuarine indicators of functional recovery".8th Biennial Education and Science Forum, NOAA Educational Partnership Program with Minority Serving Institutions, New York, NY. (August 28, 2016)

Leticia M Contreras and Alejandro Fierro-Cabo and Carlos E Cintra."Early drivers of black mangrove (*Avicennia germinans*) leaf litter decomposition in the water column".4th International Mangrove and Macrobenthos Meeting, Smithsonian Environmental Research Center, St Augustine, FL. (July 18, 2016)

Adriana E Rodriguez and Leticia M Contreras and Alejandro Fierro-Cabo."Assessing the effects of temperature and salinity on the decomposition of black mangrove (*Avicennia germinans*) leaf litter".UTRGV Engaged Scholar Symposium, UTRGV, Brownsville, TX. (April 21, 2016)

Angelica R Tamayo and Marshall McCollum and Alejandro Fierro-Cabo."First report of introduced nilgai antelope feeding on native black mangrove in lower Laguna Madre".UTRGV Engaged Scholar Symposium, UTRGV, Brownsville, TX. (April 21, 2016)

Alejandro Fierro-Cabo."Ocelot habitat conservation and restoration options north of the Rio Grande".Ocelot Conservation Day, UTRGV, Brownsville, TX. (March 4, 2016)

Buford Lessley and Alejandro Fierro-Cabo and Jude Benavides."Assessing ecosystem health in restoring and unrestored resacas of the lower Rio Grande".20th Annual Meeting Society for Ecological Restoration Texas Chapter, Society for Ecological Restoration Texas Chapter, San Antonio, TX. (November 14, 2015)

Alejandro Fierro-Cabo and Carlos E Cintra."Fish assemblage structure indicates limited progress in restoration process over a lustrum in a severely degraded estuary of southern Tamaulipas".20th Annual Meeting Society for Ecological Restoration Texas Chapter, Society for Ecological Restoration Texas Chapter, San Antonio, TX. (November 14, 2015)

Monica Delgado and Carlos E Cintra and Alejandro Fierro-Cabo."Decomposition and nitrogen dynamics of Turtle grass (*Thalassia testudinum*) in a subtropical estuarine system".11th annual Texas Bays and Estuaries Meeting, UTMSI, Port Aransas, Texas. (April 8, 2015)

Jennifer L Vela and Heather Dawn Alexander and Jonathan Moczygemba and Alejandro Fierro-Cabo."Alternative restoration treatments to maximize growth and survival of Tamaulipan thornscrub species during seedling establishment".118th Annual Meeting Texas Academy of Science , Texas Academy of Science , San Antonio, Texas. (March 6, 2015)

Buford Lessley and Alejandro Fierro-Cabo and Jude Benavides."Resaca Rangers: a school-based network to monitor resaca ecosystem health".118th Annual Meeting Texas Academy of Science , Texas Academy of Science , San Antonio, TX. (March 6, 2015)

Monica Delgado and Carlos E Cintra and Alejandro Fierro-Cabo."Turtle seagrass (*Thalassia testudinum*) decomposition and nitrogen dynamics in a subtropical estuarine system".NOAA ECSC Annual Meeting., NOAA, Orlando, Florida. (March 1, 2015)

Crystal Martinez and Alejandro Fierro Cabo and Carlos E Cintra."Potential use of the ivory barnacle (*Balanus eburneus*) as a monitoring tool of ecosystem recovery in Texas southmost estuaries".7th Biennial Education and Science Forum, NOAA Educational Partnership Program, NOAA-EPP, University of Maryland Eastern Shore, MD. (October 26, 2014)

Mario Marquez and Alejandro Fierro Cabo and E. ."Recovery of ecosystem function as indicated by litter decay in estuaries linked to Lower Laguna Madre, Texas".7th Biennial Education and Science Forum, NOAA Educational Partnership Program, NOAA Educational Partnership Program, University of Maryland Eastern Shore, MD. (October 26, 2014)

Monica Delgado and Carlos E Cintra and Alejandro Fierro Cabo."Turtle seagrass (*Thalassia testudinum*) decomposition and nitrogen dynamics in a subtropical estuarine system".7th Biennial Education and Science Forum, NOAA Educational Partnership Program, NOAA-EPP, University of Maryland Eastern Shore, MD. (October 26, 2014)

Alejandro Fierro-Cabo and Mario Marquez and Carlos Cintra-Buenrostro."Effective indicators of ecosystem functional recovery in estuaries linked to Lower Laguna Madre, Texas".Society for Ecological Restoration, Texas and Southwest Chapters Joint Conference, Society for Ecological Restoration, Alpine, Texas. (October 19, 2014)

Leah M McIntosh and Alejandro Fierro-Cabo."Indicators of ecosystem development in resaca restoration based on the macroinvertebrate community".Society for Ecological Restoration, Texas and Southwest Chapters Joint Conference, Society for Ecological Restoration, Alpine, Texas. (October 18, 2014)

Alejandro Fierro-Cabo and Guillermo Aguilar."Key plant-animal interactions in the natural propagation of sabal palm (*Sabal mexicana*) and the restoration of palm forests in Texas".Society for Ecological Restoration, Texas and Southwest Chapters Joint Conference, Society for Ecological Restoration, Alpine, Texas. (October 18, 2014)

Jennifer L Vela and Heather Dawn Alexander and Jonathan Moczygemba and Alejandro Fierro-Cabo."Alternative restoration treatments to maximize growth and survival of Tamaulipan thornscrub species during seedling establishment".Society for Ecological Restoration, Texas and Southwest Chapters Joint Conference, Society for Ecological Restoration, Alpine, Texas. (October 17, 2014)

Monica Delgado and Carlos E. Cintra-Buenrostro and Alejandro Fierro."Decomposition and nitrogen dynamics of turtle seagrass (*Thalassia testudinum*): a tale from the southernmost estuarine bay in Texas".26th Annual HENAAC Conference , Great Minds in STEM, New Orleans, LA. (October 2, 2014)

Paloma A Rodriguez and Leah M McIntosh and Alejandro Fierro-Cabo."Developing a mass-size relationship for *Melanoides tuberculata*, a potential ecological indicator for resacas".UTB 16th Annual Research Symposium, UTB, Brownsville, TX. (April 4, 2014)

Thanya Hernandez and Alma Martinez and Guillermo Aguilar and Alejandro Fierro."Predator preferences and predation intensities on sabal palm (*Sabal mexicana* Mart) seeds".UTB 16th Annual Research Symposium, UTB, Brownsville, TX. (April 4, 2014)

Leah McIntosh and Alejandro Fierro-Cabo."Macroinvertebrate community composition of a reflooded resaca as a potential indicator of successional stage".Texas Academy of Science, 117th Annual Meeting, Texas Academy of Science, Galveston, Texas. (March 8, 2014)

Guillermo Aguilar and Alejandro Fierro-Cabo."Sabal palm's safety net: coyote's balancing interaction on seed predators".Texas Academy of Science, 117th Annual Meeting, Texas Academy of Science, Galveston, TX. (March 8, 2014)

Crystal Martinez and Alejandro Fierro-Cabo."Barnacles as potential indicators of estuarine system recovery".Texas Academy of Science, 117th Annual Meeting, Texas Academy of Science, Galveston, Texas. (March 7, 2014)

Mario Marquez and Alejandro Fierro and Carlos Cintra-Buenrostro."Decomposition patterns and nitrogen dynamics of Black Mangrove (*Avicennia germinans*) leaf litter in Bahia Grande and South Bay, Texas".UTB-USFWS: Integrating Research with Land Management at Laguna Atascosa National Wildlife Refuge Symposium, UTB, Brownsville, TX. (November 15, 2013)

Crystal Martinez and Alejandro Fierro and Carlos Cintra-Buenrostro."Ivory Barnacle (*Balanus eburneus*) as an ecological indicator in south Texas estuaries".UTB-USFWS: Integrating Research with Land Management at Laguna Atascosa National Wildlife Refuge Symposium, UTB, Brownsville, TX. (November 15, 2013)

Crystal Martinez and Alejandro Fierro and Carlos Cintra-Buenrostro."Balanus eburneus as an ecological indicator in south Texas estuaries".2013 National Coastal Conference: Responding to the Waves of Change, American Shore and Beach Preservation Association, South Padre Island, Texas. (October 23, 2013)

Leah McIntosh and Sahu Teli Jessica and Alejandro Fierro."Macroinvertebrate community and decomposition in re-flooded resacas: preliminary look at potential indicators of system stability".Ecological Society of America - 98th Annual Meeting, Ecological Society of America, Minneapolis, MN. (August 9, 2013)

Marquez Mario and Alejandro Fierro-Cabo and Carlos Cintra-Buenrostro."Black mangrove (*Avicennia germinans*) leaf litter decomposition as indicator of ecosystem function in estuaries in Lower Laguna Madre, Texas".Texas Bays and Estuaries Meeting, University of Texas Marine Science Institute, Port Aransas, Texas. (April 25, 2013)

Cinthya Fuentes-Tapia and Alejandro Fierro and Guillermo Aguilar."Challenging plant propagation: Sabal palm and seed predators".15th Annual Research Symposium, University of Texas-Brownsville, Brownsville, Texas. (April 5, 2013)

Mario Marquez and Alejandro Fierro and Carlos Cintra-Buenrostro and David Hicks."Decomposition patterns of black mangrove (*Avicennia germinans*) leaf litter in disturbed estuaries linked to the Lower Laguna Madre, Texas".National Oceanic and Atmospheric Administration - Environmental Cooperative Science Center Annual Meeting, National Oceanic and Atmospheric Administration - Environmental Cooperative Science Center, Tampa, FL. (March 10, 2013)

Samuel Camarillo and Alejandro Fierro and Eric Linder."Are coyotes saviors of Sabal palms ? ".16th Annual Conference of the Texas Chapter of the Society for Ecological Restoration, Texas Chapter of the Society for Ecological Restoration, Weslaco, Texas. (November 3, 2012)

Alejandro Fierro."Developing ecological and biological indicators for tropical and subtropical coastal zones".First Conference in Subtropical Biology, UT Pan American, Edinburg, Texas. (January 13, 2012)

Piedad Mayagoitia and Raul Valdez and Alejandro Fierro-Cabo."Status and habitat use of neotropical otters in southern Tamaulipas, Mexico".43rd Joint Annual Meeting of the Wildlife Society, Wildlife Society, Flagstaff, Arizona. (February 4, 2010)

Cristina Rodriguez-Palacio and Lilia Crisostomo-Vazquez and Alejandro Fierro-Cabo."Florecimientos algales nocivos (FAN) en el estero Garrapatas, Tamaulipas".VII International Meeting of the Mexican Society of Planktology, Mexican Society of Planktology, Tlanepantla, Edo. de Mex. (April 22, 2009)

Lilia Crisostomo-Vazquez and Cristina Rodriguez-Palacio and Alejandro Fierro-Cabo."Primer registro de *Chatonella* subsalsa (*Raphidophyceae*) en el Golfo de México".Primer Congreso Latinoamericano de Biotecnología Ambiental, Instituto de Ecología, A.C. (INECOL) and Universidad Veracruzana, Xalapa, Ver., Mexico. (October 6, 2008)

Luisiana Morales-Zamudio and Alejandro Fierro-Cabo and Miguel Dominguez-Crespo and Jesus D de la Rosa."Possible urban biological indicator of heavy metal content in air particulate matter".European Aerosol Conference, Hellenic Association for Aerosol Research, Thessaloniki, Greece. (August 25, 2008)

Luisiana Morales-Zamudio and Alejandro Fierro-Cabo and Miguel Dominguez-Crespo and R Silva-Rodrigo."Bioindicador urbano de metales pesados en material particulado del aire a partir del *Hemidactylus frenatus*".Congreso Nacional de Ingeniería Química, Instituto Tecnológico de Ciudad Madero, Tampico, Tam. Mexico.2007)

Alejandro Fierro-Cabo and Sergio Jimenez-Hernandez."Functional and structural indicators for the assessment of ecological state in tropical coastal wetlands: preliminary results".International Conference on Coastal Ecosystems, EPOMEX Universidad Autonoma de Campeche, Campeche, Cam, Mexico. (June 27, 2006)

Teaching

Teaching Experience

BIOL 1106, Biology for Science Majors Laboratory I, 2 Course(s)

BIOL 1106, General Biology Laboratory I, 1 Course(s)

BIOL 1108, Biological Concepts Laboratory I, 1 Course(s)

BIOL 1108, Biology Non-Sci Major Lab I, 1 Course(s)

BIOL 1108, Biology Non-Sci Majors Lab I, 1 Course(s)

BIOL 1108, Biology Non-Science Majors Lab I, 1 Course(s)

BIOL 1108, Biology for Non-Science Majors Laboratory I, 1 Course(s)
BIOL 1109, Biological Concepts Laboratory II, 4 Course(s)
BIOL 1109, Biology Non-Sci Major Lab II, 2 Course(s)
BIOL 1109, Biology Non-Sci Majors Lab II, 2 Course(s)
BIOL 1109, Biology Non-Science Majors Lab II, 4 Course(s)
BIOL 1109, Biology for Non-Science Major Lab II, 12 Course(s)
BIOL 2143, General Biology Laboratory III, 2 Course(s)
BIOL 2343, General Biology III, 5 Course(s)
BIOL 3404, Conservation Biology, 14 Course(s)
BIOL 3404, Conservation Biology Lab, 2 Course(s)
BIOL 4370, SpTp: Plant-Animal Interaction, 1 Course(s)
BIOL 4370, Topics in Biology, 1 Course(s)
BIOL 4390, Biology Internship, 20 Course(s)
BIOL 4399, Independent Research, 6 Course(s)
BIOL 4399, Research Problems in Biology, 12 Course(s)
BIOL 4422, Conservation Biology, 4 Course(s)
BIOL 5136, Current Issues in Biology, 2 Course(s)
BIOL 5170, Topics in Biology, 1 Course(s)
BIOL 5342, Restoration Ecology, 6 Course(s)
BIOL 5370, Topics in Biology, 3 Course(s)
BIOL 6185, Graduate Research, 4 Course(s)
BIOL 6285, Graduate Research, 8 Course(s)
BIOL 6310, Plant-Animal Interactions, 2 Course(s)
BIOL 6365, Graduate Biological Research Problems, 1 Course(s)
BIOL 6385, Graduate Research, 5 Course(s)
BIOL 6390, Biology Internship, 3 Course(s)
BIOL 6398, Adv. Topics I:Plant-Animal Int, 1 Course(s)
BIOL 6398, AdvTopic Bio I:Plant-Animals I, 1 Course(s)
BIOL 6685, Graduate Research, 1 Course(s)
BIOL 7100, Thesis Proposal, 3 Course(s)
BIOL 7300, Thesis, 5 Course(s)
BIOL 7300, Thesis I, 4 Course(s)
BIOL 7301, Thesis, 8 Course(s)
BIOL 7301, Thesis II, 8 Course(s)
EEMS 5342, Restoration Ecology, 3 Course(s)
EEMS 6185, Graduate Research, 2 Course(s)
EEMS 6285, Graduate Research, 5 Course(s)
EEMS 6385, Graduate Research, 9 Course(s)
EEMS 6386, Non-thesis Research, 1 Course(s)
EEMS 6390, Graduate Internship, 6 Course(s)
EEMS 6685, Graduate Research, 3 Course(s)
EEMS 7100, Continuing Thesis, 3 Course(s)
EEMS 7300, Thesis I, 4 Course(s)
EEMS 7301, Thesis II, 7 Course(s)
ENVR 4303, Envr Sci Res Proj, 2 Course(s)
ENVR 4304, Envr Sci Internship, 12 Course(s)
MARS 4390, Marine Biology Internship, 13 Course(s)

MARS 4399, Research Problems, 7 Course(s)

UNIV 4000, Directed Research, 1 Course(s)

Non-Credit Instruction

- Guest Lecture, BISD and UTRGV, 60. (May 31, 2016)
- Guest Lecture, BISD and UTRGV, 30. (May 27, 2016)
- Guest Lecture, Saint Joseph Academy and UTRGV, 40. (April 28, 2016)
- Guest Lecture, BISD and UTRGV, 30. (April 20, 2016)
- Guest Lecture, USFWS and UTRGV, 30. (March 4, 2016)
- Workshop, Engaged Scholarship and Learning UTRGV, 15. (February 25, 2016)
- Workshop, UTB and BISD. Resaca ecological monitoring, 11. (December 5, 2014 - December 6, 2014)
- Guest Lecture, Gorgas Science Society, 12. (November 20, 2014)
- Guest Lecture, Texas Master Naturalist, 25. (March 27, 2013)

Directed Student Learning

Master's Thesis Committee Chair, Gracie Granados. Floral resources for pollinators in Tamaulipan thornscrub, Department of Biology. (August 2023)

Undergraduate Supervised Research, Hector Leal. Carbon and Nitrogen dynamics in the mangrove-saltmarsh interface, School of Earth, Environmental, and Marine Sciences. (August 2023)

Undergraduate Supervised Research, Lizbet Salcedo. Flower resources for pollinators in the thornforest, School of Earth, Environmental, and Marine Sciences. (January 2023)

Master's Thesis Committee Member, Asif Ahmed. Effects of Short-term Exposure to Pesticides Mixture on Tissue Architecture and body fluid Conditions of the American Oyster, School of Earth, Environmental, and Marine Sciences. (September 2022)

Master's Thesis Committee Member, Samantha Colunga. Soil carbon in thornscrub restoration chronosequence, School of Earth, Environmental, and Marine Sciences. (September 2022)

Master's Thesis Committee Chair, David De La Garza. ECOLOGICAL FACTORS AFFECTING SOIL CARBON FLUXES ACROSS ESTUARINE VEGETATION ZONES IN BLACK MANGROVE (AVICENNIA GERMINANS) STANDS OF THE LOWER LAGUNA MADRE, School of Earth, Environmental, and Marine Sciences. (January 2022)

Master's Thesis Committee Member, Sandra Leal. Population structure of Red Drum (*Sciaenops ocellatus*) in two systems in the northwestern Gulf of Mexico, School of Earth, Environmental, and Marine Sciences. (September 2019)

Master's Thesis Committee Member, Adam Sanjar. Use of road crossings by rodents, School of Earth, Environmental, and Marine Sciences. (July 2021 - May 1, 2023)

Undergraduate Supervised Research, Jacob Resendiz. Determining germination parameters of thornforest species used in reforestation, Department of Biology. (June 2022 - December 2022)

Undergraduate Supervised Research, Lizbet Salcedo. Determining germination parameters of thornforest species used in reforestation, School of Earth, Environmental, and Marine Sciences. (June 2022 - December 2022)

Master's Thesis Committee Chair, Douglas Mainhart. INFLUENCE OF PRETREATMENTS ON PHYSIOLOGICAL STATUS AND POST-PLANTING SURVIVAL OF THORNFEST SEEDLINGS IN A RESTORATION CONTEXT, Department of Biology. (January 2021 - December 2022)

Master's Thesis Committee Member, Elizabeth Mogus-Garcia. Red drum (*Sciaenops ocellatus*) trophic web reconstruction using stable isotopes in two systems in the northwestern Gulf of Mexico, School of Earth, Environmental, and Marine Sciences. (September 2019 - August 2022)

Master's Thesis Committee Chair, Elena Flores. Effects of nutrient enrichment on mangrove and saltmarsh habitats, School of Earth, Environmental, and Marine Sciences. (March 2019 - July 2022)

Undergraduate Supervised Research, Dora Hernandez and William Yanez. Carbon mineralization in mangrove leaf litter, School of Earth, Environmental, and Marine Sciences. (January 2022 - May 2022)

Graduate Capstone/Senior Project, Victoria Rodriguez. Effect of storage time on seed viability of thornforest species, School of Earth, Environmental, and Marine Sciences. (September 2021 - December 2021)

Undergraduate Supervised Research, David De la Garza. Factors affecting soil C fluxes in mangroves, Department of Biology. (June 2021 - December 2021)

Master's Thesis Committee Chair, David Lecusay. Assessment and monitoring of deltaic wetlands and fluvial systems: refining and validating a multimetric index of resaca ecosystem health, School of Earth, Environmental, and Marine Sciences. (March 2019 - December 2021)

Undergraduate Supervised Research,Aylin Caballero and Abigail Lorenzi. Decomposition of sargassum in a coastal dune environment, School of Earth, Environmental, and Marine Sciences. (January 2021 - May 2021)

Undergraduate Supervised Research,Asael Rodriguez. Carbon dynamics in wetlands, School of Earth, Environmental, and Marine Sciences. (May 2020 - May 2021)

Master's Thesis Committee Member,Franklin Wes. An assessment on microplastic pollution in the resacas of the lower Rio Grande valley, Texas, School of Earth, Environmental, and Marine Sciences. (September 2019 - March 2021)

Master's Thesis Committee Chair,Emily Mullins. Native plant allelopathy: a potential approach to limit invasive grass encroachment in thorn forest restoration, School of Earth, Environmental, and Marine Sciences. (March 2019 - December 8, 2020)

Graduate Capstone/Senior Project,August Plamann. Enhancing the seed germination process of Montezuma cypress (*Taxodium mucronatum*), School of Earth, Environmental, and Marine Sciences. (March 2020 - August 2020)

Master's Thesis Committee Member,Faeqa Mohsin. Optimizing species selection for forest restoration in the lower rio Grande valley, Biological Sciences (UTB). (August 2018 - August 2020)

Master's Thesis Committee Chair,Edgar Vasquez. Exploring plant-plant interactions and nutrient manipulation as strategies for thorn forest restoration, Department of Biology. (June 2018 - August 2020)

Master's Thesis Committee Chair,Javier Navarro. Analysis of the facilitative interaction between *Batis maritima* and *Avicennia germinans* seedlings as mangrove restoration strategy, School of Earth, Environmental, and Marine Sciences. (August 2017 - July 2020)

Master's Thesis Committee Member,Taylor Hopkins. INFLUENCE OF LANDSCAPE FACTORS ON WILDLIFE PRESENCE AND ROAD MITIGATION STRUCTURE PERFORMANCE, Department of Biology. (December 20, 2018 - May 19, 2020)

Master's Thesis Committee Member,Mohammad Maruf Billah. DETECTION AND ENUMERATION OF BACTERIAL PATHOGENS IN THE AMERICAN OYSTERS (*CRASSOSTREA VIRGINICA*), School of Earth, Environmental, and Marine Sciences. (January 2018 - April 1, 2020)

Undergraduate Supervised Research,Romeo Segura. Assessing allelopathy in invasive grasses, Department of Biology. (September 2019 - December 2019)

Master's Thesis Committee Member,Catherine Eckert. Assessing the rehabilitation status of the reflooded Bahia Grande, Texas based on trace gas fluxes, benthic macroinvertebrates, and fish community data along salinity and seagrass gradients, School of Earth, Environmental, and Marine Sciences. (January 2019 - December 2019)

Undergraduate Supervised Research,Daniel Flores. Biotic interactions in mangroves, Department of Biology. (June 2018 - December 2019)

Master's Thesis Committee Member,Ashley Murphy. Tracking nitrogen transfer through Black Mangrove (*Avicennia germinans*) communities, School of Earth, Environmental, and Marine Sciences. (January 2017 - December 2019)

Undergraduate Supervised Research,Gaspar Najera. Soil blue carbon fluxes in mangrove, School of Earth, Environmental, and Marine Sciences. (January 2019 - November 2019)

Master's Thesis Committee Member,Eleazar Hernandez. HISTOLOGICAL EVIDENCE OF ANNUAL AND LUNAR REPRODUCTIVE RHYTHMS OF ATLANTIC SEA URCHIN, *ARBACIA PUNCTULATA* IN THE SOUTHERN GULF OF MEXICO: CHANGES IN NUTRITIVE PHAGOCYTES IN RELATION TO GAMETOGENESIS, School of Mathematical and Statistical Science. (January 2018 - September 2019)

Master's Thesis Committee Member,Raziel Flores. Multivariate comparative analysis of eight Tamaulipan plant communities: Structure and ecological characteristics, Department of Biology. (December 2015 - August 2019)

Undergraduate Directed Individual/Independent Study,Jaqueline Ruiz. Cold stratification to improve the germination process of Montezuma Cypress, Department of Biology. (January 20, 2019 - April 16, 2019)

Undergraduate Supervised Research,Jennifer Baez. Exploring allelopathy in native woody species, Department of Biology. (September 2018 - December 2018)

Master's Thesis Committee Chair,Tianna Picquet. EFFECTS OF NILGAI ANTELOPE (*Boselaphus tragocamelus*) BROWSING ON BLACK MANGROVE (*Avicennia germinans*) IN SOUTH TEXAS: A study on physiological, structural, and reproductive parameters, Department of Biology. (September 2016 - October 2018)

Dissertation Co-Chair,Carlos Zamora Tovar. Patrones ecológicos del manglar Tamaulipeco. Universidad Autonoma de Tamaulipas, Other (outside UTRGV). (2013 - September 2018)

Undergraduate Supervised Research,Rene Barrientos. Investigating seed germination of Montezuma cypress (*Taxodium mucronatum*), Department of Biology. (January 2018 - May 2018)

Master's Thesis Committee Member, Tiffany Cogan. Monitoring Wildlife Guards and Crossing Structures on a Divided Highway in South Texas, Department of Biology. (2015 - May 2018)

Undergraduate Supervised Research, Jennifer Lopez. Investigating seed germination of Montezuma cypress (*Taxodium mucronatum*), Department of Biology. (September 2017 - December 2017)

Undergraduate Supervised Research, Jared Parkin. Confirming allelopathic effects between selected woody native species and invasive grasses, Department of Biology. (January 2017 - May 2017)

Undergraduate Supervised Research, Sally Camacho and Shelby Bauer. Browsing effects of nilgai antelope on mangroves along the lower Laguna Madre, Department of Biology. (January 2017 - May 2017)

Master's Thesis Committee Member, Tatiana Dolgushina. Social Influences On Vocal Babbling In A Wild Parrot, Biological Sciences (UTB). (2015 - May 2017)

Master's Thesis Committee Chair, Leticia Contreras. Decomposition of black mangrove (*Avicennia germinans*) leaf litter: calibrating estuarine indicators of functional recovery, Biological Sciences (UTB). (September 2014 - May 2017)

Master's Thesis Committee Chair, Soraya Delgado. Assessment of long-term expansion of woody plants in humid, tropical grassland of Venezuela, Biological Sciences (UTB). (2014 - May 2017)

Master's Thesis Committee Chair, Buford Lessley. Development and validation of a multimetric resaca ecosystem health index, Biological Sciences (UTB). (September 2014 - December 2016)

Master's Thesis Committee Member, Shelby Bessette. Assessment of South Padre Island Dune Restoration, Biological Sciences (UTB). (September 2014 - December 2016)

Undergraduate Supervised Research, Adriana Rodriguez.). Assessing the effects of temperature and salinity on the decomposition of black mangrove (*Avicennia germinans*) leaf litter, Department of Biology. (January 2016 - May 2016)

Undergraduate Supervised Research, Angelica Tamayo. Camera trap study to confirm herbivory of exotic Nilgai antelope on black mangrove in lower Laguna Madre, Department of Biology. (January 2016 - May 2016)

Master's Thesis Committee Member, Monica Delgado. Nitrogen Dynamics and Decomposition of Seagrass (*Thalassia testudinum*) Blade and Rhizome Litter in a Shallow Water System , Biological Sciences (UTB). (2013 - May 2016)

Master's Thesis Committee Member, Jennifer Vela. Alternative restoration treatments to maximize growth and survival of Tamaulipan thornscrub species during seedling establishment, Biological Sciences (UTB). (2013 - 2015)

Master's Thesis Committee Member, Krysten Dick. Survival and growth of thornscrub seedlings in response to multiple restoration strategies, Biological Sciences (UTB). (2013 - 2015)

Master's Thesis Committee Member, Parker Watson. Resiliency of South Texas coastal prairies in response to shrub encroachment and shrub removal, Biological Sciences (UTB). (2013 - 2015)

Master's Thesis Committee Chair, Crystal Martinez. Barnacles as potential indicators of estuarine system recovery in South Texas, Biological Sciences (UTB). (2012 - 2015)

Master's Thesis Committee Member, Aaron White. The role of animal disturbances on arctic ecosystem structure and function in Northeastern Siberia, Biological Sciences (UTB). (2012 - 2015)

Master's Thesis Committee Member, Eric Verderber. Restoration strategies to minimize shrub encroachment into coastal prairies, Biological Sciences (UTB). (2012 - 2015)

Graduate Directed Individual/Independent Study, Abraham Jimenez. Identification of thornforest species dispersed by coyotes, Biological Sciences (UTB). (May 2015 - July 2015)

Graduate Directed Individual/Independent Study, Glen Cain. Determination of optimal ionic balance in a shrimp pond fed with ground water, Biological Sciences (UTB). (May 2015 - July 2015)

Graduate Directed Individual/Independent Study, Noah Valdes. Determination of trophic state in resacas, Behavioral Sciences (UTB). (May 2015 - July 2015)

Master's Comprehensive Exam Committee Member, Adriana Abete and Abraham Jimenez and Glen Cain and Griselda Lopez and Sofia Hernandez. Biological Sciences (UTB). (July 29, 2015)

Service Learning Project, Cinthya Fuentes-Tapia. UTB Herbarium specimen inventory, Biological Sciences (UTB). (January 2013 - May 2015)

Master's Comprehensive Exam Committee Member, Sofia Hernandez and Carla Martinez. Biological Sciences (UTB). (April 20, 2015)

Master's Thesis Committee Chair, Leah McIntosh. Resaca ecosystem development: colonization and succession of the macroinvertebrate community, Biological Sciences (UTB). (August 2012 - December 2014)

Master's Thesis Committee Member, Claudia Tamez. Characterizing the ecological status of southernmost Texas estuaries, Biological Sciences (UTB). (2011 - 2014)

Undergraduate Directed Individual/Independent Study, Paloma Rodriguez. Mass-size relationship for *Melanoides tuberculata*, a potential ecological indicator for resacas, Biological Sciences (UTB). (January 2014 - May 2014)

Undergraduate Supervised Research, Alma Martinez and Thanya Hernandez. Predator preferences and predation intensities on sabal palm seeds, Biological Sciences (UTB). (January 2014 - May 2014)

Master's Thesis Committee Chair, John Gray. Sedimentation and barnacle recruitment and growth in a shallow coastal lagoon of South Texas, Biological Sciences (UTB). (June 2012 - May 2014)

Master's Comprehensive Exam Committee Member, Adrian Correa and Ivan Mendez and Chris Lopez and Jessica Garza and Peter Torres and Zaira Arizmendi. Biological Sciences (UTB). (April 5, 2014)

Master's Thesis Committee Chair, Mario Marquez. Decomposition patterns and Nitrogen dynamics of black mangrove (*Avicennia germinans*) leaf litters in disturbed estuaries linked to Lower Laguna Madre, Biological Sciences (UTB). (2011 - 2013)

Master's Thesis Committee Member, Liana Lerma. The Effects of a Red Tide, *Karenia brevis* Episode on the Benthic Macroinvertebrate Communities of South Padre Island, TX, Biological Sciences (UTB). (2011 - 2013)

Master's Comprehensive Exam Committee Member, Chris Lopez and Jessica Garza and Maria Rodriguez and Phebe Fuentes. Biological Sciences (UTB). (November 6, 2013 - November 14, 2013)

Undergraduate Supervised Research, Cinthya Fuentes-Tapia. Bruchid beetle preferences on sabal palm seeds, Biological Sciences (UTB). (January 2013 - May 2013)

Master's Comprehensive Exam Committee Member, Carly Martinez and Erika Blanco and Ida Prado. Biological Sciences (UTB). (May 20, 2013)

Undergraduate Supervised Research, Samuel Camarillo. Viability of sabal palm seeds, Biological Sciences (UTB). (January 2012 - December 2012)

Master's Thesis Committee Chair, Luisiana Morales. Bioindicadores urbanos de metales pesados en material particulado del aire a partir de dos especies de geckonidos, (2007 - 2009)

Master's Thesis Committee Chair, Rolando Hernandez. Evaluación de la calidad de agua de uso recreativo en la playa Miramar, (2006 - 2008)

Service

Department Service

Faculty Mentor, Faculty Mentor (September 2022)

Committee Member, Indirect cost committee (2019)

Committee Member, Annual review committee (September 01, 2018)

Other, Peer observation of teaching (2013)

Committee Member, Scholarships committee (2011)

Committee Member, Search committee tenure track Biology-SEEMS (November 2022 - March 2023)

Participant, Environmental Sciences Internship Panel (February 10, 2023)

Other, UTRGV-Brownsville Herbarium (2011 - 2022)

Committee Member, Search committee 3-year Lecturer in SEEMS (May 2022 - July 2022)

Committee Member, Search committee ocean-coastal modeler (October 2021 - April 2022)

Committee Member, Tenure and Promotion committee (September 1, 2018 - 2021)

Committee Member, Marine focused PhD planning committee (2016 - 2021)

Committee Member, Search committee Marine Science Faculty (February 2020 - July 2020)

Committee Member, Faculty search committee Weed Ecologist (October 2017 - March 2018)

Committee Member, Search Committee for Research Associate (November 2017 - December 2017)

Committee Member, Faculty search committee Ecosystem Valuator (February 2017 - April 2017)

Committee Member, Faculty search committee Soil Ecologist (December 2016 - April 2017)

Other, Import of live fish research specimens from Mexico (August 2014 - November 2016)

Committee Member, planning new course "Soil Ecology and Conservation" (September 2016 - September 2016)

Committee Member, AESS MS program (April 2016 - July 2016)

Committee Member, Graduate Committee (2013 - 2015)

Committee Member, MS comprehensive exam committee (2013 - 2015)

Committee Member, Graduate curriculum committee (2012 - 2015)

Committee Member, Undergraduate curriculum committee (2011 - 2015)

Committee Member, Faculty search committee Coastal Plant Scientist (August 2015 - October 2015)

Committee Member, Faculty search committee, Lecturer (August 15, 2014 - August 19, 2014)

Other, UTB greenhouse (2011 - 2013)

Committee Member, Faculty search committee Avian ecologist (May 2013 - July 2013)

College Service

Committee Chair, Faculty Development Leave (February 4, 2021)

Committee Member, Faculty Development Leave (September 2016 - February 4, 2021)

Committee Member, Faculty Recognition Committee (May 2013 - 2015)

Other, LHSB building (2013 - 2015)

Committee Member, Emergency Response Team (2012 - 2015)

Other, Research seminar (October 1, 2015 - October 1, 2015)

University Service

Other, Establishment of cooperation between UTRGV and The Nature Conservancy (January 2021)

Faculty Advisor, Ecological Restoration Club (December 2020)

Committee Chair, Bee Campus USA - UTRGV (August 22, 2018)

Guest Speaker, Arbor Day 2022 (November 5, 2022)

Guest Speaker, Earth Fest 2022 (April 20, 2022)

Guest Speaker, Earth Fest 2021 (April 20, 2021)

Guest Speaker, (November 7, 2018 - November 7, 2018)

Faculty Advisor, Gorgas Science Society (September 2014 - August 2017)

Faculty Advisor, Engaged scholarship symposium abstract writing workshop (February 23, 2016 - February 23, 2016)

Faculty Advisor, UTB Ecological Restoration Club (August 2013 - August 2015)

Other, Establishment of international cooperation agreements (Mexico) (March 2014 - February 2015)

Development Activities Attended

- Workshop, "Multivariate Analysis in Ecology (& Other Sciences), using PRIMER version 7", Plymouth Marine Laboratory (February 7, 2022 - February 11, 2022)
- Self-Study Program, "Responsible conduct of research - principal investigator", University of Texas Rio Grande Valley (October 15, 2021)
- Self-Study Program, "Essentials of grant proposal development", University of Texas Rio Grande Valley (October 14, 2021)
- Webinar, "Structuring Your Remote/Online Summer Class to Make Learning STICK", University of Texas Rio Grande Valley (May 2020 - May 2020)
- Self-Study Program, "Search Committee Training II", University of Texas Rio Grande Valley (February 2020 - February 2020)
- Self-Study Program, "Wildlife Research and Lab Animal Research", University of Texas Rio Grande Valley (October 2019 - November 2019)
- Workshop, "Multilingual Pedagogy Professional Development", Center for Teaching Excellence, UTRGV (January 17, 2017 - April 25, 2017)
- Workshop, "The B3 Institute", B3 Institute, UTRGV (January 12, 2017)
- Workshop, "Camera-trap data management", USFWS (December 12, 2016)
- Workshop, "The natural, agricultural and structured environments of the lower Rio Grande Valley", SEEMS, UTRGV (May 5, 2016)
- Workshop, "Developing linkages between NOS and Environmental Cooperative Science Center Universities", National Center for Coastal Ocean Science (September 21, 2015 - September 22, 2015)
- Workshop, "Internal Funding Opportunities", Faculty Affairs and Diversity, UTRGV (September 17, 2015)
- Workshop, "Critical Thinking Assessment", UTB - Title V STEM (May 14, 2014)

- Workshop, "Service Learning", Center for Civic Engagement - UTB (April 16, 2013)
- Workshop, "MasteringBiology interactive learning tool", Pearson publisher (August 23, 2012)
- Workshop, "Team-based learning: 1) Designing Group Work that Really Works; 2) Getting Beyond Covering Content: A Key to Student Motivation and Success", Title V - UTB (August 20, 2012)
- Seminar, "Write Winning Grants", UTB research (August 19, 2010)
- Faculty Internship, "Estuarine Functional Diversity, Universite Montpellier II", Universidad Autonoma de Tamaulipas (June 5, 2007 - July 2, 2007)
- Workshop, "Gulf of Mexico Seagrasses and Oyster Reefs - Workshop II", Efroysom Fellowship Program - The Nature Conservancy (June 20, 2006 - June 22, 2006)
- Workshop, "Gulf of Mexico Seagrasses and Oyster Reefs - Workshop I", Efroysom Fellowship Program - The Nature Conservancy (December 6, 2005 - December 8, 2005)

Professional Service

- Reviewer, Journal Article, Revista Chapingo Ciencias Forestales y del Ambiente. (August 2022)
- Reviewer, Journal Article, Aquatic Botany. (March 2022)
- Reviewer, Journal Article, Interciencia. (May 2021)
- Reviewer, Journal Article, Texas Water Journal. (September 2020)
- Reviewer, Journal Article, Hydrobiologia. (2017)
- Reviewer, Journal Article, Nature Scientific Reports. (2017)
- Reviewer, Journal Article, Ecological Indicators. (2016)
- Other, Gulf Coast Cooperative Ecosystem Studies Unit. (October 2015)
- Member, Texas OneGulf Network of Experts. Texas (August 2015)
- Member, Sistema de Monitoreo de los Manglares de Mexico. (2010)
- Member, Comite Mexicano de Manglares. (2009)
- Board Member, Society for Ecological Restoration Texas Chapter. Texas (November 2015 - December 2021)
- Other, U.S. National Arboretum. Brownsville, TX (January 2021 - January 2021)
- Reviewer, Journal Article, African Journal of Ecology. (April 2020 - May 2020)
- Session Chair, Society for Ecological Restoration Texas Chapter. Galveston, Texas (November 9, 2019)
- Other, Society for Ecological Restoration Texas Chapter. Galveston, Texas (November 8, 2019 - November 9, 2019)
- Conference-Related, Society for Ecological Restoration Texas Chapter. Galveston, Texas (September 2019 - October 31, 2019)
- Other, Society for Ecological Restoration Texas Chapter. San Antonio, Texas (November 10, 2018)
- Session Chair, Society for Ecological Restoration Texas Chapter. San Antonio, Texas (November 10, 2018)
- Reviewer, Ad Hoc Reviewer, US Fish and Wildlife Service. Texas and Tamaulipas (January 19, 2018 - February 16, 2018)
- Reviewer, Ad Hoc Reviewer, US Fish and Wildlife Service. Texas (April 2017 - June 2017)
- Other, Society for Ecological Restoration Texas Chapter. Livingston, Texas (September 2016 - November 2016)
- Other, US Army Corps of Engineers. Brownsville, Texas (April 2016 - November 2016)
- Session Chair, Society for Ecological Restoration Texas Chapter. Livingston, Texas (November 12, 2016)
- Conference-Related, Texas Academy of Science. Galveston, Texas (March 7, 2014 - March 9, 2014)

Professional Memberships

- Texas OneGulf Network of Experts, (TONE) (November 2015)
- Sistema de Monitoreo de los Manglares de Mexico, (SMMM) (May 2014)
- Society for Biological Conservation, (SBC) (2006)
- Tamoanchan Conservacion,(July 2004)
- Association Quebecoise de Specialistes en Sciences du Sol, (AQSSS) (1997)
- Society for Ecological Restoration, (SER) (2015 - 2021)

Public Service

- Guest Speaker, Cameron County Master Gardeners. San Benito, Texas (April 13, 2023)
- Guest Speaker, Texas Master Naturalist, Rio Grande Valley Chapter. San Benito, Texas (February 20, 2019)

Other, South Texas Ecotourism Center . Laguna Vista, Texas (February 13, 2019)

Guest Speaker, Laguna Atascosa National Wildlife Refuge. Los Fresnos, Texas (December 03, 2018)

Other, RGV Regional Science Fair. Brownsville, Texas (2010 - 2017)

Guest Speaker, USFWS. Brownsville, Texas (March 4, 2016)

Other, Brownsville Early College High School. Brownsville, Texas (May 2015)

Other, Texas Parks and Wildlife Department. Brownsville, Texas (June 2013)

Guest Speaker, Texas Master Naturalist, Rio Grande Valley Chapter. Harlingen, Texas (March 27, 2013)

Other, Sabal Palm Sanctuary. Brownsville, Texas (August 2012 - January 2013)