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EDUCATION

Ph.D. – Geology – University of Georgia, 2000. Major Advisor: Douglas E. Crowe.
Dissertation: Oxygen isotope analysis of ancient otoliths: A mid-Holocene record of El Niño variation and human adaptation from Peruvian archaeological sites.

M.A. – Anthropology – University of Georgia, 1995. Major Advisor: Elizabeth J. Reitz.
Thesis: Stable isotopic analysis of estuarine bivalves: towards a method of paleotemperature assessment.

B.A. – Anthropology – University of Georgia, 1990.

EMPLOYMENT

2017-present Professor, University of Alabama, Department of Geological Sciences

2013-present Chair, University of Alabama, Department of Geological Sciences

2010-2017 Associate Professor, University of Alabama, Department of Geological Sciences.

2008-2013 Undergraduate Program Director, University of Alabama, Department of Geological Sciences.

2004-2010 Assistant Professor, University of Alabama, Department of Geological Sciences.

2002-2004 Postdoctoral Research Associate, Advanced Analytical Center for Environmental Sciences, Savannah River Ecology Laboratory.

2001-2002 Postdoctoral Fellow, University of Georgia, Department of Geology.

PEER-REVIEWED PUBLICATIONS

* denotes students under my advisement

Gillikin, D., Wanamaker, A.D., and **Andrus, C. F. T.,** 2019 Chemical Sclerochronology. *Chemical Geology*. 10.1016/j.chemgeo.2019.06.016.

Zimmt, J. B., Lockwood, R., **Andrus, C. F. T.,** and Herbert, G. S., 2019 Sclerochronological basis for growth increment counting: a reliable technique for life-span determination of *Crassostrea virginica* from the Mid-Atlantic United States. *Palaeogeography, Palaeoclimatology, Palaeoecology*. 516: 54-63. 10.1016/j.palaeo.2018.11.029.

Etayo-Cadavid*, M. F., **Andrus, C. F. T.**, Jones, K. B., and Hodgins, G. W. L. 2018. Subseasonal variations in marine radiocarbon reservoir age from pre-bomb *Donax obesulus*

and *Protothaca asperrima* shell carbonate. *Chemical Geology.* 10.1016/j.chemgeo.2018.07.001.

Bassett*, C., **Andrus, C. F. T.,** and West, C. F. 2018. Implications for measuring seasonality in the marine bivalve, *Saxidomus gigantea*. *Chemical Geology*. 10.1016/j.chemgeo.2018.07.004.

West, C. F., Burchell, M., and **Andrus, C. F. T.** 2018. Molluscs and paleoenvironmental reconstruction in island and coastal settings: variability, seasonality, and sampling. *In* Giovas, C. M., and LeFebre, M. J., eds. *Zooarchaeology in Practice: Case Studies in Methodology and Interpretation in Archaeofaunal Analysis*. Springer. Cham, Switzerland p.191-208.

Lulewicz, I. H., Thompson, V. D., Pluckhahn, T. J., **Andrus, C. F. T**., and Das, O. 2017. Exploring oyster (*Crassostrea virginica*) habitat collection via oxygen isotope geochemistry and its implications for ritual and mound construction at Crystal River and Roberts Island, Florida. *Journal of Island and Coastal Archaeology*. 13:3, 388-404. doi: 10.1080/15564894.2017.1363096.

Wei*, J., **Andrus, C. F. T.**, and Perez-Huerta, A., 2017. *Semele corrugata* microstructure and oxygen isotope profiles as indicators of seasonality. *in* Dillehay, T. D., ed. *Where the Land Meets the Sea: Fourteen Millennia of Human Prehistory on the North Coast of Peru*. University of Texas Press. Austin, TX p.714-722.

Sletten*, H. R., Gillikin, D. P., Halfar, J., **Andrus, C. F. T.**, and Guzman, H., 2017. Skeletal growth controls on Mg/Ca and P/Ca ratios in tropical Eastern Pacific rhodoliths (coralline red algae). *Chemical Geology*. 465: 1-10. doi: 10.1016/j.chemgeo.2017.05.010.

Black*, H. D., **Andrus, C. F. T.,** Lambert, W. J, Rick, T., and Gillikin, D. P., 2017. $\delta^{15}N$ values in *Crassostrea virginica* shells provides earliest direct evidence for nitrogen loading to Chesapeake Bay. *Scientific Reports*. 7: 44241; doi: 10.1038/srep44241.

Sletten*, H. R., **Andrus, C. F. T.**, Guzman, H. and Halfar, J., 2017. Re-evaluation of using rhodolith growth patterns for paleoenvironmental reconstruction: An example from the Gulf of Panama. *Palaeogeography, Palaeoclimatology, Palaeoecology*. 465: 264–277 doi: 10.1016/j.palaeo.2016.10.038.

Darrow, E. S., Carmichael, R. H., **Andrus, C. F. T.**, and Jackson, E. H., 2017. From middens to modern estuaries, oyster shells sequester source-specific nitrogen, *Geochimica et Cosmochimica Acta*. 202: 39–56. doi: http://dx.doi.org/10.1016/j.gca.2016.12.023.

Waselkov, G. A., **Andrus, C. F.,** and Plumb, G. E.,eds. 2016. *A State of Knowledge of the Natural, Cultural, and Economic Resources of the Greater Mobile-Tensaw River Area.* Natural Resources Report NPS/NRSS/BRD/NRR 2016/1243. Biological Resources Division, National Park Service, Fort Collins, CO. pp.240.

Plumb, G. E., Waselkov, G. A., **Andrus, C. F.,** and Finch B., 2016. A greater Mobile-Tensaw area: connections and consequences. *In* Waselkov, G. A., **Andrus, C. F.,** and Plumb, G. E., eds. *A State of Knowledge of the Natural, Cultural, and Economic Resources of the Greater Mobile-Tensaw River Area.* Natural Resources Report NPS/NRSS/BRD/NRR 2016/1243. Biological Resources Division, National Park Service, Fort Collins, CO. p. 185-193.

Gagnon, C. M., **Andrus, C. F. T.,** Ida, J., and Richardson, N. 2015. Local water source variation and experimental chicha de maíze brewing: implications for interpreting human hydroxyapatite $\delta^{18}O$ values in the Andes. *Journal of Archaeological Science: Reports*. v. 4. p. 174–181.

Thompson, V. D., Pluckhahn, T. J., Das, O. and **Andrus, C. F. T.** 2015, Assessing village life and monument construction (cal. AD 65-1070) along the Central Gulf Coast of Florida through stable isotope geochemistry. *Journal of Archaeological Science: Reports*. v. 4. p. 111–123.

Blitz, J, H., **Andrus, C. F. T**., and Downs, L. 2014 Sclerochronological measures of seasonality at a Late Woodland mound on the Mississippi Gulf Coast. *American Antiquity*. v.79. p 697-711.

Thompson, V. D. and **Andrus, C. F. T.** 2013. Using oxygen isotope sclerochronology to evaluate the role of small islands among the Guale of the Georgia Coast, USA. *Journal of Island and Coastal Archaeology*. V. 8. p. 190-209. DOI: 10.1080/15564894.2012.708007

Etayo-Cadavid*, M. F., **Andrus, C. F. T.**, Jones, K. B., Hodgins, G. W. L., Sandweiss, D. H. Uceda-Castillo, S., and Quilter, J. 2013. Marine radiocarbon reservoir age variation in *Donax obesulus* shells from Northern Peru: Late Holocene evidence for extended El Niño. *Geology*. v. 41. p. 599–602.

Pérez-Huerta, A. Etayo-Cadavid*, M. F., **Andrus, C. F. T.**, Jeffries, T. E., Watkins, C., Street, S.C., and Sandweiss, D. S. 2013. El Niño impact on mollusk biomineralization - Implications for trace element proxy reconstructions and the paleo-archeological record. *PLoS ONE* v. 8, e54274.

Andrus C. F. T. 2012. Isotope sclerochronology in southeastern US archaeology to estimate season of capture. *in* Reitz, E. J, Quitmyer, I. R., and Thomas, D. H. eds. Seasonality and Human Mobility along the Georgia Bight. *American Museum of Natural History Anthropological Papers*. v. 97. p. 123-133.

Andrus, C. F. T., and Thompson, V. D. 2011. Determining the habitats of mollusk collection at the Sapelo Island Shell Ring complex, Georgia, USA using oxygen isotope sclerochronology: *Journal of Archaeological Science*. v. 39, 215-228.

Andrus, C. F. T. 2011. Shell midden sclerochronology. *Quaternary Science Reviews*. v. 30, p. 2892 2905.

Thompson, V. D. and **Andrus, C. F. T.** 2011. Evaluating mobility, monumentality, and feasting at the Sapelo Island Shell Ring Complex: *American Antiquity* v. 76, p. 315-343.

Pérez-Huerta, A. and **Andrus, C. F. T.** 2010. Vital effects in the context of biomineralization. *in* Díaz, L. F. and García-Monge, J. M. A. eds., Biominerals and biomineralization processes. *Seminarios de la Sociedad Española de Mineralogia*: Madrid v. 7, p. 31-41.

Jones, K. B., Hodgins, G. W. L., Etayo-Cadavid*, M. F., **Andrus, C. F. T.**, and Sandweiss, D. H., 2010. Centuries of marine radiocarbon reservoir age variation within archaeological *Mesodesma donacium* shells from southern Peru: *Radiocarbon* v. 52, p. 1207-1214.

Jones, K. B., Hodgins, G. W. L., **Andrus, C. F. T.**, and Etayo-Cadavid*, M. F., 2010. Interpreting molluscan marine reservoir ages in a variable-upwelling environment: *Palaios*.v. 25, p. 126-131. DOI: 10.2110/palo.2009.p09-050r.

Jones, K. B., Hodgins, G. W. L., Etayo-Cadavid*, M. F., and **Andrus, C. F. T.** 2009. Upwelling signals in radiocarbon from early 20th century Peruvian bay scallop (*Argopecten purpuratus*) shells: *Quaternary Research* v. 72, p. 452-456. DOI: 10.1016/j.yqres. 2009.07.008.

Romanek, C. S., Beard, B. L., Anbar, A. D. and **Andrus, C. F. T.** 2009. Non-traditional stable isotopes in the environmental sciences, *in* Aelion, C. M., Hohener, P., Hunkeler, D., and Aravena, R. eds., *Environmental isotopes in bioremediation and microbial degradation processes*: Boca Raton, FL , CRC Press, p. 383-433.

Andrus, C. F. T., and Rich*, K. W., 2008, A preliminary assessment of oxygen isotope fractionation and growth increment periodicity in the estuarine clam *Rangia cuneata*: *Geo Marine Letters*. v. 28, p. 301-308. DOI: 10.1007/s00367-008-0109-3.

Reitz, E. J., **Andrus, C. F. T.**, and Sandweiss, D. H. 2008. Ancient fisheries and marine ecology of coastal Peru, *in* Rick, T. C., and Erlandson, J. M. eds., *Human impacts on ancient marine ecosystems*: University of California Press, p. 125-145.

Andrus, C. F. T. and Crowe, D. E., 2008, Isotope analysis as a means for determining season of capture for *Mercenaria*, *in* Thomas, D. H., ed., Native American landscapes of St Catherine's Island, Georgia: *American Museum of Natural History Anthropological Papers*, v. 88, p. 498-518.

Andrus, C. F. T., Sandweiss, D. H. and Reitz, E. J., 2008, Climate change and archaeology: The Holocene history of El Niño on the coast of Peru, *in* Reitz, E. J., Scarry, M. C., and Scudder, S. J., eds. *Case Studies in Environmental Archaeology*, (Second Edition): New York, Plenum Press, p. 143-157.

Jones, K. B., Hodgins, G. W. L., Dettman, D. L., **Andrus, C. F. T**., Nelson, A., and Etayo-Cadavid*, M. F. 2007. Seasonal variations in Peruvian marine reservoir age from pre-bomb *Argopecten purpuratus* shell carbonate: *Radiocarbon* v. 49, p. 877-888.

Sandweiss, D. H., Maasch, K. A., **Andrus, C. F. T**., Reitz, E. J., Riedinger-Whitmore, M., Richardson, J. B., and Rollins, H. B. 2007. Mid Holocene Climate and Culture Change in Coastal Peru, *in* Anderson, D. G., Maasch, K. A. and Sandweiss, D. H., eds*., Climate change and cultural dynamics: A global perspective on mid-Holocene transitions*: Academic/Elsevier Press, p. 25-50.

Andrus, C. F. T., Hodgins, G. W. L., Sandweiss, D. H., and Crowe, D. E. 2005. Molluscan radiocarbon as a proxy for El Niño-related upwelling variation in Peru, *in* Surge, D., and Mora, G., eds., Isotopic and Elemental Tracers of Late Quaternary Climate Change: *Geological Society of America Special Paper* v. 395, p. 13-19.

Jones, D. S., Quitmyer, I. R., and **Andrus, C. F. T**. 2005. Oxygen isotopic evidence for greater seasonality in Holocene shells of *Donax variabilis* from Florida: *Palaeogeography, Palaeoclimatology, Palaeoecology* v. 228, p. 96-108.

Quitmyer, I. R., Jones, D. S. and **Andrus, C. F. T**. 2005. Seasonal shell growth and oxygen isotopes ($\delta^{18}O$) in the variable coquina clam, *Donax variabilis* Say, 1822: A modern analogue to determine the season of resource procurement during the Late Archaic Period of coastal northeast Florida, USA, *in* Bar-Yosef Mayer, D., ed., Archaeomalacology: *Molluscs in Former Environments of Human Behavior*: Proceedings of the Archaeomalacology Symposium of the 9th International Council for Zooarchaeology, Oxford, UK, Oxbow Press, p.18-28.

Sandweiss, D. H., Maasch, K. A., Chai, F., **Andrus, C. F. T.**, and Reitz, E. J. 2004. Geoarchaeological evidence for fish regime shift linked to multidecadal Pacific climate change: *Quaternary Research* v. 61, p. 330-334.

Jones, D. S., Quitmyer, I. R., and **Andrus, C. F. T**. 2004. Seasonal shell growth and longevity in *Donax variabilis* from northeastern Florida: Evidence from oxygen isotopes: *Journal of Shellfish Research* v. 23(3), p. 707-714.

Andrus, C. F. T., Crowe, D. E., Sandweiss, D. H., Reitz, E. J., Romanek, C. S., and Maasch, K. A., 2003, Comment on "Otolith $\delta^{18}O$ record of mid-Holocene sea surface temperature in Peru" – response: *Science* v. 299, p. 203b.

Andrus, C. F. T. and Crowe, D. E. 2002. Alteration of otolith aragonite: Effects of prehistoric cooking methods on otolith chemistry: *Journal of Archaeological Science*. v. 29, p. 291-299.

Andrus, C. F. T., Crowe, D. E., Sandweiss, D. H., Reitz, E. J., and Romanek, C. S. 2002. Otolith $\delta^{18}O$ record of mid-Holocene sea surface temperature in Peru: *Science* v. 295, p. 1508-1511.

Andrus, C. F. T., Crowe, D. E. and Romanek, C. S. 2000, Oxygen isotope record of the 1997 1998 El Niño in Peruvian sea catfish (*Galeichthys peruvianus*) otoliths: *Paleoceanography* v 17(5), p. 1053-1060 - doi:10.1029/2001PA000652.

Andrus, C. F. T. and Crowe, D. E. 2000. Geochemical analysis of *Crassostrea virginica* as a method to determine season of capture: *Journal of Archaeological Science* v. 27, p. 33-42.

Weinand, D. C., **Andrus, C. F. T.**, and Crook, M. R. 2000. The identification of cownose ray (*Rhinoptera bonasus*) as a seasonal indicator species and implications for coastal Mississippian subsistence modeling: *Southeastern Archaeology* v. 19, p. 156-162.

PEER-REVIEWED ABSTRACTS

Andrus, C .F. T., Bassett*, C. N., Voorhies, B., Collins, J. D., Peacock, E. 2019 Challenges and applications of oxygen isotope analysis of season of capture of freshwater mollusks. 5th International Sclerochronology Conference, *Book of Abstracts*. pp. 27.

Bassett*, C. N., **Andrus, C. F. T.,** West, C. F., and Etnier, M., 2019. Fact or Fiction? Exploring the possibility of neoglacial sea ice off the coast of Unalaska. . 5th International Sclerochronology Conference, *Book of Abstracts*. pp. 28.

Bassett*, C. N., and **Andrus, C. F. T.,** 2019. Examining the potential of Pacific abalone as a novel high resolution archive of seasonal upwelling in the Channel Islands, CA, USA. 5th International Sclerochronology Conference, *Book of Abstracts*. pp. 101.

Warner, J., DeLong, K., Chicoine D., **Andrus. C. F. T.,** Thirumalai, K, and Wanamaker, A. 2019. Local perspectives on ENSO mean states ~2300 B.P. and now: $\delta^{18}O$ reconstructions from the short-lived bivalves *Donax obesulus* and *Mesodesma donacium*. 5th International Sclerochronology Conference, *Book of Abstracts*. pp. 91.

Bassett*, C. N., **Andrus, C. F. T.,** West, C. F., and Etnier, M., 2018. Fact or Fiction? Neoglacial sea ice off the coast of Unalaska. Oceans Past VII *Book of Abstracts*, pp 38.

Warner, J., DeLong, K., Chicoine D., Wanamaker, A. **Andrus. C. F. T.,** and Thirumalai, K. 2018 Local perspectives on ENSO variability ~2300 BP and now: evidence from two short lived intertidal bivalves: *Mesodesma donacium* and *Donax obesulus*. American Geophysical Union Fall Meeting Abstract PP43D-1958.

Andrus, C. F.T., Bassett*, C., Black*, H. D., Payne*, T. N. 2017. Nitrogen isotope analyses in mollusk shell: applications to environmental sciences and archaeology. American Geophysical Union Fall Meeting Abstract PP53D-03.

Reitz., E. J., Hadden, C**. S.**, Little, M., Waselkov, G. A., **Andrus, C. F. T.,** and Peacock, E. 2017 Woodland-period Seasonality on the Northern Coast of the Gulf of Mexico. Southeastern Archaeological Conference *Bulletin* 60: 83.

Andrus, C. F. T., Kelley, A, and Sandweiss, D. H. 2017 Productivity in a human context: creating and applying proxies relevant to Chicama Valley archaeology. Society for American Archaeology *Program* 82: 382.

Andrus, C. F. T. 2016. Human adaptation to seasonal climate variation in prehistoric coastal southeastern USA. *Geological Society of America Abstracts with Programs.* v. 48.

Bassett*, C. N., **Andrus, C. F. T.,** and West, C. F., 2016. Clams and climate in the Kodiak Archipelago, Alaska: insights from oxygen isotope sclerochronological analysis of *S. gigantea* from middle to late Holocene archaeological deposits. *Geological Society of America Abstracts with Programs.* v. 48.

Zimmt, J. B., Lockwood, R., **Andrus, C. F. T.,** and Herbert, G. S., 2016. Revisiting growth increment counting as a method for biologically aging *Crassostrea virginica* from the US Mid-Atlantic. *Geological Society of America Abstracts with Programs.* v. 48.

Andrus, C. F. T., Payne*, T., and Black*, H. D. 2016. Archaeological applications of molluscan nitrogen isotope analyses. 4th International Sclerochronology Conference. *Program and Abstracts* p. 28.

Bassett*, C. N, **Andrus, C. F. T.,** West, C. F., and Etnier, M. A. 2016. Clams and climate: Implications for reconstructing paleoseasonality in southern Alaska. 4th International Sclerochronology Conference. *Program and Abstracts* p. 31.

Andrus, C. F. T., 2016. Assessment of past subsistence strategy and environmental impacts using novel geochemical analyses of mollusk shells. Society for American Archaeology *Program* v. 81, p. 133.

Sandweiss, D. H., and **Andrus, C. F. T.** 2016. The Reitz stuff: -a faunal perspective on El Niño from coastal Peru. Society for American Archaeology *Program* 81: 28.

Lulewicz, I., Thompson, V. D., Pluckhahn, T., Das, O., and **Andrus, C. F. T.** 2016. From habitat exploitation to monument construction: exploring the nature of shell deposits at Crystal River and Roberts Island through stable isotope geochemistry. Society for American Archaeology *Program* v. 81, p. 132.

Andrus, C. F. T. 2016. Oxygen isotope season of capture estimates in mollusks may be incorrect, yet the method is still useful. International Council for Archaeozoology Stable Isotopes in Zooarchaeology 1st Working Group Meeting *Program* v. 1, p. 14.

Bassett*, C. N, West, C. F., Etnier, M. A., and **Andrus, C. F. T.** 2016. Clams and climate: implications for reconstructing past environments in Southern Alaska. International Council for Archaeozoology Stable Isotopes in Zooarchaeology 1st Working Group Meeting *Program* 1: 19.

Payne*, T. N. and **Andrus, C. F. T.** 2016. Archaeological Applications of $\delta^{15}N$ obtained from mollusk shells. International Council for Archaeozoology Stable Isotopes in Zooarchaeology 1st Working Group Meeting *Program* v. 1, p. 21.

Lulewicz, I., Thompson, V. D., Pluckhahn, T., Das, O., and **Andrus, C. F. T.** 2016. Reimagining the complexity of shell deposits at Crystal River and Roberts Island Shell Mound Complex through oxygen isotope geochemistry. International Council for Archaeozoology Stable Isotopes in Zooarchaeology 1st Working Group Meeting *Program* v. 1, p. 15.

Darrow, E. S, Carmichael, R. H., **Andrus, C. F. T.**, and Jackson, E. H. 2016. Organic stable isotopes in ancient oyster shell trace pre-colonial nitrogen sources. American Geophysical Union, Ocean Science Meeting Abstract 90592.

Bassett*, C. N., and **Andrus, C. F. T.** 2015. Sclerochronological analysis of *Saxidomus gigantea*: Implications for reconstructing past seasonality and sea ice extent in the Northern Pacific Ocean. American Geophysical Union Fall Meeting Abstract PP53B-2341.

Payne*, T. N. and **Andrus, C. F. T.** 2015. $\delta^{15}N$ as a proxy for historic anthropogenic nitrogen loading in Charleston Harbor, SC. American Geophysical Union Fall Meeting Abstract PP53B-2343.

Das, O., Robinson, D. M., Andrus, C. F. T., Mandal, S., Sen, K., and Khanal S. 2015. Stable isotopic variation of the Gangolihat and Deoban Formations in Garhwal-Kumaun, northwestern India: implications for the correlation of the Lower Lesser Himalayan stratigraphy. *Geological Society of America Abstracts with Programs.* v. 47, p. 584.

Andrus, C. F. T., Das, O., and Thompson, V. D. 2014. Assessing the precision and accuracy of oxygen isotope seasonality reconstructions derived from midden mollusks. *Geological Society of America Abstracts with Programs.* v. 46, p.52.

West, C. F., **Andrus, C. F. T.,** Eitner, M., and Burchell, M. 2014. Abrupt climate change in the Aleutian Islands, Alaska. *Geological Society of America Abstracts with Programs.* v. 46, p.53.

Sletten*, H. R., **Andrus, C. F. T.,** Gillikin, D. P., and Halfar, J. 2014. Preliminary growth and trace elemental characterization of rhodoliths (*Lithothamnion* sp.) from the Gulf of Panama, Panama. *Geological Society of America Abstracts with Programs.* v. 46, p.128.

West, C. F., **Andrus, C. F. T.,** and Eitner, M. 2014. Abrupt Climate Change in the Aleutian Islands, Alaska. *International Conference of Archaeozoology Abstracts*. v. 12, p.164.

Andrus, C. F. T., Das, O., and Cobb, R. M., 2014. Subseasonal geochemical and sclerochronological variations in coastal mollusk shells. *Goldschmidt 2014 Abstracts*: 54.

Black*, H. D., **Andrus, C. F. T.,** Rick, T., Hines, A. 2014. $\delta^{15}N$ as a potential paleoenvironmental proxy for nitrogen loading in Chesapeake Bay. *Goldschmidt 2014 Abstracts*: 212

Nicosia, A., Pérez-Huerta, A., Sandweiss, D. H., and **Andrus, C. F. T**. 2014. The effects of the 1982-1983 El Niño mega-event on bivalve mollusc shells. *Goldschmidt 2014 Abstracts*: 1808.

West, C. F., Burchell, M., and **Andrus, C. F. T.** 2014. Shellfish and paleoenvironmental reconstruction in island and coastal settings: variability, seasonality, and sampling. Society for American Archaeology *Program* 79.

Gagnon, C. M, Richardson, N., **Andrus, C. F. T.,** and Ida, J. 2014. Experimental chicha brewing: implications for interpreting skeletal $\delta^{18}O$ values in the Andes. Society for American Archaeology *Program* 79.

Black*, H. D., **Andrus, C. F. T.,** Rick, T., and Hines, A. 2013. $\delta^{15}N$ as a potential paleoenvironmental proxy for nitrogen loading in Chesapeake Bay. American Geophysical Union Fall Meeting Abstract PP13A-1864.

Andrus, C. F. T. 2013. 40 years since Shackleton: The state of oxygen isotope season of capture analysis in archaeology. 3rd International Sclerochronology Conference, *Program and Abstracts* 28 (Invited keynote)

West, C. F. and **Andrus, C. F. T.** 2013. High-resolution sampling of *Saxidomus gigantea* in the Kodiak Archipelago. Society for American Archaeology *Program* v. 78, p. 435.

Andrus, C. F. T., Blitz, J, H. and Thompson, V. D. 2012. Sclerochronological detection of short term events in archaeological sites: Examples from the Graveline Mound Site, Mississippi and the Sapelo Shell Ring Complex, Georgia, USA. *Geological Society of America Abstracts with Programs*, v. 44, no. 7, p. 141.

Rich* K. W., and **Andrus, C. F. T.** 2012. Stable oxygen isotope analysis of the freshwater gastropod *Pachychilus* spp. and its potential use for seasonality studies at the lowland Maya site of Pacbitun, Belize. *Geological Society of America Abstracts with Programs*, v. 44, no. 7, p. 141.

Black*, H. D. and **Andrus, C. F. T.** 2012. Effects of prehistoric cooking methods on $\delta^{15}N$ in mollusk shells. *Geological Society of America Abstracts with Programs*, v. 44, no. 7, p.252.

Wei*, J. and **Andrus, C. F. T.** 2012. Sclerochronological oxygen isotope analysis in Peruvian *Semele corrugata* valves to assess archaeological season of capture. *Geological Society of America Abstracts with Programs*, v. 44, no. 7, p. 252.

Andrus, C. F. T., and Thompson, V. D. 2012. Reconstructing estuarine paleoclimate from midden samples: Challenges of transportation across salinity gradients. American Geophysical Union, Ocean Science Meeting *Program* p. 87.

Cobb*, R. M., **Andrus, C. F. T.**, Kozdon, R., and Valley, J. W. 2012. SIMS analysis of primary and infilled areas within *Stylaster erubescens* colonies. American Geophysical Union, Ocean Science Meeting *Program* p. 98.

Black*, H. D. **Andrus, C. F. T.**, and Cobb*, R. M. 2012. The processes of taphonomy and diagenesis on the deep sea hydrocoral *Stylaster erubescens* fossils from the Charleston Bump. American Geophysical Union, Ocean Science Meeting *Program* p. 98.

Andrus, C. F. T., Blitz, J, H. and Downs, L. 2011. Oxygen isotope season of capture records in *Crassostrea virginica* and *Rangia cuneata* valves from the Graveline Site, Mississippi. Southeastern Archaeological Conference. *Bulletin* v. 54, p. 22.

Andrus, C. F. T., Etayo-Cadavid*, M. F., Sandweiss, D. H., Reitz, E. J., Hodgins, G. W. L., and Jones, K. B. 2011. Upwelling, productivity, and fish regime shift related to coastal Andean civilization. American Geophysical Union Chapman Conference on Climates, Past Landscapes, and Civilizations. *Final Program*

Cobb*, R. M., **Andrus, C. F. T.**, and Pérez-Huerta, A. 2011. Structural differences in growth features of deep water corals. American Society for Limnology and Oceanography *Final Program* S02: 253.

Andrus, C. F. T. 2010. Sclerochronology in archaeology: Beyond season of capture analysis. 2nd International Sclerochronology Conference, *Program and Abstracts* 29 (Invited keynote)

Cobb*, R. M., **Andrus, C. F. T.**, Pérez-Huerta, A. and Olson, J. B. 2010. Analysis of skeletal growth in Stylasterid corals. 2nd International Sclerochronology Conference, *Program and Abstracts* 39.

Keene, D. A, and **Andrus, C. F. T.,** 2010. An integrated approach for assessing sedentism in the Georgia Bight. Society for American Archaeology *Program* 75: 154.

Rich*, K. W., **Andrus, C. F. T.,** and Cobb*, R. M. 2009. Recent investigations of Gulf of Mexico bivalve species for the application of archaeological shell middens as paleoclimate proxies. Southeastern Archaeological Conference *Bulletin* 64.

Andrus, C. F. T., Olson, J. B., Romanek, C. S., and Sedberry, G. R. 2009. Oxygen isotope fractionation in shallow and deep water Stylaster spp. hydrocorals. *Geological Society of America Abstracts with Programs*, v. 41, no. 7, p. 402.

Rich*, K. W., and **Andrus, C. F. T.** 2009. Oxygen isotope geochemistry of the freshwater Jute snail (Pachychilus sp.): A potential ultra-local seasonal paleoclimate proxy for tropical Mesoamerica. *Geological Society of America Abstracts with Programs*, v. 41, no. 7, p. 401.

Jones*, C. A., **Andrus, C. F. T.**, Etayo-Cadavid*, M. F., Jones, K. B., and Hodgins, G. W. L. 2009. Mineralogy and seasonal growth of South Pacific mussel valves. *Geological Society of America Abstracts with Programs,* v. 41, no. 7, p. 476.

Cobb*, R. M., and **Andrus, C. F. T.,** 2009. Oxygen isotope variation within *Rangia cuneata* populations. *Geological Society of America Abstracts with Programs*, v. 41, no. 7, p. 475.

Hansen*, J. A., **Andrus, C. F. T.**, and Carmichael, R. H. 2009. Nitrogen isotopes in mollusks as a proxy for marine productivity. *Geological Society of America Abstracts with Programs*, v. 41, no. 7, p. 475.

Andrus, C. F. T., and Thompson, V. D. 2008. Oxygen isotope analysis of midden mollusks to assess site formation processes and subsistence strategies at the Sapelo Island Shell Rings: *Geological Society of America Abstracts with Programs*, v. 40, no. 6, p. 521.

Rich*, K. W., **Andrus, C. F. T**., Quitmyer, I. R., and Jones, D. S. 2008. A growth increment analysis of *Donax variabilis*: Comparison between diurnal and semidiurnal tidal habitats: *Geological Society of America Abstracts with Programs*, v. 40, no. 6, p. 439.

Etayo-Cadavid*, M. F., **Andrus, C. F. T.**, Hodgins, G. W. L. 2008. High-resolution elemental analysis in mollusks as a proxy for upwelling: *Geological Society of America Abstracts with Programs*, v. 40, no. 6, p. 522.

Cobb*, R. M. and **Andrus, C. F. T**. 2008. *Rangia cuneata* shells as an environmental proxy: Variations in elemental concentrations within populations: *Geological Society of America Abstracts with Programs*, v. 40, no. 6, p. 473.

Jones, K. B., Hodgins, G. W. L., Etayo-Cadavid*, M. F., and **Andrus, C. F. T.** 2008. Reporting marine reservoir ages in a variable-upwelling environment: *Geological Society of America Abstracts with Programs*, v. 40, no. 6, p. 522.

Andrus, C. F. T., and Etayo-Cadavid*, M. F. 2008. Indurated sediments at Quebrada Jaguay. Society for American Archaeology *Program* v. 73, p. 128.

Rich*, K. W. and **Andrus, C. F. T**. 2008. Using archaeological shell middens in climate reconstruction: An investigation of Gulf of Mexico *Donax variabilis* as a potential climate proxy. Society for American Archaeology *Program* v. 73, p. 134.

Jones, K. B., Etayo-Cadavid*, M. F., **Andrus, C. F. T.**, and Hodgins, G. W. L. 2008. Radiocarbon chronology of Site GJ-280, Quebrada Jaguay, Peru. Society for American Archaeology *Program* v. 73, p. 128.

Rich*, K. W. and **Andrus, C. F. T**. 2007. An investigation of Gulf of Mexico *Donax variabilis* as a potential paleoclimate proxy. American Geophysical Union Fall Meeting Abstract PP31C 0541.

Etayo-Cadavid*, M. F., **Andrus, C. F. T.**, Hodgins, G. W. L., Jones, K. B., and Landeros, A. 2007. Radiocarbon in mollusk shells as a proxy for Peruvian upwelling: Modern pre-bomb

reservoir effect correction. American Geophysical Union Fall Meeting Abstract PP11A 0238.

Jones, K. B., Hodgins, G. W. L., **Andrus, C. F. T.**, and Etayo-Cadavid*, M. F. 2007. Seasonal and El Niño signals in radiocarbon profiles from early 20th century Peruvian bay scallop (*Argopecten purpuratus*) shells. *Geological Society of America Meeting Program* v. 39, p. 583.

Andrus, C. F. T., Romanek, C. S., and Sedberry, G. R. 2007. Incremental growth in a deep sea hydrocoral.1st International Sclerochronology Conference, *Program and Abstract Book* p. 3.

Rich*, K. W. and **Andrus, C. F. T**. 2007. Growth patterns in the littoral mollusk *Donax variabilis*. 1st International Sclerochronology Conference, *Program and Abstract Book* p. 108.

Rich*, K. W. and **Andrus, C. F. T**. 2007. Growth patterns and storm surge effects in the estuarine mollusk *Rangia cuneata*. 1st International Sclerochronology Conference, *Program and Abstract Book* p. 109.

Andrus, C. F. T., and Thompson, V. D. 2007. The Sapelo Island Shell Rings: An example of applications and challenges in geochemical analysis of middens. Past Global Changes (PAGES): Stable isotopes in archaeological midden shells: High resolution paleoclimatic and paleoenvironmental archives. p. 27 http://www.science.mcmaster.ca/geo/research/sibl/workshop/index.html

Etayo-Cadavid*, M. F., **Andrus, C. F. T.**, Jones, K. B., Hodgins, G. W. L. 2007. Mollusc shells as a proxy for coastal upwelling: A new reservoir effect correction for Peru. Past Global Changes (PAGES): Stable isotopes in archaeological midden shells: High resolution paleoclimatic and paleoenvironmental archives. p. 12 http://www.science.mcmaster.ca/geo/research/sibl/workshop/index.html

Rich*, K. W., and **Andrus, C. F. T**. and Stieber, M. 2007. Isotopic analysis of northern Gulf of Mexico midden deposits. Past Global Changes (PAGES): Stable isotopes in archaeological midden shells: High resolution paleoclimatic and paleoenvironmental archives. p. 31 http://www.science.mcmaster.ca/geo/research/sibl/workshop/index.html

Hodgins, G. W. L., **Andrus, C. F. T.**, Chu, A, Etayo-Cadavid* M. F., and Jones, K. B. 2007. Reconstructing the magnitude of the marine radiocarbon reservoir along coastal Peru: Data from the Preceramic site of Bandurria, Huaura Valley, Peru. Society for American Archaeology *Program* 72.

Andrus, C. F. T., Romanek, C. S., and Sedberry, G. R. 2006. Isotopic records of growth in deepwater Stylasteridae corals (Cnidaria: Hydrozoa): Ecological and paleoclimatic implications. *Geological Society of America Meeting Program* 222-1.

Etayo-Cadavid*, M. F., **Andrus, C. F. T.**, Hodgins, G. W. L., and Jones, K. B. 2006. Ontogenetic radiocarbon variation in modern pre-bomb Peruvian mollusk shells as a proxy for upwelling. *Geological Society of America Meeting Program* 202-1.

Jones, K. B., Hodgins, G. W. L., **Andrus, C. F. T.**, and Etayo-Cadavid*, M. F. 2006. Radiocarbon and stable isotope variation in pre-bomb Argopecten shells from Peru: Implications for chronometry and the marine reservoir correction. *Geological Society of America Meeting Program* 202-2.

Hodgins, G. W. L., **Andrus, C. F. T.**, Dettman, D. L., Jones, K. B., and Nelson, A. B. 2006. Investigating seasonal variations in the reservoir age of Peruvian coastal waters using shell carbonate from pre-bomb *Argopecten* specimens. 19th International ^{14}C Conference. p. 261.

Keller*, S. M., Etayo-Cadavid*, M. F., **Andrus, C. F. T.**, Chapman*, P., Ramirez*, V., Wilson*,C., and Callahan*, J. 2006. $\delta^{18}O$ analysis of *Crassatellites vadosus* from the Late Cretaceous Coon Creek Formation. *SE Geological Society of America. Abstracts with Program* v. 55, p. 11-1.

Reitz, E. J., Sandweiss, D. S., and **Andrus, C. F. T.** 2006. Evidence for a change in fishing strategies at northern Peruvian coastal sites in the Preceramic Period. *10th International Congress of the International Council for Zooarchaeology. Final Programand Abstracts.* 10.

Thompson, V., D., and **Andrus, C. F. T.** 2006. Monument, midden, or both: Evaluating coastal Georgia shell rings through stable isotope geochemistry. Society for American Archaeology *Program* 71.

Andrus, C. F. T., Hodgins, G. W. L., and Sandweiss, D. H. 2005. Seasonal Variation in Upwelling Recorded in Peruvian Mollusks: Implications for Reservoir Correction Estimates. American Geophysical Union – *Eos Transactions*. American Geophysical Union, 86(52) Fall Meeting Supplement. Abstract PP21C-1580.

Andrus, C. F. T., Sedberry, G. R., and Romanek, C. S. 2005. Geochemical profiles of corals from a dynamic habitat: Charleston Bump, NW Blake Plateau. 3rd International Symposium on Deep-Sea Corals: Science and Management. *Program and Abstract Book* p. 60.

Quitmyer, I. R., Jones, D. S. and **Andrus, C. F. T.** 2005. Seasonal Collection and Climate Reconstruction from Shells of the Variable Coquina Clam *Donax variabilis* during the Middle to Late Holocene of Northeastern Florida: Evidence from Oxygen Isotopes. Southeastern Archaeology Conference. *Bulletin* v. 62, p. 54.

Reitz, E. J., **Andrus, C. F. T.**, and Sandweiss, D. H. 2005. Ancient Fisheries and Marine Ecology of Coastal Perú. Society for American Archaeology *Program* 70.

Andrus, C. F. T., Romanek, C. S. and Sedberry, G. R. 2004. Geochemical cyclicity in colonial deepwater corals from the Charleston Bump, Blake Plateau. *Geological Society of America Meeting Program* 121-25.

Andrus, C. F. T., Carroll, M., Romanek, C. S., Stephenson, D. K., and King, A. 2004. Mussel shell geochemistry as a means of measuring season of capture in fluvial and lacustrine sites. Society for American Archaeology *Program* 69.

Jones, D. S., Quitmyer, I. R., and **Andrus, C. F. T.** 2004. Stable isotope evidence of Middle to Late Holocene seasonality and temperature change in archaeological coquina clam shells from Florida. *Eos Transactions* American Geophysical Union – Ocean Science Meeting Supplement.

Jones, D. S., Quitmyer, I. R., and **Andrus, C. F. T.** 2004. Seasonal shell growth and longevity in the variable coquina clam, *Donax variabilis*, from Northeast Florida: Evidence from oxygen isotopes. *American Malacological Society Abstracts* v. 70, p. 46.

Jones, D. S., Quitmyer, I. R., and **Andrus, C. F. T.** 2003. Seasonal collection of coquina clams from Florida: Evidence from shell growth and oxygen isotopes. *Geological Society of America Meeting Program* 163-7.

Sandweiss, D. H., Richardson, J. B., **Andrus, C. F. T.**, Houk, S., Piperno, D., Reitz, E. J., and Tanner, B. 2003. Update on Siches, an Early to Middle Holocene Fishing site in far northern Peru. *22nd Northeast Conference on Andean Archaeology and Ethnohistory*, Harvard University, Cambridge, MA

Andrus, C. F. T., Leckrone, K. J. and Crowe, D. E. 2003. Non-destructive isotopic analysis of archaeological materials. Society for American Archaeology *Program* 68: 39J.

Andrus, C. F. T., Hodgins, G. W. L., Sandweiss, D. H., and Crowe, D. E. 2002. Molluscan radiocarbon as a proxy for El Niño-related upwelling variation in Peru. *Geological Society of America Meeting Program* 140-12.

Quitmyer, I. R., Jones, D. S. and **Andrus, C. F. T.** 2002. Seasonal shell growth and oxygen isotopes ($\delta^{18}O$) in the variable coquina clam, *Donax variabilis* Say, 1822: A modern analogue to determine the season of resource procurement during the Late Archaic Period of coastal northeast Florida, USA. *9th International Congress of the International Council for Zooarchaeology. Final Program and Abstracts.* v. 9, p.106.

Andrus, C. F. T., Crowe, D. E., and Sandweiss, D. H. 2001. Development and application of otoliths as paleoclimate proxies. American Geophysical Union – *Eos Transactions*. American Geophysical Union, Fall Meeting Supplement, 82(47).

Andrus, C. F. T., Crowe, D. E., and Sandweiss, D. H. 2000. Anthropogenic induration of sediments at the Terminal Pleistocene Peruvian site Quebrada Jaguay. *Geological Society of America Meeting Program* A276.

Weinand, D. C., **Andrus, C. F. T.**, and Crook, M. R. 2000. Discovery and significance of cownose ray (*Rhinoptera bonasus*) Southeastern Archaeology Conference. *Bulletin* 57: 50 (invited).

Andrus, C. F. T., Crowe, D. E., and Sandweiss, D. H. 2000. Climate change and subsistence strategy in mid-Holocene Peru: Geochemical evidence of ENSO variation. Society for American Archaeology *Program* v. 65, p. 30.

Sandwiess, D. H, Tanner, B., Sanger, D., and **Andrus C. F. T.** 2000. Paleoindian-age domestic structure at a Peruvian fishing site. Society for American Archaeology *Program* v. 65, p. 48.

Reitz, E. J. and **Andrus, C. F. T.** 2000. Interpretations of zooarchaeological and geoarchaeological data for evidence of mid-Holocene climate change in Northern Peru. *SE Geological Society of America. Abstracts with Program* v. 49, p. 45.

Andrus, C. F. T., Crowe, D. E., and Sandweiss, D. H. 1999. Geochemical evidence of mid-Holocene ENSO variation derived from otoliths. American Geophysical Union – *Eos Transactions*, American Geophysical Union, Fall Meeting Supplement 80: F575

Andrus, C. F. T. and Crowe, D. E. 1999. Geochemical determination of Hard Clam season of capture from five sites on St. Catherine's Island, Georgia. Southeastern Archaeological Conference. *Bulletin v.* 56, p. 18-19.

Andrus, **C. F. T.**, Crowe, D. E., and Sandweiss, D. H. 1998. Mid-Holocene El Niño variation recorded in otoliths from Preceramic Peruvian middens. *Geological Society of America Meeting Program* A-16.

Andrus, C. F. T., Crowe, D. E., and Sandweiss D. H, 1998. Laser microprobe analysis of otoliths: New methods and applications from mid-Holocene Peru. *8th International Congress of the International Council for Zooarchaeology. Final Program and Abstracts.* v. 8, p. 40.

Andrus, C. F. T. 1995. Laser microprobe analysis of estuarine bivalves. *Geological Society of America Meeting Program* A-415.

Andrus, C. F. T. 1994. Laser mass spectrometry: Analysis of bivalves and broader applications. Southeastern Archaeological Conference. *Bulletin v.* 50, p. 20.

REPORTS AND NON-PEER-REVIEWED PUBLICATIONS

Sandweiss, D.H., **Andrus, C. F.T.**, Chai, F. Kelley, A. R. Maasch, K. A., and Reitz, E.J. 2016 Re: ENSO Variability and Archaeological Proxies (Comment on Rustic et al. 2015, Dynamical excitation of the tropical Pacific Ocean and ENSO variability by Little Ice Age cooling, *Science* 350:1537-1541). Science e-Letters http://science.sciencemag.org/content/350/6267/1537.e-letters>

Black*, H. D. and **Andrus, C. F. T.** 2012. Taphonomy and Diagenesis on the Deep-Sea Hydrocoral *Stylaster erubescens* Fossils from the Charleston Bump. The *University of Alabama McNair Journal*. v. 12, p. 19-40.

Sanders*, B. K., Conaway, M., and **Andrus, C. F. T.** 2010. Does the Debate Still Rage? A Survey Assessment of University of Alabama Students' Thoughts on Evolution and Faith. *The University of Alabama McNair Journal*. v. 10, p. 121-138.

C. F. T. Andrus. 2009. Final Report on: Documentation of Historical Water Quality and Chemistry Regimes in Mobile Bay and Choccolatta Bay through Isotope Analysis and Mollusk Species Composition: Evidence for hurricane impacts Grant number UA-CZM 306-08-2.

Cobb*, R. M., **Andrus, C. F. T.**, and Etayo-Cadvid*, M. F. 2009. *Rangia cuneata* shells as an environmental proxy: Variations in elemental concentrations within populations. *The University of Alabama McNair Journal*. v. 9, p. 45-58.

C. F. T. Andrus. 2008. Final Report on: "Documentation of Historical Water Quality and Chemistry Regimes in Mobile Bay and Choccolatta Bay through Isotope Analysis and MolluskSpecies Composition" Alabama Department of Conservation and Natural Resources.

C. F. T. Andrus. 2008. Progress Report on: "Assessment of Historical Salinity Variation in Choccolatta & Mobile Bays: Phase II." Alabama Department of Conservation and Natural Resources.

C. F. T. Andrus. 2008. Progress Report on: "Documentation of Historical Water Quality and Chemistry Regimes in Mobile Bay and Choccolatta Bay through Isotope Analysis: Evidence for Hurricane Storm Surge Impacts." Alabama Department of Conservation and Natural Resources.

C. F. T. Andrus. 2007. Semi-Annual Report to the Alabama Department of Conservation and Natural Resources: "Documentation of Historical Water Quality and Chemistry Regimes in Mobile Bay and Choccolatta Bay through Isotope Analysis" Alabama Department of Conservation and Natural Resources.

C. F. T. Andrus. 2006. Final report and data collected for the preliminary pilot study: "Documentation of Historical Water Quality and Chemistry Regimes in Mobile Bay and Choccolatta Bay through Isotope Analysis and Mollusk Species Composition" Alabama Department of Conservation and Natural Resources.

Sedberry, G. R., **Andrus, C. F. T.**, Barans, C. A., Crowe, S. E., Fiore, C. L., Griffin, S. B., Jutte, P. C., Sautter, L. R., and Schobernd, C., M. 2005. Mounds, depressions, scarps and caves: Exploration of habitat and species diversity on the Charleston Bump and Blake Plateau. NOAA Office of Ocean Exploration. Project number NA03OAR4600097.

PUBLIC DATABASE/ARCHIVE CONTRIBUTIONS

2015 Gulf of Mexico Research Initiative Information and Data Cooperative (GRIIDC)
2011 Natural History Collections, Smithsonian Institution – Field samples from Peru and Chile
2003 NOAA National Centers for Environmental Information – Molluscan oxygen isotope data
2002 NASA Goddard Institute: Global Seawater Oxygen-18 Database – Peruvian coastal seawater
2002 NOAA National Centers for Environmental Information – Otolith and water oxygen isotope and trophic data

MANUSCRIPTS AND GRANT PROPOSALS REVIEWED

National Science Foundation
- Antarctic Organisms and Ecosystems (1)
- Archaeology (5)
- Biological Oceanography (1)
- Comparative Analysis of Marine Ecosystem Organization (1)
- Earth Sciences Instrumentation and Facilities (1)
- Earth System History Program (1)
- Geology and Paleontology Program (1)
- Ocean Sciences (2)
- Paleo Perspectives on Climate Change (P2C2) program (7)
- P2C2 review panelist (1)

National Oceanic and Atmospheric Administration (1)
National Geographic Society (4)
The Research Council of Norway (1)
United States Civilian Research and Development Foundation (1)
Deutsche Forschungsgemeinschaft (German Research Foundation) (4)
Texas Sea Grant (1)
American Journal of Science (1)
Archaeofauna (1)
Environmental Biology of Fishes (2)
Geoarchaeology (1)
Geo Marine Letters (1)
Geochimica et Cosmochimica Acta (1)
Global and Planetary Change (1)
Holocene (1)
International Journal of Earth Sciences (1)
International Council of Archaeozoology (1)
Journal of Archaeological Method and Theory (1)
Journal of Archaeological Science (8)
Journal of Archaeological Science Reports (1)
Journal of Geology (1)
Journal of Island and Coastal Archaeology (1)
Journal of Quaternary Science (1)
Limnology and Oceanography (2)
Nature Communications (1)
Palaios (1)
Paleoceanography (2)

Paleogeography, Paleoclimatology, Paleoecology (6)
Proceedings of the National Academy of Sciences (2)
Quaternary International (2)
Scientific Reports (1)
Southeastern Archaeology (1)
Southeastern Naturalist (1)

SERVICE ACTIVITIES (PARTIAL LIST)

2015-present	State of Alabama Articulation and General Studies Committee, Geology and Earth Science Committee
2015-present	UA representative to Association of Public and Land-grant Universities' Board on Oceans, Atmosphere, and Climate
2012-present	UA Dept. of Geological Sciences Academic Assessment Director
2005-present	Member of UA Evolution Working Group and ALLELE speaker series organizer
2004-present	Co-director of the University of Alabama Stable Isotope Laboratory
2004–present	Served or chaired on an average of 4 departmental committees per year.
2015-2018	Advisory Committee for the Water Policy Summit
2017-2018	Guest editor for special issue of *Chemical Geology*
2017-2018	Alabama Science Olympiad Event Chair
2017	Co-chair and organizer for American Geophysical Union annual meeting session
2017	Discussant for special session at the Society for American Archaeology annual meeting in Vancouver, CA
2016	Panelist and moderator for Women in STEM Experience (WISE) Conference Professional Roundtable
2015-2016	4th International Sclerochronology Conference Planning Committee
2015	National Science Foundation P2C2 proposal review panelist
2013-2014	Co-chair and organize for 2014 International Goldschmidt Conference session "Trace Element and Isotope Geochemistry in Molluscs: Schlerochronology of Ancient and Modern Environmental Processes"
2012-2013	Co-Chair for College Committee on Active Learning
2012	Co-chair and organizer for GSA session "New Developments and Applications in Sclerochronology"
2010-2012	UA College of Arts and Sciences College Academy to Improve Student Success
2009-2012	Alabama Science Olympiad Event Chair
2009-2012	UA College of Arts and Sciences Curriculum Committee member
2008-2013	UA Dept. of Geological Sciences Undergraduate Program Committee Chair
2008	Co-chair and organizer for 2008 Geological Society of America special session "Geoarchaeological Records of Climate and Environmental Change"
2007	*Storm World* panel discussant with author Chris Mooney, New College, UA
2003	Panel discussant, Southeastern Archaeological Conference "Getting involved: specializations and subdisciplines in archaeology"

INVITED LECTURES

September 13, 2018	Alabama Mineral Institute, Bryan Conference Center, Tuscaloosa, AL
May 24, 2018	Alabama Board of Licensure for Professional Geologists 7th Continuing Education Conference, Pelham, AL
February 5, 2018	Birmingham Paleontological Society, Hoover, AL

September 14, 2017	Dauphin Island Sea Laboratory, Dauphin Island, AL
August 13, 2017	Museum of the Aleutians, Dutch Harbor, Alaska
June 19, 2017	Hefei University of Technology, Hefei, China
June 14, 2017	Nanjing Institute of Geology Paleontology, Chinese Academy of Sciences
June 13, 2017	Hohai University, Nanjing, China
March 7, 2017	Oscher Lifelong Learning Institute, Tuscaloosa, AL
April 7, 2016	Society of American Archaeology, Orlando, FL
February 20, 2014	University of Kentucky, Department of Earth and Environmental Sciences
October 16, 2013	Geocycles Workshop (keynote), Guttenburg University, Mainz, Germany
May 21, 2013	3rd International Sclerochronology Conference (keynote) Caernarfon, Wales
March 21, 2013	Universidad Nacional Mayor de San Marcos, Lima, Peru
December 4, 2012	Birmingham Paleontological Society, Hoover Public Library, Hoover, AL
November 15, 2012	Mallet Assembly, Tuscaloosa, AL
September 20, 2012	University of Georgia, Department of Geology, Athens, GA
June 6, 2012	Oscher Lifelong Learning Institute, Tuscaloosa, AL
April 8, 2011	Louisiana State University, Baton Rouge, LA
April 6, 2011	College Academy to Improve Student Success, UA, Tuscaloosa, AL
January 11, 2011	Oscher Lifelong Learning Institute, Tuscaloosa, AL
November 15, 2010	Blount Undergraduate Initiative, Tuscaloosa, AL
October 6, 2010	NASA Marshall Space Flight Center, Huntsville, AL
October 4, 2010	Alabama Paleontological Society, Birmingham, AL
July 27, 2010	2nd Int. Sclerochronology Conference (keynote), Gutenberg Univ. Germany
March 6, 2010	University of Alabama Arts and Science Leadership Board, Tuscaloosa, AL
March 3, 2010	University of Montevallo, Montevallo, AL
June 1, 2009	Birmingham Paleontological Society, Birmingham, AL
March 19, 2009	University of Georgia, Department of Geology, Athens, GA
October 27, 2008	Mississippi State Univ., Dept. of Sociology, Anthropology and Social Work
March 20, 2008	Society for Mining, Metallurgy, and Exploration, Bessemer, AL
March 13, 2008	University of Alabama, Geography Department, Tuscaloosa, AL
March 6, 2008	Dauphin Island Sea Laboratory, Dauphin Island, AL
November 8, 2007	University of Alabama, Alabama Perspectives on Sustainability and Climate Change. Panel discussion of Chris Mooney's *Storm World*, Tuscaloosa, AL
October 25, 2007	Willamette University, Archaeological Institute of America, Willamette, OR
July 11, 2007	Past Global Changes (PAGES) Workshop, McMaster University, Ontario
April 13, 2007	University of Arizona, IGERT lecture, Tucson, AZ
March 19, 2007	University of Maine, Climate Change Institute, Orono, ME
March 3, 2007	Univ. of West Florida, Depts. of Environmental Studies and Anthropology
March 24, 2004	University of Alabama, Department of Geological Sciences, Tuscaloosa, AL
March 3, 2004	University of South Carolina, Department of Anthropology, Columbia, SC
November 13, 2003	Southeastern Archaeology Conference, Charlotte, NC
October 10, 2003	University of South Carolina, Marine Science Program, Columbia, SC
February 13-14, 2003	University of Iowa, Department of Geosciences, Iowa City, IA
October 16, 2002	Robust Redhorse Conservation Committee, Edgefield, SC
February 7, 2002	University of Kentucky, Department of Geosciences, Lexington, KY
February 25, 2000	University of South Carolina, Department of Geology, Columbia, SC
November 12, 1998	Center for Latin American and Caribbean Studies, Athens, GA

FUNDING

2018-2020 $201,695 (total) $52,276 to Alabama	Co-Principal Investigator. (Collaborating PI's Sally Walker, UGA, David Gillikin, Union College, Alberto Perez-Huerta, U. of Alabama) "Collaborative research: The Antarctic scallop as key to paleoenvironments and sea ice conditions: understanding the modern to predict the past" National Science Foundation - Polar Programs PLR- 1745064.
2016-2020 $700,000 (total) $132,780 to Alabama	Principal Investigator (Collaborating PI's Catherine West, Boston U., and Michael Etnier, Portland State.). "Collaborative research: Archaeological and paleoenvironmental perspectives of climate change in the Aleutian Islands" National Science Foundation - Polar Programs PLR-1523034.
2014-2015 $4,255	Principal Investigator. "State of knowledge and synthesis of the natural, cultural, and economic conservation resources of the lower Alabama River area" National Park Service (pass through U. of S. Alabama PI Greg Waselkov).
2010-2013 $139,965 (total) $34,204 to Alabama	Principal Investigator (Collaborating PI's Elizabeth Reitz, U. of Georgia and Greg Waselkov, USA). "Collaborative research: Woodland subsistence seasonality on the northern coast of the Gulf of Mexico" National Science Foundation - Archaeology BCS-1026166.
2010-2012 $200,000	Principal Investigator (co-PI's Alberto Perez-Huerta and Paul Aharon). "Acquisition of a gas-source isotope ratio mass spectrometer (GS-IRMS) to upgrade the University of Alabama Geological Sciences Stable Isotope Laboratory" National Science Foundation - Instruments and Facilities EAR 0949303.
2011-2012 $31,050	Principle Investigator. "BP/MESC: Sentinel macrofauna: isotopic records of oil exposure in oyster shells" MESC Gulf Research Initiative (BP Oil Spill Research Fund).
2010-2011 $50,000	Principle Investigator "Growth rates in deep-sea stylasterid corals off the southeastern U.S." NOAA Coral Reef Conservation Program. Pass-through George Sedberry, Gray's Reef National Marine Sanctuary.
2008-2009 $97,660	Co- Principle Investigator (PI Harold Stowell). "Upgrade of the University of Alabama JEOL 8600 electron probe microanalyzer" National Science Foundation - Instruments and Facilities EAR-0744467.
2007-2009 $20,000	Principle Investigator. "Documentation of historical water quality and chemistry regimes in Mobile Bay and Choccolatta Bay through isotope analysis and mollusk species composition: evidence for hurricane impacts." Alabama Department of Conservation and Natural Resources.

2006-2007 $20,000	Principle Investigator. “Isotopic records of historical salinity variation in Choccolatta and Mobile Bays.” Alabama Department of Conservation and Natural Resources.
2005-2009 $598,295 $153,058 to Alabama	Principle Investigator (collaborating PI’s Greg Hodgins, U. of Arizona and (total) Dan Sandweiss, U. of Maine). “Collaborative research: molluscan radiocarbon as a proxy for upwelling in Holocene Peru." National Science Foundation – Earth System History. OCE-0502533.
2006 $9,000	Principle Investigator. “Documentation of historical water quality and chemistry regimes in Mobile Bay and Choccolatta Bay through isotope analysis and mollusk species composition” Alabama Department of Conservation and Natural Resources.
2005-2006 $5,000	Principle Investigator. “Continuous multi-proxy paleoclimate reconstruction from Lake Jackson, Alabama” University of Alabama Research Advisory Committee.
2004-2006 $119,320 (total) $9,460 to Alabama	Primary Participant. (George Sedberry - PI) “Estuary to the abyss: exploring along the latitude 31-30 transect - coral research” NOAA – Explore.
2003-2006 $86,237 (total) $11,600 to Andrus	Collaborator. (George Sedberry – PI, in collaboration with Chris Romanek) “Mounds, depressions, scarps and caves: exploration of habitat and species diversity on the Charleston Bump and Blake Plateau.” NOAA – Explore.
2003-2006 $8,400	Collaborator. (George Sedberry – PI, in collaboration with Chris Romanek) Funding for wreckfish otolith oxygen isotope research. South Carolina Department of Natural Resources
1999 $2,000	Principle Investigator. Funded field collections in Peru. Geological Society of America.
1999 $1,200	Principle Investigator. “Mid-Holocene paleo-ENSO determination via geoarchaeological /geochemical analyses.” Explorers Club International.
1998-1999 $1,200	Principle Investigator. Funded field collections in Peru. Center for Latin American and Caribbean Studies.
1997-1999 $5,500	Principle Investigator. Funded field collections in Peru and conference presentations. UGA Geology Department Wheeler-Watts fund.
1996-1997 $2,000	Principle Investigator. Funded field collections in Peru. UGA Geology Department Allard and Levy Awards.

1994-1996	Principle Investigator. Funded field collections on St. Catherine's Island, GA
$2,500	American Museum of Natural History.

HONORS AND AWARDS

2013	Keynote speaker to the Geocycles Workshop, Mainz, Germany
2013	Keynote speaker to the 3nd International Sclerochronology Conference
2009-2012	University of Alabama Leadership Board Faculty Fellow
2009	Keynote speaker to the 2nd International Sclerochronology Conference
2007	Inducted to Sigma Xi
1999 & 2000	Nominated for Excellence in Teaching Award, UGA
1999	American Geophysical Union Student Travel Award
1998-1999	Outstanding Graduate Teaching Award, UGA
1998-1999	Teaching Assistant of the Year, Department of Geology, UGA
1998	Geological Society of America Student Travel Award
1997	Gilles Allard Award for Field Geology, Department of Geology, UGA
1996	Sigma Gamma Epsilon National Honor Society in the Earth Sciences
1995-1996	Eugene Levy Marine Geology Award, Department of Geology, UGA

COURSES TAUGHT

The Dynamic Earth (Introduction to Geology)
The Earth through Time (Historical Geology)
Paleoclimatology
Climate Change
Sclerochronology
Communicating Geology
Advanced Topics in Paleoclimatology
Paleoclimate Seminar
Quaternary Climate and Environments
Evolution for Everyone
Stable Isotope Analysis
Late Quaternary Sea-level Curves: Proxies, Dating and Discrepancies

PROFESSIONAL AFFILIATIONS

American Geophysical Union
Geological Society of America
Society for American Archaeology

STUDENTS/POSTDOCTORAL SCIENTISTS ADVISED

Christine Bassett	M.S. 2016, Ph.D student
Heather Black	McNair Scholar 2011, M.S. 2014
Robin M. Cobb	McNair Scholar 2009, M.S. 2014
Miguel F. Etayo-Cadavid	M.S. 2009, Ph.D. 2010
Oindrila Das	Post-doc 6/2013 - 12/2014
Jamekia Durrough-Pritchard	M.S. student
Jestina A. Hansen	M.S. 2011
Christie A. Jones	M.S. 2010
Kathleen Kingry	M.S. 2016
Taylor Payne	M.S. 2016
Bailey Sanders	McNair Scholar 2010
Hillary Sletten	Ph.D. 2016
Jeixin Wei	M.S. 2014

Served as graduate committee member to 37 students at UA in Geological Sciences, Biological Sciences (3), Anthropology (6), and Music (3), and external member at the University of Georgia (3), University of South Alabama (1), Louisiana State University (1) and McMaster University (1)