

Curriculum Vita

DR. CELINA A. SUAREZ

DEPARTMENT OF GEOSCIENCES, UNIVERSITY OF ARKANSAS • casuarez@uark.edu

POSITIONS

Associate Professor: 2018 – current: Associate Professor, Dept. of Geosciences, University of Arkansas

Assistant Professor: 2012 – 2018: Assistant Professor, Dept. of Geosciences, University of Arkansas

Post-doctoral Researcher/Visiting Researcher: 2011- 2013 NSF Postdoctoral Fellow, Boise State University

Project Title: Vertebrate Biapatite Fossilization: Multi-proxy Investigation of Biogenic Preservation and Diagenesis

EDUCATION

PhD Geology – May, 2010. University of Kansas, Lawrence, Kansas.

Dissertation Title: Geochemical Approaches to the Life and Death of Dinosaurs from the Early Cretaceous Cedar Mountain Formation, Utah

Advisor: L. González

MS Geology - August, 2005. Temple University, Philadelphia, Pennsylvania

Thesis Title: Rare Earth Element Geochemistry and Taphonomy of the Crystal Geysir Dinosaur Quarry, East-central, Utah

Advisor: D. Grandstaff

BS Geosciences - May, 2003 Trinity University, San Antonio, Texas

Undergraduate Thesis Research: Rare Element Geochemistry of the Cleveland Lloyd Dinosaur Quarry

RESEARCH INTERESTS

My research interests include paleoecology, paleoclimatology, and taphonomy of ancient terrestrial ecosystems. I am particularly interested in how major perturbations to the carbon cycle affected terrestrial ecosystems and evolution. The principle tools used include: 1) geochemistry of fossil from the rock record (vertebrates, invertebrates, and plants) as proxies to investigate paleoclimate and paleoecology 2) stable isotopes, trace element geochemistry, and Raman and Infrared spectroscopy to assess how the fossilization process chemically and physically alters fossil proxies and 3) detailed field stratigraphic methods such as stratigraphic section descriptions and measurements to place these records into a chronology.

TEACHING EXPERIENCE (2012 TO PRESENT)

Assistant Professor, University of Arkansas

- Introduction to Paleontology

- o *Class synopsis:* This course covers the evolution of life on earth; how climate and life have shaped each other throughout Earth's history; identification of major phyla and classes of invertebrates, vertebrates and plants and how they can be used to establish the age of rocks, reconstruct paleoenvironments, and support the theory of evolution; and how paleontology is used in the 21st century to answer

fundamental questions of societal importance such as how climate change may affect modern and future ecosystems

- Earth System History
 - o *Class synopsis:* This course covers the physical and biological events in the history of the earth from its formation to the beginning of the historical era. The course focuses on how the physical events in earth history helped to shape the evolution of life on earth and how life on earth effects the formation of the earth and its climate. The laboratory focuses on utilizing the rock record to reconstruct past environments, ecosystems, and major geologic events.

- Low-temperature Geochemistry of Natural Waters
 - o *Class synopsis:* This course covers the low-temperature geochemistry of waters and their associated minerals at Earth's surface. The main focus of the class provides students with an understanding of the controls on the chemical composition of natural waters and the minerals precipitated from them. Topics covered include water-rock interactions, pH, redox, the carbonate-water system, clay minerals and exchange, heavy metals, and a brief introduction to stable isotopes and geomicrobiology.

- Geology Field Camp
 - o *Class synopsis:* This six week course is designed to instruct undergraduate students in a variety of field techniques and introduces them to regional aspects of the geology of western Montana and environs. Students participating in the University of Arkansas field course are given an opportunity to learn field techniques within a regional framework characterized by diverse geological features. Field mapping of Paleozoic and Mesozoic sedimentary rocks in two areas within the Wyoming-Montana fold belt near Dillon allow insight into structural and historical aspects of the Laramide/Sevier orogenic belt. Hydrology sampling and interpretation using standard equipment will also be taught.

LABORATORY EXPERIENCE

- Experience analyzing samples and/or basic trouble shooting of
 - o Thermo Nicolet Nexus 670 FTIR + Thermo Spectro-Tech Continuum IR Microscope
 - o ThermoFinnigan Delta Plus IRMS
 - o ThermoFinnigan Delta Plus XP IRMS
 - o ThermoFinnigan MAT 253 IRMS
 - o Costech Elemental Analyzer
 - o Thermo Scientific High Temperature Conversion Elemental Analyzer (TC/EA)
 - o KIEL Carbonate Device
 - o Gas Bench II
 - o Thermo X Series 2 quadropole ICP-MS
 - o PlasmaQuadII+XS ICP-MS
 - o Thin section construction (impregnation, slabbing, cutting, polishing)

FIELD EXPERIENCE

- Geologic mapping using Brunton compass and topographic map
- Vertebrate fossil excavation
- Stratigraphic section construction using Jacob's Staff
- Chemostratigraphy sampling
- Paleomagnetism sampling
- Trackway mapping, cleaning
- Basic photogrammetry of trackways

PUBLICATIONS

Peer Reviewed Articles (first author):

- Suarez, C.A.** Morschhauser, E.M., Suarez, M.B., You, H-L, Li, D-Q, and Dodson, P. (*accepted, in press*) Rare earth element geochemistry of bone beds from the Early Cretaceous Zhonggou Formation of Gansu Province, China: *Journal of Vertebrate Paleontology*.
- Suarez, C.A.**, Knobbe, T., Crowley, J.L., Kirkland, J.I., and Milner, A.R.C (2017) A chronostratigraphic assessment of the Moenave Formation, USA using C-isotope chemostratigraphy, and detrital zircon geochronology: implications for the terrestrial end Triassic extinction: *Earth and Planetary Science Letters*, v. 475, p. 83-93.
- Suarez, C.A.**, You, H-L, Suarez, M.B., Li, D-Q, and Trieschmann, J.B. (2017) Stable isotopes reveal rapid enamel elongation (amelogenesis) rates for the Early Cretaceous iguanodontian dinosaur *Lanzhousaurus magnidens*: *Scientific Reports*, 7:15319.
- Suarez, C.A.**, Flaig, P.P., Ludvigson, G.A., González, L.A., Tian, R., Zhou, H., McCarthy, P.J., Van der Kolk, D.A. and Fiorillo, A.R. (2016) Reconstructing the paleohydrology of a cretaceous Alaskan paleopolar coastal plain from stable isotopes of bivalves: *Palaeogeography, Palaeoclimatology, Palaeoecology*, v. 441, p. 339-351.
- Suarez, C.A.**, Gonzalez, L.A., Ludvigson, G.A., Kirkland, J.I., Cifelli, R.L. and Kohn M.J. (2014) Multi-taxa isotopic investigation of paleohydrology in the Lower Cretaceous Cedar Mountain Formation, Eastern Utah: deciphering effects of the Nevadaplano Plateau on regional climate: *Journal of Sedimentary Research*. v. 84, p. 975-987.
- Suarez, C.A.**, Ludvigson, G.A., Gonzalez, L.A., Fiorillo, A.R., Flaig, P.P. and McCarthy, P.J. (2013) Use of multiple oxygen isotope proxies for elucidating Arctic Cretaceous Palaeohydrology: *in Isotopic Studies in Cretaceous Research*, Bojar, A.-V., Melomte-Dobrinescu, M.C. & Smit, J. (eds), *Geological Society of London, Special Publications*, v. 382, p. 185-202.
- Suarez, C.A.**, González, L.A., Ludvigson, G.A., Cifelli, R.L. and Tremain, E. (2012) Water utilization of the Cretaceous Mussentuchit local fauna, Cedar Mountain Formation, UT, USA: documentation of terrestrial water reservoirs: *Palaeogeography, Palaeoclimatology, Palaeoecology*, v. 313, p. 78-92.
- Suarez, C.A.**, Macpherson, G.L., González, L.A., and Grandstaff, D.E. (2010) Heterogeneous rare earth element (REE) patterns and concentrations in a fossil bone as determined by LAM-ICP-MS analysis: implications for the use of REE in vertebrate taphonomy and fossilization history: *Geochimica et Cosmochimica Acta*. v. 74, p. 2970-2988.
- Suarez, C.A.**, Suarez, M., Terry, D.O. Jr., and Grandstaff, D.E. (2007) Rare earth element geochemistry and taphonomy of the Early Cretaceous Crystal Geyser Dinosaur Quarry, east-central Utah: *PALAIOS*, v. 22, no. 5, p. 500-512.

Peer Reviewed Articles (co-author):

- Foster, J.R., Hunt-Foster, R.K., Gorman, M.A., Trujillo, K.C., **Suarez, C.A.**, McHugh, J.B., Peterson, J.E., Warnock, J.P., and Schoenstein, H.E. (2018) Paleontology, taphonomy, sedimentology of the Mygatt-Moore Quarry, a large dinosaur bonebed in the Morrison Formation, Western Colorado – implications for Upper Jurassic dinosaur preservation modes: *Geology of the Intermountain West*, v. 5, 23-93.
- Antonietto, L.S., Park Boush, L.E., **Suarez, C.A.**, Milner, A.R.C, and Kirkland, J.I. (2018). The “Last Dawn of the Reigning Darwinulids”? A review of the Ostracoda (Arthropoda: Crustacea) from the Whitmore Point Member, Moenave Formation, Lower Jurassic (Hettangian), Arizona and Utah states, USA: *Journal of Paleontology*. doi: 10.1017/jpa.2017.150.
- Platt, B.F., **Suarez, C.A.**, Boss, S.K., Williamson, M., Cothren, J., Kvamme, J.A.C. (2018) LIDAR-based characterization and conservation of the first theropod dinosaur trackways from Arkansas, USA. *PLOS ONE*, v. 13, e0190527.
- Yamamura, D. and Suarez, C.A. (*in review*) Isotopic evidence for sudden paleohydrologic change in the Campanian (Upper Cretaceous) Kaiparowits Formation, south-central Utah: *Journal of Sedimentary Research*.
- Yamamura, D. and Suarez, C.A. (*in review*) Diagenesis of vertebrate skeletal remains of the Cretaceous Kaiparowits Formation and their use as paleohydrologic proxies: a complex hydrologic setting: *Palaeogeography, Palaeoclimatology, Palaeoecology*
- Kirkland, J.I., Suarez, M.B., **Suarez, C.A.**, Hunt-Foster, R. (2017). The Lower Cretaceous in East-Central Utah—The Cedar Mountain Formation and its Bounding Strata: *Geology of the Intermountain West* v. 3, p. 101–228.
- Suarez, M.B., **Suarez, C.A.**, Al-Suwaidi, A.H., Hatzell, G., Kirkland, J.I., Salazar-Verdin, J., Ludvigson, G.A., and Joeckel, R.M. (2017) Terrestrial carbon isotope chemostratigraphy in the Yellow Cat Member of the Cedar Mountain Formation: Complications and pitfalls: in *Terrestrial Depositional Systems: Deciphering Complexities through Multiple Stratigraphic Methods*, Zeigler, K.E and Parker, W.G. (eds), Elsevier Publications, p. 303-335.
- Harrell, T. L., Pérez-Huerta, A., and **Suarez, C. A.** (2016) Endothermic mosasaurs? Possible thermoregulation of Late Cretaceous mosasaurs (Reptilia, Squamata) indicated by stable oxygen isotopes in fossil bioapatite in comparison with coeval marine fish and pelagic seabirds: *Palaeontology*, v. 59, no. 3, p. 351-363.
- Ludvigson, G.A., Joeckel, R.M., Murphy, L.R., Stockli, D.F., González, L.A., **Suarez, C.A.**, Kirkland, J.I. and Al-Suwaidi, A. (2015) The emerging terrestrial record of Aptian-Albian global change: *Cretaceous Research*, v. 56, p. 1-24.
- Suarez, M., **Suarez, C.**, Kirkland, D.E., Grandstaff, D.E., González, L.A., and Terry Jr., D.O. (2007) Sedimentology, stratigraphy, and depositional environment of the Crystal Geyser Dinosaur Quarry, East-Central, Utah: *PALAIOS*, v. 22, no. 5, p. 513-527.

General Interest Articles:

- Suarez, C.** and Suarez, M. (2002) A summer of fossils: *Geotimes*; v. 27, no. 5, p. 14-15.

Abstracts of Presentations (first author):

- Suarez, C.A.**, The vertebrate fauna from the Lower Cretaceous Holly Creek Formation. The first multi-taxa vertebrate assemblage from the Mesozoic of Arkansas, USA: Geological Society of America *Abstracts with Programs*, v. 49, no. 6, 303-5.
- Suarez, C.A.**, Knobbe, T. Milner, A.R.C., Kirkland, J.I., and Crowley, J. (2016) Identifying the end Triassic extinction in the Moenave Formation, Utah using C-isotope chemostratigraphy,

- detrital zircon geochronology, and biostratigraphy: Society of Vertebrate Paleontology 75th Annual Meeting – *Meeting Program and Abstracts*, p. 234.
- Suarez, C.A.**, Trieschmann, B., You, H., Da-Quing, L., and Suarez, M.B. (2015) Isotopic composition of Early Cretaceous Hekou Group vertebrates from Lanzhou Province, China supports cool climates in the mid-Late Valanginian: Society of Vertebrate Paleontology 75th Annual Meeting – *Meeting Program and Abstracts*, p. 202.
- Suarez, C.A.**, Trieschmann, J.B., Suarez, M., You, H., and Li, D-Q. (2014) Mean annual precipitation and isotopic composition interpreted from vertebrate bioapatite and bulk organic carbon for the Early Cretaceous Hekou Group, Gansu Province, China: Geological Society of America *Abstracts with Programs*, v. 46, no. 6, p. 617.
- Suarez, C.A.** and Kohn, M.J. (2013) Investigation of chemical and physical changes to bioapatite during fossilization using trace element geochemistry, infrared spectroscopy, and stable isotopes: Annual Meeting of the American Geophysical Union, San Francisco, CA, December 9-13
- Suarez, C.A.**, Boss, S., Platt, B., Shell, R., Williamson, M. (2013) Preservation of large theropod and sauropod trackways from the Lower Cretaceous DeQueen Formation, Arkansas using LIDAR: Creating a virtual trackway lab for use in teaching introductory and upper division laboratories: *Journal of Vertebrate Paleontology – Meeting Program and Abstracts*, 73rd Annual Meeting, Los Angeles, CA.
- Suarez, C.A.** Trieschmann, B., You, H., and Da-Qing, L. (2013) The Paleoecosystem of the early Cretaceous Lanzhou-Minhe Basin, NW China revealed from tooth isotopic composition of *Lanzhousaurus magnidens*: Geological Society of America *Abstracts with Programs*, v. 45, no. 7, p. 526.
- Suarez, C.A.** and Kohn, M.J. (2012) Assessing trace element diffusion models in fossil and sub-fossil bone: Annual Meeting of the American Geophysical Union, San Francisco, CA, Dec. 3-7, 2012.
- Suarez, C.A.**, Ludvigson, G.A., Gonzalez, L.A., Fiorillo, A.R., McCarthy, P.J., Lollar, C.J. and Flaig, P.P. (2011) Investigations of Late Cretaceous Arctic paleohydrology by integration of terrestrial stable isotope proxies: Geological Society of America *Abstracts with Programs*, v. 43, no. 5, p. 163.
- Suarez, C.A.**; Ludvigson, G.A., Gonzalez, L.A., Lollar, C., and Fiorillo, A.R. (2010) Constraining Late Cretaceous Terrestrial High-Latitude Water Using Oxygen Isotopic Compositions of Pedogenic Siderite and Dinosaur Tooth Enamel: A Multi-proxy Approach: Annual Meeting of the American Geophysical Union, December 13-17, San Francisco, CA.
- Suarez, C.A.**, Gonzalez, L.A., Ludvigson, G.A., Kirkland, J.I., and Cifelli, R. (2010) Oxygen isotopic composition of vertebrate phosphate from the Cedar Mountain Formation, UT: A tool for deciphering both global and small-scale climate change and ecological partitioning: *Journal of Vertebrate Paleontology*, v. 30 suppl. to 4, p.172A.
- Suarez, C.A.**, Gonzalez, L.A., Ludvigson, G.A., Kirkland, J.I., and Cifelli, R. (2010) Oxygen isotopic composition of vertebrate phosphate from the Cedar Mountain Formation, UT: Deciphering global, small-scale climate change and water utilization: Society for the Advancement of Chicanos and Native Americans in Science National conferences, *Abstracts*, v. 7, p. 358.
- Suarez, C.A.**, Macpherson, G. L., and Grandstaff, D. E. (2009) Rare earth element geochemistry of fossil bone: using geochemical patterns to trace illegally excavated fossil: in Foss, S., Cavin, J., Brown, T., Kirkland, J., and Stantucci, V. (Eds.), *Proceedings of the 8th Conference on Fossil Resources*, May 19-21, St. George, UT. p. 4-6.

- Suarez, C.A.** and Gonzalez, L.A. (2008) Dinosaurs and mountains: Use of fossil bone and teeth to determine paleoclimatic effects of mountain building: Society for the Advancement of Chicanos and Native Americans in Science National Conferences *Abstracts*, v. 5 p. 29.
- Suarez, C. A.**, Macpherson, G.L., Wolfe, M., González, L. A., and Grandstaff, D. E. (2007) LAM-ICP-MS analysis of fossil bone: some unexpected results and implications for interpretation of rare earth elements in fossil bone: *Journal of Vertebrate Paleontology*, v. 27, supplement to no. 3, p. 154A.
- Suarez, C. A.**, Macpherson, G.L., González, L. A., and Grandstaff, D. E. (2007) Geochemical and petrographic analysis of fossil bone: unexpected results and implications for fossilization: Society for the Advancement of Chicanos and Native Americans in Science National Conferences *Abstracts*, v. 4 p. 161.
- Suarez, C. A.**, Macpherson, G.L., Grandstaff, D. E., and González, L. A. (2007) Taphonomic puzzles: using rare earth element geochemistry to unravel complex taphonomy of vertebrate fossil sites in the Yellow Cat Member of the Cedar Mountain Formation: Annual Meeting of the Rocky-Mountain Section of the Geological Society of America, May 7-9, St. George, UT: Geological Society of America *Abstracts with Programs*, v. 39, no. 5, p. 33.
- Suarez, C. A.**, Macpherson, G. L., Grandstaff, D. E., and González, L. A. (2007) Rare earth elements (REE) in dinosaur bone sites record local fractionation of REE in paleo-pore water: a glimpse of the various local depositional environments in the late Early Cretaceous Cedar Mountain Formation, Utah: Annual Meeting of the North-Central and South-Central Section of the Geological Society of America, April 11-13, Lawrence, KS: Geological Society of America *Abstracts with Programs*, v. 39, no. 3, p. 75.
- Suarez, C.A.**, Macpherson, G.L., Gonzalez, L.A., Kirkland, J.I., and Grandstaff, D.E. (2006) Preliminary geochemical taphonomy of bone bed sites in the Yellow Cat Member of the Cedar Mountain Formation, Utah: Annual Meeting of the Geological Society of America, Philadelphia, PA, October 22-25, in Geological Society of America *Abstracts with Programs*, v. 38, no. 7, p. 395.
- Suarez, C. A.**, Suarez, M., Terry, D.O. Jr., and Grandstaff, D.E. (2005) A combined rare earth element and sedimentologic approach to taphonomic interpretation of the early Cretaceous Crystal Geyser Dinosaur Quarry: American Association of Petroleum Geologists/Society for Sedimentary Geology, 2005 Annual Convention, Calgary, Alberta, Canada, *Extended Abstracts Volumes*, v. 14.
- Suarez, C.A.** (2005) Evidence for a very complex taphonomic history of the Early Cretaceous Crystal Geyser Dinosaur Quarry, east-central, Utah: *Journal of Vertebrate Paleontology*, v. 25 suppl. to 3, p.119A.
- Suarez, C.A.** and Suarez, M. (2004) Use of Facies, Taphonomy, and Rare Earth Element Geochemistry Analyses at the Cleveland Lloyd Dinosaur Quarry: Tools for bone bed interpretations: *Journal of Vertebrate Paleontology*, v. 24 suppl. to 3, p. 119A.

Abstracts of Presentations (co-author)

- Ludvigson, G.A., Gonzalez, L.A., **Suarez, C.A.**, Ross, J.B., and Platt, B.F. (2014) New additions to the North American mid-Cretaceous paleoprecipitation $\delta^{18}\text{O}$ dataset: integration of pedogenic and vertebrate fossil proxies: Geological Society of America *Abstracts with Programs*, v. 46, no. 6, p. 617.

- Platt, B.F., Shell, R., **Suarez, C.A.**, Boss, S., and Williamson, M. (2013) The first theropod trackways from the lower Cretaceous De Queen Formation, Southwest Arkansas: *Journal of Vertebrate Paleontology: Programs with Abstracts*, 73rd Annual Meeting, Los Angeles, CA, p. 192.
- Suarez, M. B., Salazar-Verdin, J., Suarez, C.A., Al Suwaidi, A. H., and Kirkland, J. I. (2014) Organic carbon isotope chemostratigraphy of two location in the Early Cretaceous Yellow Cat Member of the Cedar Mountain Formation near Moab, Utah: Mid-Mesozoic Meeting: *The Age of Dinosaurs in Transitions Meeting*, Fruita, CA and Green River, UT, *Proceedings*, p. 76-77.
- Montgomery, E. H., Suarez, M. B., Al Suwaidi, A. H., Kirkland, J. I., and Suarez, C.A. (2014) Exploring the stable isotope record of Lake Carpenter: A Lacustrine sequence in the Aptian-Albian Cretaceous Cedar Mountain Formation, Utah, USA: American Geophysical Union Annual Meeting, San Francisco, CA, Dec. 15-19.
- Montgomery, E. H., Suarez, M. B., Gray, W. M., Kirkland, J. I., Suarez, C.A., and Al Suwaidi, A. H. (2014) Carbon isotope chemostratigraphy from the Ruby Ranch Member, Cedar Mountain Formation near Moab, Utah: Mid-Mesozoic Meeting: *The Age of Dinosaurs in Transitions*, Fruita, CA and Green River, UT, *Proceedings*, p. 72.
- Suarez, M. B., Milder, T., Suarez, C.A., You, H., Dodson, P., and Li, D. (2014) Stable carbon isotope chemostratigraphy from Cretaceous strata of the Yujingzi Basin, Gansu Province, China, Mid-Mesozoic Meeting: *The Age of Dinosaurs in Transitions*, Fruita, CA and Green River, UT, *Proceedings*, p. 76.

Abstracts of Presentations (*graduate student first-author, **undergraduate student):

- Cesar Bissaro Jr., M.*, Hsiou, A.S, Ghilardi, R.P., Souza Filho, J.P., Guilherme, E., Maciente, A.A., Pollock, E.D., and Suarez, C.A. (2017) Stable isotope, rare earth elements, and petrographic analyses of vertebrate fossils from Solimoes Formation (Upper Miocene, Acre Basin, Brazil): expected insights on paleoecology, paleoenvironment and taphonomy: South-Central GSA Sectional Meeting, San Antonio, TX, Geological Society of America *Abstracts with Programs*, v. 49, No. 1, Paper No. 6-7.
- Ryan, A.A.** and Suarez, C.A. (2017) Determining the chemostratigraphic record of the Cedar Mountain Formation using $\delta^{13}\text{C}_{\text{org}}$ isotopes: South-Central GSA Sectional Meeting, San Antonio, TX, Geological Society of America *Abstracts with Programs*, v. 49, No. 1, Paper No. 8-16.
- Manlove, H.** and Suarez, C.A. (2017) Rare earth element geochemistry of vertebrate fossils from the Cretaceous Moreno Formation, California: South-Central GSA Section Meeting, San Antonio, TX, Geological Society of America *Abstracts with Programs*, v. 49, No. 1, Paper No. 8-50.
- Manlove, H.** Yamamura, D., and Suarez, C.A. (2017) Investigating the diagenesis of turtle shell fragment using stable isotope, Kaiparowits Formation, southern Utah: *Journal of Vertebrate Paleontology: Programs with Abstracts*, 76th Annual Meeting, Salt Lake City, UT, p. 183.
- Morgan, K.,* Kirkland, J.I., Suarez, C.A., and Pittman, J. (2016) First occurrence of an Arkansas ankylosaur: *Journal of Vertebrate Paleontology: Program with Abstracts*, 76th Annual Meeting, Salt Lake City, UT, p. 191
- Yamamura, D.* and Suarez, C.A. (2016) Paleoclimate investigation of the Kaiparowits Formation, South-central Utah using stable isotope proxies: Geological Society of America *Abstracts with Programs*, v.. 48, No. 7. doi: 10.1130/abs/2016AM-283326.

- Yamamura, D.* and **Suarez, C.A.** (2016) Investigating vertebrate paleoecology of the Kaiparowits Formation via stable isotopic composition of skeletal remains: Society of Vertebrate Paleontology 75th Annual Meeting – *Meeting Program and Abstracts*, p. 256.
- Knobbe, T.* and **Suarez, C.A.** (2014) Impacts of the Central Atlantic Magmatic Province on the terrestrial carbon cycle in Western Pangea: Geological Society of America *Abstracts with Programs*, v. 46, no. 6, p. 300.
- Trieschmann, J.B.*, **Suarez, C.A.**, Suarez, M.B., You, H.L, Li, D.Q. (2014) Stable isotopic analysis of vertebrate fossils from the Early Cretaceous Hekou Group, Gansu Province China: Mid-Mesozoic Meeting, *The Age of Dinosaurs in Transitions*, Fruita, CA and Green River, UT, *Proceedings*, p.78.
- Hatzell, G.A.*, **Suarez, C.A.**, Suarez, M.B., Al-Suwaidi, A., Kirkland, J.I. (2014) Organic carbon-isotope chemostratigraphy of the Lower Cretaceous Cedar Mountain Formation, Utah, Mid-Mesozoic Meeting: *The Age of Dinosaurs in Transitions*, Fruita, CA and Green River, UT, *Proceedings*, p. 56
- Knobbe, T.* and **Suarez, C.A.** (2014) Organic carbon-isotope chemostratigraphy from the Whitmore Point Member of the Moenave Formation as an indicator of terrestrial impacts of the Central Atlantic Magmatic Province at the Triassic-Jurassic boundary: South-Central Sectional GSA Meeting, Fayetteville, AR, Geological Society of America *Abstracts with Programs*, v. 46, no. 1, p. 2.
- Hatzell, G.A.*, **Suarez, C.A.**, Suarez, M.B., Al-Suwaidi, A. (2014) Organic carbon-isotope chemostratigraphy of the Lower Cretaceous Cedar Mountain Formation, Utah: South-Central Sectional GSA Meeting, Fayetteville, AR, Geological Society of America *Abstracts with Programs*, v. 46, no. 1, p2.

HONORS/AWARDS

- Robert C. and Sandra Connor Faculty Fellowship, 2016-2017
- 2012-2013 Professor of the Year – Dept. of Geosciences, University of Arkansas
 - Northside Independent School District, San Antonio, TX 2011 Pillar of Character: Respect
 - Outstanding Graduate Student Presentation: Society for the Advancement of Chicanos and Native Americans in Science 2008 National Conference, October 9-12, 2008 Salt Lake City, UT
 - Outstanding Student Poster: Society for the Advancement of Chicanos and Native Americans in Science 2007 National Conference, October, 11-14, 2007, Kansas City, MO
 - Outstanding Student Paper: Annual Meeting of the South-Central-North-Central Section Geological Society of America, April 11-13, 2007, Lawrence, KS
 - University of Kansas, Department of Geology Patterson Scholarship, 2006
 - Geological Society of America Outstanding Graduate Minority Student Research Grant Proposal – 2006
 - American Geological Institute Graduate Minority Participation Scholarship, 2004-2008
 - South Texas Geological Society Field Camp Scholarship, 2003
 - South Texas Geological Society (STGS) Scholarship, 2003.
 - Eckert Scholarship –Trinity University Geosciences Department, 2002
 - American Geological Institute Undergraduate Minority Participation Scholarship, 2001-2003
 - Dean’s List, Trinity University – Spring 2002 and 2003
 - Sigma Gamma Epsilon – Earth Science honor society, inducted 2001.

GRANTS

C. A. Suarez - CV

- 2017 NSF Integrating Earth Systems: Time of Transformation: integrating the dynamic biotic, geologic, and climate systems of North America during the Early to Late Cretaceous transition – \$775,977 , *in review*
- 2017 NSF EAR Sedimentary Geology/Paleobiology: Low versus High Latitude Continental Climatic Effects of the Central Atlantic Magmatic Province on the End Triassic Extinction Event – \$401,773, *in review*
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- 2017 Department of Interior, BLM Utah 2017 Heritage Resources Preservation Programs and Projects – \$10,649
- 2016 NSF-EAR IF Early Career: Acquisition of a laser ablation system to enable new constraints on continental crust, dinosaurs, and ore deposits - \$542,294
- 2016 American Geological Institute Deep Carbon Observatory Diversity Grant - \$6,738
- 2011 NSF Postdoctoral Fellowship - \$170,000
- 2008 Sigma Xi Student Grants-in-Aid - \$1000
- 2008 Paleontological Society Gould Student Grant Award- \$750
- 2007 Paleontological Society Gould Student Grant Award- \$500
- 2006 Geologic Society of America Graduate Student Grants - \$3000
- 2006 University of Kansas Summer Research Grant - \$1500
- 2006 Association for Women Geoscientists Osage Chapter Graduate Student Grant-\$200
- 2003 Geologic Society of America – South Central Undergraduate Research Grant - \$500

INVITED TALKS AND PRESENTATIONS:

- DinoFest 2017 – invited speaker Natural History Museum of Utah, January, 2017
- Women in Paleontology Featured Speaker, Orlando Science Center, Orlando, FL. May 6, 2017
- Oklahoma State University, Boone Pickens School of Geology, April 17, 2015
- Geology, Minerals, Energy, Geophysics Science Center Seminar, USGS, Menlo Park, CA (November 4, 2013)
- University of Arkansas, Dept. of Geosciences Seminar – Images of a Late Cretaceous Arctic Coastal Plain: Insights into Arctic paleohydrology and paleoecology using stable isotopes of fossils (2012)
- Keynote Presentation: 2011 Annual Meeting of the Society of Exploration Geophysicists, Applied Science Education Program (2011)
- Boise State University LSAMP program: “How to Give an Effective Oral and Poster Presentation (2011)
- Bureau of Land Management – Brown Bag Science Series: Salt Lake City Office: “Advances in Rare Earth Element Geochemical analysis of Fossil Vertebrates and its Role on Geochemistry of Fossil Resources” (2011)

PUBLIC MEDIA RESEARCH RECOGNITION AND REVIEWS:

- Discovery Channel’s Dirty Jobs with Mike Rowe: “Fossil Hunters” December 20th, 2011
- The Statesmen; San Antonio Express News; KCUR Public Radio Show: Central Standard; KBTU – Local NBC Station, Boise, ID; 2011 – interviewed about a new dinosaur (*Geminiraptor suarezarum*) named after myself and my sister
- Associated Press, Salt Lake Tribune, WOAI New Radio San Antonio, TX; 2010 – interviewed about a new dinosaur (*Geminiraptor suarezarum*) named after myself and my sister

C. A. Suarez - CV

- *Nature News* 2009, interviewed and quoted for news article in *Nature* [Dalton, R. (2009), *Nature*, v. 459, May 21, p. 307].
- Discovery-Science Channel 2005, interviewed and filmed for the special “Utah Dinosaur Graveyard” 2005.
- WHYY- News Radio Philadelphia, PA 2005: interviewed about my research related to the discovery of a new dinosaur *Falcarius utahensis*.
- San Antonio Express News 2005: interviewed about my research related to the discovery of a new dinosaur *Falcarius utahensis*.

SERVICE

- Manuscript reviewer: *Palaeogeography, Palaeoclimatology, Palaeoecology, Sedimentary Geology, Journal of Archaeological Sciences, Sedimentology, Palaios, Journal of the Royal Society – Interface, American Mineralogist, Journal of Palaeontology, and the Science of Nature, PLOS One*
- Ad hoc reviewer P2C2 and Sedimentary Geology and Paleobiology, NSF
- Co-guest Editor: *Elements*, themed volume on Catastrophic Perturbations to Earth’s Carbon Cycle (2017)
- NSF Committee of Visitors for Surface Processes Programs (June 2014)
- Earth-Cube End-User Workshop, Sedimentary Geology Representative (August 2013)
- Earth-Cube Sedimentary Geology, participant (March 2013)
- Review Panel, NSF Graduate Research Fellowship (January 2013)
- Session Advocate for topical session at 2011 Annual GSA Meeting: Minnesota, MN (2011)
- Participant: Sedimentary Geology and Paleobiology: “Transitions” Science Plan Workshop” October 24-25th 2011, Washington, DC.
- Seminar speaker, BSU Louis Stokes Alliance for Minority Participation Program: “How to Give Effective Oral and Poster Presentations” – available on Idaho EPSCoR website Professional Development Resources www.idahoepscor.org (2011)
- Mentor LSAMP (minority) student on geochemical lab skills (2011)
- Keynote Presentation: Society for Exploration Geophysicists Annual Meeting: Applied Science Education Program (2011)
- 2011 Pillars of Northside Independent School District, San Antonio, TX Award Recipient: Science talks at local middle and high schools (2011)
- President (2006-2008), Association for Women Geoscientists, Osage Chapter
- Presentation on fossils to 1st Grade Science class at the Oak Lane Day School, Philadelphia, PA. (Fall 2006)
- Organized and assisted in workshop for Girl Scouts attaining their “Rocks Rock” badge. (Spring 2006)
- Presentation on geology to 4th -6th grade girls on Geologic Careers at the Expanding Horizons program at Emporia State University. (Spring 2006)
- Testified before the Texas State School Board with other Texas geoscientists petitioning to keep earth science education in K-12 schools. (January 2002)

MEMBERSHIPS

- Geological Society of America
- Society of Vertebrate Paleontology
- Society of Sedimentary Geology
- Paleontological Society
- Association for Women Geoscientists

C. A. Suarez - CV

- American Geophysical Union
- Society for the Advancement of Chicanos and Native Americans in Sciences