Alejandra Olivia Martinez

www.slomothesloth.com amartinez5@eaglepassisd.net

EDUCATION

Master of Education December 2012, Sul Ross State University, Eagle Pass, Texas
Bachelor of Science May 2005**,** Texas A&M University, College Station, Texas Major: Wildlife and Fisheries Sciences

WORK EXPERIENCE

August 2006 – Present **Eagle Pass Independent School District, Eagle Pass, Texas**
Teacher - 7th and 8th grade science which includes chemistry, physics, biology, Earth science, and astronomy

February - August 2023 **School of Rock, IODP Curriculum Writer**
Revised a JOIDES Resolution lesson on seafloor spreading and compiled lessons connected to the new Texas Standards to be implemented August 2024

July 2020 – October 2021 **Texas Education Agency TEKS Revision Work Group C & F**
Wrote and revised the new middle school Texas Essential Knowledge and Skills for K-8th grade.

December - January 2016 **JOIDES Resolution Education and Outreach Officer**
Facilitated webcasts between classrooms and a deep sea drilling vessel during Expedition 360, the first of 3 planned expeditions to drill to the mantle.

June 2014 – August 2014 **University of Texas Institute for Geophysics, Austin, Texas**
Compiled and revised Earth Science curriculum and organized units for the DIG TEXAS Blueprint Project.

PROFESSIONAL DEVELOPMENT

October 2023 **Ocean Exploration Trust Lead Science Communication Fellow**
Aboard the Exploration Vessel *Nautilus* I served as the Lead Educator at Sea on an expedition to collect photogrammetry footage around hydrothermal vents, a volcano, coral reefs and scuttled WWII subs

July 2022 **Onboard Educator PUFINS at Sea**
I produced YouTube videos and blogs while on a 14 day expedition in the North Atlantic where scientists recovered cores from the Holocene period to study sea-surface temperatures.

2020-2022 **National Geographic Grosvenor Teacher Fellow**
Fellows work to further students' understanding of the planet and empower them to generate solutions for a healthier and more sustainable future.

July 2019 **National Geographic Summer Institute**
I spent a week reviewing adult learning principles, learning about National Geographic's education values and became a facilitator for Educator Certification and the Geo-Inquiry Process

June 2019 **PolarTREC Educator**
I worked as a field assistant and outreach coordinator for a team of researchers on the North Slope of Alaska for 5 weeks studying phenology and vegetation in the warming Arctic Tundra.

August 2018 **Yellowstone STEAM Workshop**
As part of a cohort of 12 teachers, we learned about integrating science and art while exploring Yellowstone National Park.

June 2017 **DIG Field School**
I spent a week in the field with paleontologists learning fossil recovery methods and visiting large dig sites including the Tufts-Love T-Rex currently on display at the Burke Museum.

July 2016 **Honeywell Space Camp for Teachers**
I spent a week in Huntsville, Alabama learning how astronauts train and how I can incorporate space science into my curriculum while networking with teachers from around the world

July 2012 and 2014 **Texas A&M University G-Camp 1 & 2**
I learned the principles of geology while traveling through Texas, New Mexico and Colorado with professors Dr. John Vitek and Dr. Rick Giardino on a 17-day field course over two summers. We expanded our Earth science content knowledge, networked, and developed materials to teach geologic concepts to my students.

August 2013 **Ocean Exploration Trust Educator at Sea**
Aboard the Exploration Vessel *Nautilus* I fielded questions coming into The Nautilus website. and was featured in daily live video interactions with museum and aquarium audiences around the world.

PUBLICATIONS

December 13, 2023 American Geophysical Union Fall Meeting Poster Presentation

I am second author on a poster that will showcase the work I did in rewriting a lesson on seafloor spreading evidence based on nanofossils for School of Rock, a professional development aboard the JOIDES Resolution

Fall 2023 Science Scope, NSTA Press,

Inspiring the Next Generation: Teachers in the Field and Scientists in the Classroom. I cowrote an article about my experiences in professional development and outlined ways teachers can incorporate current science into their classrooms

December 17, 2016 American Geophysical Union Fall Meeting Poster Presentation

I was first author on a poster entitled "Outreach Aboard the JR During IODP Exp 360: Bringing Cutting Edge Research on Mid Ocean Ridge Processes to classroom Worldwide

December 19, 2015 American Geophysical Union Fall Meeting Poster Presentation

I was first author on a poster entitled "Authentic Learning Experiences for Educators Through Summer Internships: Revising the DIG Texas Instructional Blueprints" and I coauthored two other posters entitled "Evaluating Educational Resources for Inclusion in the DIG Texas Instructional Blueprints for Earth & Space Science" and "DIG Texas Instructional Blueprints."

PRESENTATIONS

November 22, 2019 Science Teachers Association of Texas Conference

I shared my experience as a PolarTREC Educator with 6^{th}-12^{th} grade teachers and spoke about resources available to teachers.

November 4, 2016 Science Teachers Association of Texas Conference

I shared my experience as Education and Outreach Officer aboard the JOIDES Resolution with fellow science educators and encouraged them to use website resources available to them and apply to sail.

April 5, 2013 Geological Society of America South Central Meeting Presentation

I conducted two presentations on the benefits of participating in Texas A&M University's G-Camp program. In the first titled "Miss Martinez Goes to G-Camp" I outlined how my students expressed their confidence in my content knowledge and their eagerness to examine rock samples I had collected. In the second presentation, titled "G-Camp: Practical Applications at Memorial Jr. High" I demonstrated lab activities I developed during the experience and established the benefits of networking amongst teachers and research scientists. I received the award for Outstanding Teacher Presentation.

OUTREACH

October 2023 Ocean Exploration Trust Lead Science Communication Fellow

Aboard the Exploration Vessel *Nautilus* I served as the Lead Science Communication Fellow on an expedition. I developed online content and ran Zoom and Google Meet interactions that reached over 6,000 students worldwide.

June 2022 Onboard Educator, Rutgers PUFINS

I sailed aboard the RV Atlantis during a sediment coring expedition and facilitated video webcasts with classrooms and Facebook Lives in coordination with the Rutgers Geology Museum and Rutgers University.

Summer 2019 PolarTREC Educator

I participated in an expedition to the North Slope of Alaska, Phenology and Vegetation in the Warming Arctic 2019. Along with assisting in the field, I updated the website with journal entries daily, created videos, lessons, and hosted a Polar Connect Event where people could tune in live and learn about our expedition.

December - January 2016 JOIDES Resolution Education and Outreach Officer

Facilitated webcasts between classrooms and a deep sea drilling vessel during Expedition 360, the first of 3 planned expeditions to drill to the mantle.

AWARDS, ACHIEVEMENTS and CERTIFICATIONS

Memorial Junior High Teacher of the Year, HEB Excellence in Education Award Finalist, Distinguished Award Winner of the Texas Medical Association Ernest and Sarah Butler Award for Excellence in Science Teaching , National Geographic Grosvenor Teacher Fellow , National Geographic Certified Educator, Teacher of the Month - Eagle Pass Independent School district, Education Foundation Grant Recipient, Eagle Pass ISD, Outstanding Teacher Presentation - Geological Society of America S. Central Meeting, Walmart Grant Recipient - For the implementation of a Flexible Classroom, NASA Grant Recipient, Education and Outreach portion of "Biosignatures in Earth's Deep Oceanic Crust: An Analog Environment for Habitable Ocean Worlds"