CURRICULUM VITAE

PEDRO MAZIER CHAVARRIA

Commerce, TX 75428 Pedro.chavarria@tamuc.edu

Education

- Ph.D. Texas A&M University, College Station, TX; Wildlife and Fisheries Science. May 2013
- M.S. Texas A&M University, College Station, TX; Wildlife and Fisheries Science. August 2006
- B.A. Pomona College, Claremont, CA; Biology. May 1999

Research Interests:

community ecology, terrestrial vertebrates, GIS, natural resource management, threatened and endangered species, exotic and invasive species, stream ecology, fire ecology, environmental science, STEM education, HSI Outreach

Work Experience

Texas A&M University-Commerce

Date Employed: Sept. 2022-current

Commerce, TX

Assistant Professor (Wildlife)

Tenure-track position in the College of Agricultural Sciences and Natural Resources (CASNR). Teaching courses with focus on wildlife ecology and natural resources management. Responsibilities include committee participation, research, grant writing, student advising and mentoring.

Courses taught:

AG 316 / BSC 316Becoming a Wildlfie Professional (Online; Lecture)AG 397 International Wildlife ConservationAG 397 Big Game ManagementAG 397 Waterfowl ManagementAG 335 Wildlife Management I (Online; Lecture)AG 336 Wildlife Management II (Online; Lecture)AG 435 Wildlife Habitat Ecology and ManagementAG 440 Human Dimensions of Wildlife ManagementAG 497 Undergraduate Research Experience

Arizona State University-Polytechnic

Date Employed: July 2019 – May 2022

Mesa, AZ

Wildlife Ecology Lecturer

Lecturer and lab instructor for courses in the College of Integrated Sciences and Arts (CISA), including those in Biology and Applied Biological Sciences majors. Responsible for managing assigned courses and labs, student advising and mentoring, community outreach and recruitment, and collaboration on STEM grants. Service: Diversity, Equity, and Inclusion Committee, Awards Committee

Served as principal advisor to 2 Master's students (4+1 accelerated Applied Biological Sciences Masters program) for their Applied Projects, 1 Barret Honor's Thesis student, and mentor to (5+) Barrett Honors students

- 1. Matthew Karam: Evaluating Urban Avian Ecology And Hazards At Phoenix-Mesa Gateway Airport (completed Fall 2021)
- 2. Gabriella Mada: Monitoring Factors Leading to Successful Introduction of Burrowing Owls (Athene cunicularia) at ASU Polytechnic Campus (completion by Spring 2022)
- 3. Jennifer Kobs, Seasonal Variation in Burrowing Owl (Athene cunicularia) behavior and diets at ASU Polytechnic (completion by Fall 2022)

Courses taught:

BIO 182 Introduction to Biology II (Lecture)
BIO 182 Introduction to Biology II (Laboratory)
ABS 274 Introduction to Wildlife Management (Laboratory)
ABS 355 Vertebrate Adaptations
ABS 377 International Wildlife Conservation
ABS 470 Life History of Mammals
ABS 484 Internship
ABS 475 Habitat Management for Small Animals
ABS 490 Applied Biological Sciences Seminar
ABS 550 Vegetation Dynamics
ABS 592 Research
ABS 593 Applied Project

Heritage University

Date Employed: January 2018 – June 2019

Toppenish, WA

McNair Program Coordinator / Assistant Professor (Environmental Science / Biology)

Program Coordinator for Ronald E. McNair Post-Baccalaureate Achievement Program (U.S. Department of Education TRiO programs). Lecture and lab instructor for McNair Research Methods course and other assigned Environmental Science and Biology courses. Advising and mentoring, community outreach and recruitment, and collaboration on STEM grants. Manage NEEF grant in collaboration with USFWS.

Served as external committee advisor to 2 Master's students from Universidad de Sonora.

<u>Courses taught</u>: BIOL 410D Vertebrate Zoology (Lecture and Lab) ESNC 305L Ecology Laboratory BIOL 110L General Biology Laboratory ENSC 390 Special Topic: Wildlife Ecology and Techniques (lecture and lab) HON 303.0 GRE Preparation HON 303.1 Research Methods (Quantitative and Qualitative)

<u>Master's Thesis, (External Committee) Advisor (2016-2019):</u> Student: Oscar Enrique López Bujanda Degree: Maestria en Biocencias College: Universidad de Sonora, Departamento de Investigaciones Centificas y Technologicas Project: Dieta invernal de la codorniz mexicana Moctezuma (Cyrtonyx montezumae) en Arizona y Nuevo Mexico

STEM Activites managed or participating on-campus:

1. Program Coordinator for Ronald E. McNair Postbaccaulaureate TriO Program: Assist with finding summer research internship opportunities for 25+ students. Mentor the McNair scholars on their academic progress and planning for graduate school.

- 2. Grant writing: NSF Building Capacity CREST grant; NEEF HOL grant; Spark Bird grant
- Faculty mentor for NSF i-Nature Indigenous (i<u>N</u>tegration of <u>A</u>quatic sciences and <u>T</u>raditional-Ecological-Knowledge for <u>U</u>ndergraduate culturally <u>R</u>esponsive <u>E</u>ducation); Summer 2018 Faculty presenter for on-campus middle school and high school outreach events hosted by Heritage University's Admission Events Coordinator
- 4. People of the Big River Field Course: July 8-22 (2017, 2018) Field Course Instructor / Assistant: Assist Dr. Jessica Black with field lessons in GPS, Field Ecology, Wildlife / Mammology, Traditional Ecological Knowledge of Northwest tribes.
- 5. Indigenous Ecology Research in Panama: Assist Dr. Jessica Black with building capacity for ecological research with indigenous Ngobe-Bugle tribe in Panama (Central America); assist in Spanish translation and coordination of MOU with Universidad de Panama.
- 6. Costa Rica Indigenous Research Experience (LSAMP-CRIRE) Faculty mentor. Plan and guide native students from U.S. tribes with ecological research projects in Costa Rica.

New Mexico State University

Date Employed: May 2017 – January 2018

Las Cruces, NM

Adjunct Assistant Professor (Wildlife Ecology) USDA NRCT Faculty Mentor

Adjunct / Term Professor in the Department of Fish, Widlife, and Conservation Ecology. Lecture and lab instructor for 4 courses. Responsible for managing assigned courses and lab, student advising and mentoring, community outreach, and collaboration on STEM grants (USDA NRCT Program).

Courses taught:

FWCE 450 Special Topic: Natural Resource Management Field Techniques (lecture and lab) FWCE 430 Avian Field Ecology (lecture and lab) FWCE 393 Professional Experience and Communications FWCE 450 Special Topic: Backcountry Wilderness

Northern New Mexico College

Date Employed: August 2014 - May 2017

Espanola, NM

Assistant Professor (Environmental Science) USDA NRCT Faculty Mentor

Tenure-track position, Assistant Professor in Environmental Science, Department of Biology, Chemistry and Environmental Science. Lecture and lab instructor for over 12 courses in Environmethal Science and Biology. Responsible for managing courses offered, management of labs, purchasing of lab and research equipment, student advising and mentoring, applying for research grants, community outreach, ecological field research, curriculum design, recruitment and mentoring of adjunct faculty. Faculty mentor and grant manager for the USDA NRCT Program at NNMC in collaboration with New Mexico State University.

STEM Activites managed or participating on-campus:

- 1. Southwest Natural Resource Conservation Training Academy (SWNRCT): Faculty mentor for 4year USDA grant to improve recruitment and retention of students in natural resource fields in Hispanic-serving institutions (HSI's) (Spring 2016)
- 2. Espanola Valley Environmental Educators Training Academy (EVEETA): Faculty mentor for K-12 Teacher STEM Program, Spring-Summer 2015
- 3. NOYCE Teacher STEM Academy (Co-PI), Fall 2015-Spring 2016

- 4. STEM Scholars Mentor and Friday STEM Academy Mentor, Fall 2015
- STEM Academy (Los Alamos National Lab grant) advisor for STEM program geared towards diversity of women and minorities, 8th grade focus, Fall 2015-Spring 2016
- 6. College Assistance Migrant Program (CAMP) Mentor, Spring 2015-Fall 2016
- 7. New Mexico Alliance for Minority Participation (NM-AMP) Mentor: 3 students

STEM Activites managed or participating off-campus:

- 1. Tribal Youth Environmental Summer Camp, Taos Pueblo (June 14-19, 2015), guest instructor for wildlife ecology lesson (4th grade-pre-college)
- 2. Southwest Natural Resource Conservation Training Academy (SWNRCT): Faculty mentor

Courses taught:

- ES 112 Intro to Environmental Science (lecture and lab)
- ES 201 Chemical and Physical Processes (lecture and lab)
- ES 203 Intro to GIS, GPS, and Cartography (lecture and lab)
- ES 225 Principles of Agroecology
- ES 319 Principles of Wildlife Management (lecture/lab)
- ES 320 Environmental Ethics (Blackboard online course)
- ES 338 Environmental Laws and Policies (Blackboard online course)
- ES 380 Undergraduate Research Experience (field/lab)
- ES 415 Energy and Resource Development
- ES 420 Ecology and Hydrology of the Southwest (lecture and field trip)
- ES 480 Senior Capstone (Experimental Lab/Field Research Thesis)
- ES 499 Topics: Environmental Research Methods (lecture, field/lab)

BIOL 499 Stream Ecology and Field Methods (lecture, field/lab)

Research collaborations:

- 1. <u>Valles Caldera National Preserve</u>: water quality monitoring of stream chemistry, monitoring impact of thining and burning on soil chemistry
- 2. <u>Bureau of Land Management</u>: monitoring of stream macroinvertebrates in Rio Hondo, Pecos River (NM)
- 3. <u>New Mexico Wildlife Center</u>: monitoring stream macroinvertebrates at Lake Abiquiu
- 4. <u>Taos Pueblo Department of Natural Resources</u>: monitoring of Black bear population and vegetation

<u>Committess served</u>: Undergraduate Curriculum Committee Scholastic Honors Committee Academic Standards Committee College Learning Assessment Committee (Information Technology Competence and Research)

University of New Mexico—Los Alamos

Date Employed: Summer 2013

Los Alamos, NM

Biology Instructor

Adjunct professor for the Department of Science and Engineering.

Courses taught:

BIO 123: Biology for Health-Related Majors BIO 124L: Biology Laboratory for Health-Related Majors

Date Employed: Fall 2011, 2012, Spring 2013

Date Employed: Fall 2010-Spring 2011

Blinn College

Bryan, TX

Biology Instructor

Adjunct professor for the Department of Science and Engineering. Lecture and lab instructor. General Biology II material covered all basic concepts of biology from biological chemistry, genetics, cells, organisms, and ecology. (4 credit hours each, 3 sections); BIOL 1408 material covered all basic concepts of biology from biological chemistry, genetics, cells, organisms, and ecology. (4 credit hours each, 2 sections)

<u>Courses taught</u>: BIOL 1407: General Biology II BIOL 1408: Introductory Biology

Texas A&M University

College Station, TX

Laboratory Teaching Assistant (Ecology)

Department of Renewable Natural Resources, Texas A&M University, College Station, TX. Instructor for a 3 hour laboratory consisting of lectures on ecological theory followed by applied field techniques in both terrestrial and wetland systems. Topics covered included vegetation sampling, capture and marking of wildlife, and population estimation methods for flora and fauna in terrestrial, lentic, and lotic systems. Taught 2 sections per semester. (2 sections each semester)

<u>Courses taught</u>: RENR-215: Fundamentals of Ecology Laboratory

Sul Ross State University

Alpine, TX

Date Employed: Fall 2007

Co-Lecturer (Wildlife Resources)

Department of Natural Resource Management. Co-Instructor for 1 hour lecture that met 3 times per week. Topics covered the entire span of the text "Wildlife Ecology and Management", 4th edition, by E.G. Bolen and W.L. Robinson.

<u>Courses taught</u>: NRM-2302: Wildlife Resources

Texas A&M University College Station, TX Date Employed: Spring 2006, Fall 2006, Spring 2007

Laboratory Teaching Assistant (Wildlife Techniques)

Page 6 of 13

Department of Wildlife and Fisheries Science. Instuctor for laboratory consisting of wildlife techniques theory followed by applied field exercises. Topics covered included sampling techniques, capture and marking of wildlife, population estimation, home range analysis, and GIS. Taught 2 sections per semester.

Courses taught: WFSC-408: Wildlife Techniques Laboratory

Texas A&M University

Date Employed: December 2007-2010

College Station, TX

Principal Investigator / Graduate Doctoral Field Research: Montezuma quail

Design field research methods, procurement of field research materials. Apply for permits, submit grant proposals, submit reports to AZG&F and other funding agents. Trained and supervised 10 field research assistants. Conducted trapping, banding, and radio-telemetry monitoring of Montezuma quail. Organized database, conduct analysis of data, publish results in peer-reviewed journals. Presented research results at various professional meetings and conferences

Private Consulting

National Hispanic Environmental Council

Date Employed: Summers 2005-2015

CA. NM. NY

Lead Instructor: Ecological Field Instructor/Counselor

Minority Youth Environmental Training Institute (MYETI). Lead instructor for STEM "Institutes" sponsored by the U.S. Forest Service, National Park Service, NRCS, EPA, and other participating federal agencies. Serve as lead field and classroom instructor, role model and counselor for various environmental/ecological programs held at the Pacific Region Institute (Santa Monica National Recreation Area and Channel Islands National Park, California), Northeast Region Institute (Gateway National Park, Ellis Island National Monument, and Fire Island National Park, New York), and the Glorieta Institute (New Mexico). Taught students lessons in ecology, wildlife management, water quality sampling, lentic and lotic aquatic sampling, career experience in the National Park Service, and pursuing undergraduate and graduate education in science.

Atkins Consulting

Date Employed: August 2012–2013

Austin, TX

Senior Scientist I

Assisted in consultation process (NEPA), review of park legislature, and writing of the Feral Hog Management Plan for Big Thicket National Preserve. Advised park managers on which measures to take to reduce the impact of feral hog on the natural resources of the preserve.

Research Internships

Resource Assistant, Student Conservation Association Internship, Joshua Tree National Park, CA. • March 2000-June 2000.

Duties involved learning methods of distance sampling, radio tracking, data management, GPS PLGR operation, and monitoring of sensitive species.

• **Field Research and Lab Assistant**, Biology Department, Pomona College, Claremont, CA. Spring 1995-Spring 1998

Assisted Dr. William O. Wirtz II with ecological field research on the impacts of fire on the ecology of vertebrates in coastal sage scrub (CSS) communities. This included the preparation and maintenance of field tools, trapping, handling and identification of live-trapped mammals, aves, or herps in the field. Monitored habitat and reproductive success of the threatened California gnatcatcher (*Polioptila californica*).

Federal Work Experience

Big Thicket National Preserve

Date Employed: June 2004-August 2006

Beaumont, TX

Wildlife Biologist (SCEP) (GS-7)

SCEP graduate student. Full-time, intermittent, work schedule of 40+ hrs; 50% field work, 30% data management, 20% Supervisory

Duties:

- 1. Assist in reviewing, in cooperation with Texas A&M Unversity, management measures for controlling feral hog (*Sus scrofa*) populations in the twelve units of the preserve. Examine appropriateness of field methods for monitoring feral hog populations. Meet with park professionals to review enabling legislation for future feral hog control programs.
- 2. Condult astudy of feral hog impacts to natural resources in the preserve. Method employed consisted of surveying 5 of the 12 units in the preserve, walking strip-transects, taking GIS referenced data, recording damage into an Access database, and producing maps in ArcGIS.
- 3. Supervise biological technicians for the feral hog impact survey. Assist in supervising a crew of student biological technicians working on the Texas trailing phlox recovery and monitoring program. Provide guidance in report writing and map production.
- 4. Assist Gillian Bowser, Ph.D. (GCCESU Coordinator for NPS at Texas A&M University) Stewardship for NPS, regarding the need to develop a program for controlling feral animals.
- 5. Assist Curtis Hoagland, Chief of Resources, in setting of mist nests and bird banding for MAPS migratory bird studies. Conduct outreach presentations for volunteer opportunities at BTNP

Channel Islands National Park

Date Employed: October 2002-June 2004

Ventura, CA

Island Fox/Wildlife Biological Science Technician (GS-5)

Biological science technician. Full-time work schedule of 40+ hrs; 90% field work, 10% data management.

Duties:

- 1. Assist in implementing management measures for Island Foxes (*Urocyon littoralis*), with the responsibility for the care and handling of foxes held for the captive breeding program. I spend two tours (8 days per tour) a month on an island by myself overseeing the maintenance and improvement of the captive fox facilities, monitoring the health and behavior of the captive foxes, and managing reports, information and computer databases related to the welfare of the foxes.
- 2. Assist with the capture and handling of vertebrates (*Peromyscus maniculatus, Sceloporus occidentalis, Elgaria multicarinata, Batrachoseps pacificus*) following established protocols (mouse grids and herptile coverboard transects) for the Inventory and Monitoring program
- 3. Assist with landbird monitoring using informal surveys or point-count protocols.
- 4. Monitor wild foxes using radiotelemetry, remote cameras and live trapping; Conduct limited review of time-lapse video monitoring tapes of fox reproductive behavior. Using an ethogram, identify if foxes are exhibiting social behaviors and which behaviors may be indicative of successful or unsuccesful breeding.

- 5. Submit weekly trip reports to the Field Lead Tech, Wildlife Biologist, and Terrestrial biologist noting the status of island fox operations. Create Powerpoint presentation for Island Fox Husbandry Meeting at the Santa Barbara Zoo.
- 6. Tend to ranger duties by myself on San Miguel Island when the resident Ranger is not present. These duties include the maintenance of Ranger Station facilities, trasmitting weather reports and assessing transportation conditions for Dispatch, and tending to Visitor-use needs (campground and trail maintenance, visitor safety, and escorting visitors on interpretive hikes).

Joshua Tree National Park

Date Employed: June 2000-October 2002

Twentynine Palms, CA

Wildlife Biologist/ Biological Technician (GS-5/6)

Biological science technician and wildlife biologist. Full-time work schedule of 40+ hrs; 80% field work, 20% data management.

Duties:

- 1. Represented Joshua Tree National Park's Resources Management Division in the Desert Tortoise Council Symposium; presented poster: <u>On the Road to Recovery: Protecting the Desert Tortoise</u> <u>During a Federal Highways Project in Joshua Tree National Park</u>
- 2. Apply for Federal and State Scientific Collection Permits
- 3. Obtained scientific handling permit (biological monitor) for the threatened desert tortoise (*Gopherus agassizii*).
- 4. Perform Section 7 surveys for Desert Tortoises in Lower Covington Flats, an area proposed for an experimental Blackbrush burn
- 5. Submit reports and perform informal consulation with USFWS regarding Desert Tortoise issues
- 6. Monitor desert tortoises and their habitat in areas designated for road improvements.
- 7. ArcView and Trimble GPS used to generate maps and reports for the USFWS.
- 8. Perform informal surveys of other wildlife affected in the area proposed for an experimental Blackbrush burn. This included assessing rodent communities through live-trapping (sherman traps), assessing herptile and invertebrate communities through the use of pit-traps, and assessing bird communities through visual point-count census. Genus handled include *Onychomys, Peromyscus, Perognathus, Chaetodipus, Dipodymis, Sceloporus, Xantusia, Elgaria, Masticophis, Pituophis,* and invertebrates.

Biological Monitor/ Field Contact Representative (wildlife technician) (4/2001-8/5/2002)

- 9. Responsible for overseeing compliance with protective measures for the desert tortoise in regards to USFWS biological opinion on Federal Highways road construction Project #173.
- 10. Follow Section 7 USFWS protocols for monitoring Desert Tortoises and their habitat
- 11. Obtained scientific handling permits (biological monitor) for the threatened desert tortoise.
- 12. Use Trimble GPS dataloggers to collect GIS information
- 13. Manage GIS databases using Pathfinder Software and Arcview 3.2a
- 14. Served as crew leader for a desert tortoise mitigation survey of the proposed Federal Highways road construction Project #291. Duties include those under Section 7 of Fish and Wildlife protocol for monitoring of desert tortoise and its habitat. Used PLGR GPS, TrackPlan software, and ArcView to generate maps. Submitted desert tortoise survey report to NPS Denver Service Center for later inclusion in the greater biological assessment submitted to the USFWS.

Vegetation technician (10/2000 - 4/2001)

- 15. Participated in plant salvaging and restoration for Federal Highways construction Project #291.
- 16. Increased knowledge of desert flora and techniques for potting, boxing, and revegetation.
- 17. Assisted in building an irrigation system for the plants salvaged in the project. Learned how to operate tractor, forklift, small jackhammer, small chainsaw.

Biological Science Technician(6/2000 – 8/2000)

- 18. Promoted to GS-404-05 to continue research at Joshua Tree National Park on the Desert Tortoise Recovery Project. Methods included distance (transect) sampling via GPS PLGR navigation;
- 19. Helped set radio transmitters to track desert tortoises. Monitored the threatened *Gopherus agassizii* and created an ArcView map for presentation in ESRI booth.
- 20. Used *CalHome* software to produce MCP estimates of radio-tracked tortoise' home ranges.
- 21. Organized computer databases, assisted in entry.
- 22. Organized a tape backup system over a network.

Publications, Dissertations, Theses

- Karam, M., Chavarria, P., and F. Albuquerque. 2021. Increased risks to aviation from a sympatric columbid along an agricultural-urban interface: implications for local hazard mitigation. PeerJ (in review)
- Randel, C., Johnson, C., Chavarria, P., Lopez, R., Silvy, N., and J. Tomeček. 2019. Estimating Montezuma Quail Hatch Date using Primary Molt at Harvest. Willife Society Bulletin 43(4):766-768
- Chavarria, P. M., N. J. Silvy, R. R. Lopez, D. S. Davis, and A. Montoya. 2017. Seasonal range and movements of Montezuma quail in SE Arizona. Proceedings of the National Quail Symposium 8; July 24, 2017
- Chavarria, P. M., N. J. Silvy, R. R. Lopez, D. S. Davis, and A. Montoya. 2017. Survival demographics of Montezuma quail in southeast Arizona. Proceedings of the National Quail Symposium 8; July 24, 2017
- Chavarria, P. M. 2013. Ecology of Montezuma Quail in Southeast Arizona. Dissertation. Texas A&M University, College Station, TX, USA.
- Chavarria, P. M., A. R. Kocek, N. J. Silvy, and R. R. Lopez. 2012. Use of portable infrared cameras to facilitate detection and capture success of Montezuma quail. Proceedings of the National Quail Symposium 7:333–338.
- Chavarria, P. M., N. J. Silvy, R. R. Lopez, C. Hass, and L. Kennedy. 2012. Post-fire succession and Montezuma quail in a semidesert grassland of southeast Arizona. Proceedings of the National Quail Symposium 7:339–345
- Chavarria, P. M., A. Montoya, N. J. Silvy, and R. R. Lopez. 2012. Impact of inclement weather on overwinter mortality of Montezuma quail in southeast Arizona. Proceedings of the National Quail Symposium 7:346–351.
- Chavarria, P. M., R. R. Lopez, G. Bowser, and N. J. Silvy. 2007. A landscape-level survey of feral hog impacts to natural resources of the Big Thicket National Preserve. Human–Wildlife Conflicts 1(2):199–204.
- Chavarria, P. M. 2006. Assessing the impact of feral hog populations to the natural resources of Big Thicket National Preserve. M.S. Thesis. Texas A&M University, College Station, TX, USA.
- Chavarria, P. M., R. R. Lopez, G. Bowser, and N. J. Silvy. 2006. An assessment of white-tailed deer (*Odocoileus virginianus*) and feral hog (*Sus scrofa*) populations at Big Thicket National Preserve, Texas. Pages 67–70 *in* D. Harmon, editor. People, places, and parks: proceedings of the 2005 George Wright Society Conference on Parks, Protected Areas, and Cultural Sites: The George Wright Society. Hancock, Michigan, USA.
- Chavarria, P.M., R. R. Lopez, R. Rivera, T. Defex, M. Piña Jr., M.R. Gutierrez. 2007. La Vida Verde: Hispanic engagement in natural resource conservation and education. Pages 36–39 *in* D. Harmon, editor. Protected Areas in a Changing World: proceedings of the 2007 George Wright Society Conference on Parks, Protected Areas, and Cultural Sites: The George Wright Society. Hancock, Michigan, USA
- Chavarria, P. M. 1999. Competitive interactions of *Sceloporus orcutti* and *Sceloporus occidentalis* in coastal sage scrub community in southern California. B.A. Thesis. Pomona College, Claremont Colleges, Claremont, CA, USA.

Professional Service, Presentations, and Invited Talks

- Heritage University Gathering of Scholars Symposium, April 2019. Lead Organizer.
- M.J. Murdock College Science Research Program Conference, November 2018. Undergraduate poster competition judge.
- Heritage University Gathering of Scholars Symposium, April 2018. Lead Organizer.
- USDA PI Conference 2017. Poster Competition Lead Coordinator.
- Chavarria, P. M. 2017. The Impact of Stochastic Events on Montezuma Quail Ecology. New Mexico State University, Department of Fish, Widlife, and Conservation Ecology Seminar. November 8, 2017.
- Chavarria, P. M.. 2016. Engaging and Enhancing Opportunities for Hispanic and Native American Students in Natural Resource Management. Heritage University Seminar for The Center for Indigenous Health, Culture and Environment. September 30, 2016.
- Chavarria, P. M. 2015. Demystifying the Montezuma quail: Understanding its ecology in the midst of climate change. Northern New Mexico College Biology Seminar. September 4, 2015. *Invited talk*
- Chavarria, P. M.. 2010. Update on Montezuma quail research: Population Dynamics and Habitat Characteristics of Montezuma (Mearn's) Quail in Southeastern Arizona. Appleton-Whittell Research Ranch of the National Audubon Society, Elgin, AZ. March 13, 2010. *Invited talk*
- Chavarria, P. M. 2009. Population Dynamics and Habitat Characteristics of Montezuma (Mearn's) Quail in Southeastern Arizona. Appleton-Whittell Research Ranch of the National Audubon Society, Elgin, AZ. February 21, 2009. *Invited talk*
- Chavarria, P. M. 2009. Population Dynamics and Habitat Characteristics of Montezuma (Mearn's) Quail in Southeastern Arizona. Quail Unlimited, Sierra Vista Chapter, Sierra Vista, AZ. June 2, 2009. *Invited talk*
- Chavarria, P. M. 2007. Management considerations of invasive species in the National Pork (Park) Service: Case studies of feral hogs. University of Missouri-Columbia, MO. April 5, 2007. *Invited talk, guest lecturer*
- Chavarria, P.M., R. R. Lopez, R. Rivera, T. Defex, M. Piña Jr., M.R. Gutierrez. 2007. La Vida Verde: Hispanic engagement in natural resource conservation and education. The 2007 George Wright Society Conference on Parks, Protected Areas, and Cultural Sites: The George Wright Society. *Conference presentation*
- Chavarria, P.M. 2006. A landscape-level survey of feral hog impacts to natural resources of the Big Thicket National Preserve. Feral Hog Symposium, Mobile, Alabama. *Conference presentation*
- Chavarria, P.M. 2007. Feral hog (*Sus scrofa*) impacts to the vegetation communities of Big Thicket National Preserve, TX. 2007 Big Thicket Conference, Beaumont, TX. *Conference presentation*
- Chavarria, P.M. 2007. Feral hog (*Sus scrofa*) impacts to the vegetation communities of Big Thicket National Preserve, TX. 2007 Texas Chapter of The Wildlife Society Conference. Amarillo, TX. *Conference poster*
- Chavarria, P. M. 2005. An assessment of white-tailed deer (*Odocoileus virginianus*) and feral hog (*Sus scrofa*) populations at Big Thicket National Preserve, Texas. 2005 Texas Chapter of The Wildlife Society Conference, Beaumont, TX. *Conference poster*
- Chavarria, P.M. 2006. A passion for life: My life's journey in wildlife research with the National Park Service. Texas A&M University Zoological Society. March 1, 2006. *Invited talk*
- Chavarria, P.M. 2002. On the road to cooperation: Protecting the desert tortoise during a federal highway project in Joshua Tree National Park. 27th Desert Tortoise Council Symposium. March 22, 2002. *Conference poster*

Honors and Awards

- Ariel Appleton Research Fellowship, 2010. Montezuma quail research on the Appleton-Whittell Research Ranch of the National Audubon Society, Elgin, AZ.
- Audubon's Apacheria Fellowship, 2010. Montezuma quail research on the Appleton-Whittell Research Ranch of the National Audubon Society, Elgin, AZ.
- Texas A&M University Graduate Diversity Fellowship 2006-2010
- Alfred P. Sloan Foundation Graduate Diversity Fellowship 2007-2010
- Hispanic Leadership Program in Agriculture and Natural Resources (HLPANR), Graduate Student Fellowship (Texas A&M University), Fellow, 2004-present
- Gamma Sigma Delta, International Honor Society of Agriculture, Associate Member of Texas A&M University Chapter, 2005.
- Sigma Xi, Scientific Research Honor Society, Associate Member of the Claremont Colleges Chapter, 1996
- George Wright Society (GWS) Graduate Student Travel Scholarship (2005, 2007)
- Minorities in Agriculture and Natural Resources and Related Sciences (MANRRS), Cargill Animal Nutrition Graduate Scholarship
- MANRRS Participation Points Award, 3rd Place
- MANRRS National Conference 2005. Research Discussion Contest, Finalist.
- NSF Research Experience for Undergraduates (REU) Research Grant (fellowship), 1995-1997
- California Alliance for Minority Participation (CAMP) Research Grant (fellowship), 1997

Professional Grant Writing Activity

- USDA-National Institute of Food and Agriculture: North Texas Alliance for Urban Agricultural Education. Total Awarded: \$748,455.00 Project Start Date: 09/01/2023, Project End Date. Applied as Co-PI.
- NSF 19-540: Improving Undergraduate STEM Education: Hispanic- Serving Institutions (HSI Program): Building Capacity: Culturally Responsive Education in Science, Technology, Engineering, and Mathematics (CRESCENT); Requested: \$2,499,997; Submitted March 2019; <u>Accepted</u> (June 26, 2019); Applied as Co-PI
- National Environmental Education Federation: Hands-on-the-Land Grant: **Project Topp-Rangers** (**Toppenish Rangers**); Requested: \$5,000; Submitted February 2018; <u>Accepted</u> (April 2018)
- American Birding Association: Spark Bird Project grant; Award: \$2800 (binoculars); Submitted February 2018; <u>Accepted</u> (April 2018)
- NSF S-STEM (NSF 17-527): Engagement Achievement and Graduation for Lowincome Students (EAGLES): a partnership in STEM education; Heritage University, subrecipient Co-PI; <u>Accepted</u> July 2019.
- NSF 18-524: Improving Undergraduate STEM Education: Hispanic- Serving Institutions (HSI Program): **Building Capacity: CREST (Culturally Responsive Education in STEM)**; Requested: \$1,499,577; Submitted March 2018; Excellent reviews. Not awarded. Applied as PI.
- USDA NIFA Grant: Southwest Natural Resource Career Track Program (SWNRCT): Preparing Students For Success In Natural Resource Fields. PI: Martha Desmond, Ph.D (New Mexico State University); Subrecipient PI: Pedro Chavarria, Ph.D. (Northern New Mexico College). 4-year subaward amount requested: \$178,000; <u>Accepted</u> (September 2015)

• Arizona Bird Conservation Initiative Grant; PI; Requested: \$10,000. Population dynamics, habitat characteristics, and landscape genetics of Montezuma (Mearn's quail) in southeastern Arizona; October 2010

Specialized Training

- Wildlife Handling and Chemical Immobilization (Certified; Global Wildlife Resources)
- Hispanic Servicing Institutions (HSI) Faculty Institute on Data Driven Teaching and Learning (Escala Educational Services) July 31-August 4, 2016
- Project WILD (Wildlife Education), 2006
- Project Learning Tree (Environmental Education), 2015
- Introduction to Wilderness Management, NPS JOTR, 2000
- Inventory and Monitoring Natural Resources, NPS Channel Islands NP, 09/01
- Fire Resource Advisor, NPS/BLM, 05/02
- S-130 Basic Wildfire Firefighter Training, NPS/BLM, 05/02 Spring 2004

Professional Activities and Affiliations

- Noyce Academy STEM Faculty Mentor (Northern New Mexico College), Fall 2016-Spring 2017
- Environmental Educators Association of New Mexico (EEANM): Board Member (November 2015-October 2016), Member (Spring 2015-Fall 2016)
- Sigma Xi, Scientific Research Honor Society, Associate Member of the Claremont Colleges Chapter, 1996-current.
- Pathways Working Group (Natural Resource Careers with Federal Government), 2014-current
- Society for Advancement of Chicanos and Native Americans in Science (SACNAS) 2014-current
- Gamma Sigma Delta, International Honor Society of Agriculture, Associate Member of Texas A&M University Chapter, 2005.
- The Wildlife Society, National/Texas/Arizona Chapters, Member. 2005.
- Minorities in Agriculture and Natural Resources and Related Sciences (MANRRS), Member, Texas A&M Chapter (2004-2006). Have served as speaker and presenter at educational conferences and banquets.
- George Wright Society (GWS), Student Member, 2005-2007.
- Society for Conservation GIS (SCGIS) Member, 2000-2001

<u>Skills</u>

- **Computer Hardware:** Hardware installation and troubleshooting, server administration, intermediate knowledge (Novell or Microsoft network), Intermediate knowledge of networking, routing
- Computer Software: ArcView 3.2a, ArcGIS, and QGIS map production and spatial analysis; Home Range Analysis software; Microsoft Office: Word, Excel, Powerpoint, Access; Statistical Analysis: R, SPSS, Minitab, JMP; HTML language; Advanced internet user (FTP, TCP/IP); Graphics and Video editing: Paintshop Pro, Photoshop, Premiere; Software and OS installation, debugging, troubleshooting (WIN or DOS)
- Field Ecology
 - Wildlife Trapping and Monitoring: Use of primitive and specialized traps for capture of amphibians, reptiles, mammals, aves, insects. Examples included: drift fence grids with pit traps for herptiles, small mammals, insects; Sherman trap and Havahart trap grids for small mammals and mesomammals; mist-nest transects for birds; portable and stationary infra-red cameras for passive or active monitoring during day or nighttime; dip-nets, plankton tow-nets and seine nets for monitoring lentic, lotic, and marine fauna; ear-clipping, surgical bead-marking, leg-banding, and transmitter mounting for marking; radio-telemetry for active monitoring; distance sampling and mark-resight.
 - **Vegetation Sampling:** Use of varios techniques including point-quarter-quadrat method, line intercept, quadrat sampling, transects, distance-sampling, and use of GIS remote-sense imagery for determination of cover, abundance, and diversity.

• Environmental Sampling

- Water and Air Quality Sampling: Use of water quality kits to test for presence of nitrates, phosphates, turbidity, pH, salinity, temperature and other environmental components; Use of specialized weather station (NOAA) equipment for water testing such as thermograph, rain gauge and air quality sensors and filters; field use of portable Kestrel sensors, YSI multiparameter water quality portable meters; Hach environmental monitoring equipment (spectrometers, turbidity meters, etc.); LaMotte SMART Water Quality chemistry kit
- Soil Quality Sampling: GEMPLER'S® Professional Soil Quality Test Kit and the LaMotte STH Series Professional Soil Testing Outfit was used to conduct a thorough assessment of the soil respiration, infiltration, bulk density, salinity (EC), pH, soil nitrate, aggregate stability, compaction, soil structure, soil texture, water quality, nitrite nitrogen, ammonia, nitrogen, phosphorus, potassium, humus, magnesium, calcium, sulfate, aluminum, chlorides, ferric iron, manganese, and green plant tissue tests using techniques provided with the test kit.
- Languages: Spanish: proficient in writing, reading, speaking.