CURRICULUM VITAE

Anthony (Tony) J. Martin Department of Environmental Studies, Emory University Atlanta, Georgia 30322 USA Telephone: (404) 727-6476; Fax: (404) 727-4448 E-mail: geoam@learnlink.emory.edu

EDUCATION

- Ph.D. in geology, University of Georgia, 1992.
- M.S. in geology, Miami University, Ohio, 1986.
- B.S. in geobiology (minor in art), Saint Joseph's College, Indiana, 1982, magna cum laude.

TEACHING EXPERIENCE

• Professor of Practice, Senior Lecturer, and Lecturer, Department of Environmental Studies and Geosciences Program, Emory University, Atlanta, Georgia: 1990-present.

Courses taught:

- ENVS 120 Human and Natural Ecology.
- ENVS 135/235 Environmental Geology.
- ENVS 142 Evolution of the Earth.
- ENVS 190 Dinosaurs and Their Environments: Freshman Seminar.
- ENVS/NBB 190 How to Interpret Behavior You Did Not See: Freshman Seminar.
- ENVS 241 Modern and Ancient Tropical Environments.
- ENVS 242 Modern and Ancient Tropical Environments Field Course, taught at Gerace Research Center, San Salvador Island (Bahamas).
- ENVS 342 Barrier Islands.
- ENVS 349 Ecology of Invasions.
- ENVS 361 Ecosystems through Time.
- ENVS 385 Special Topics: Paleoecology.
- ENVS 385 Special Topics: Ecological History of Australia and New Zealand.
- ENVS 390 Seminar in Environmental Issues.
- ENVS 410 Extinctions.
- ENVS 444 Ecosystems of the Southeastern U.S. Field Course.
- BIO/ENVS 475 Seminar in Paleontology.
- ENVS 495 Honors in Environmental Studies.
- ENVS 499 Independent Research.
- BIO 341 Evolutionary Biology and BIO/ENVS 349 (Ecology of Invasions) as summer study-abroad courses in Queensland, Australia.

• Affiliated faculty, Oxford College of Emory University, 1995-Present.

Courses co-taught (with Stephen Henderson and Michael McQuaide, Oxford College):

• GEO 100 (Desert Geology), field course in the Chihuahuan Desert (New Mexico and

Texas) and Sonoran Desert (Arizona).

- GEO 200 (Dinosaurs and Their World), field course in Colorado and Utah, each course cotaught with Stephen Henderson of Oxford College.
- SOC 231 (Social Change in Developing Societies), field course about shamanism in Ecuador.

• Advisor for undergraduate student research from 1994-present; 17 student-authored abstracts accepted for presentation at meetings of the Geological Society of America, Society of Vertebrate Paleontology, North American Paleontological Convention, and Southeastern Ecology and Evolution Conference.

• Graduate teaching assistant, Department of Geology, University of Georgia: 1985-1989. Taught lab sections for historical geology and invertebrate paleontology, and large (100+ students) lecture classes in physical geology for non-science majors.

• Graduate teaching assistant, Department of Geology, Miami University (Ohio): 1982-1984. Taught lab sections for historical geology and invertebrate paleontology.

BOOKS PUBLISHED

- Varricchio, D.J., **Martin, A.J.**, and Katsura, Y. 2009. *El Dinosaurio Que Excavó Su Madriguera* [The Dinosaur That Dug Its Burrow]. ¡Fundamental! 15, Fundación Conjunto Paleontológico de Teruel-Dinópolis, Teruel, Spain, 72 p. (In English and Spanish.)
- Martin, A.J. 2006. *Trace Fossils of San Salvador*. Gerace Research Center, San Salvador, Bahamas, 80 p.
- Martin, A.J. 2006. *Introduction to the Study of Dinosaurs* [Second Edition]. Blackwell Publishing, Oxford, U.K., 560 p.
- Martin, A.J. 2001. *Introduction to the Study of Dinosaurs* [First Edition]. Blackwell Science, Malden, Massachusetts, 426 p.

BOOK IN PRESS

Martin, A.J. *Life Traces of the Georgia Coast.* Indiana University Press, Bloomington, Indiana: revised manuscript submitted in May 2011: anticipated publication in fall 2011.

PUBLIC-OUTREACH COURSES (DVD)

Martin, A.J., and Hawks, J. 2010. *Major Transitions in Evolution*. The Teaching Company, Chantilly, Virginia: 24 lectures on DVD and course guidebook, 116 p. Course co-taught with paleoanthropologist John Hawks; I wrote and delivered Lectures 1-17, he wrote and delivered Lectures 18-23, and we collaborated on Lecture 24.

EDITED VOLUMES

- Pienkowski, G., **Martin, A.J.**, and Meyer, C.A. (editors). 2010. Advances in Marginal-Marine and Non-Marine Ichnology (Special Issue), Geological Quarterly, Polish Geological Institute, 53.
- Martin, A.J. (editor). 2003. Permo-Carboniferous Ichnology Workshop (Abstract Volume). Alabama Museum of Natural History, Tuscaloosa, Alabama: 76 p.

MANUSCRIPTS IN REFEREED JOURNALS AND EDITED VOLUMES

- Martin, A.J., Rich, T.H., Hall, M., Vickers-Rich, P., and Vasquez-Prokopec, G. 2011. A polar dinosaur-track assemblage from the Eumeralla Formation (Albian), Victoria, Australia. Alcheringa: An Australasian Journal of Palaeontology: <u>doi:</u> <u>10.1080/03115518.2011.597564</u>, 1-19.
- Martin, A.J., and Rindsberg, A.K. 2011. Ichnological diagnosis of ancient storm-washover fans, Yellow Banks Bluff, St. Catherines Island. *In* Bishop, G.A, Rollin, H.B., and Thomas, D.H. (editors), *Geoarchaeology of St. Catherines Island, Georgia*. Anthropological Papers of the American Museum of Natural History, No. 94: 114-127.
- Martin, A.J., and Varricchio, D.J. 2011. Paleoecological utility of insect trace fossils in dinosaur nesting sites of the Two Medicine Formation (Campanian), Choteau, Montana. *Historical Biology*, 23: 15-25: doi: 10.1080/08912963.2010.505285.
- Martin, A.J., Vazquez-Prokopec, G.M., and Page, M. 2010. First known feeding trace of the Eocene bottom-dwelling fish *Notogoneus osculus* and its paleontological significance. *PLoS One*, 5: http://dx.plos.org/10.1371/journal.pone.0010420.
- Tacker, R.C., Martin, A.J., and Weaver, P.G. 2010. Trace fossils versus body fossils: *Oldhamia recta* revisited. *Precambrian Research*, 178: 43-50.
- Martin, A.J. 2009. Neoichnology of an Arctic fluvial point bar, Colville River, Alaska (USA). *Geological Quarterly*, 53: 383-396.
- Pienkowski, G., **Martin, A.J.**, and Meyer, C.A. (editors). 2009. Preface. Special Issue, Second International Congress on Ichnology (Ichnia 2008). *Geological Quarterly*, 53: 369-371.
- Martin, A.J. 2009. Applications of trace fossils to interpreting paleoenvironments and sequence stratigraphy. *In* Duncan, M.S., and Kath, R.L. (editors), Fall Line Geology of East Georgia: With a Special Emphasis on the Upper Eocene, Georgia Geological Society Guidebook, 29: 35-42.
- Martin, A.J. 2009. Dinosaur burrows in the Otway Group (Albian) of Victoria, Australia and their relation to Cretaceous polar environments. *Cretaceous Research*, 30: 1223-1237.
- Martin, A.J., Rich, T.H., Poore, G.C.B., Schultz, M.B., Austin, C.M., Kool, L., and Vickers-Rich, P. 2008. Fossil evidence from Australia for oldest known freshwater crayfish in Gondwana. *Gondwana Research*, 14: 287-296.
- Varricchio, D.J., Martin, A. J., and Katsura, Y. 2007. First trace and body fossil evidence of a burrowing, denning dinosaur. *Proceedings of the Royal Society of London B*, 274: 1361-1368.
- Martin, A.J., and Rindsberg, A.K. 2007. Arthropod tracemakers of *Nereites*? Neoichnological observations of juvenile limulids and their paleoichnological applications. *In* Miller, W.M., III (editor), *Trace Fossils: Concepts, Problems, Prospects*, Elsevier, Amsterdam: 478-491.
- Gregory, M.R., Campbell, K.A., Zuraida, R., and Martin, A.J. 2006. Plant traces resembling *Skolithos. Ichnos*, 13: 205-216.
- Martin, A.J. 2006. Resting traces of *Ocypode quadrata* associated with hydration and respiration: Sapelo Island, Georgia, USA. *Ichnos*, 13: 57-67.
- Martin, A.J. 2006. A composite trace fossil of decapod and hymenopteran origin from the Rice Bay Formation (Holocene), San Salvador, Bahamas. *In* Gamble, D., and Davis, R.L. (editors), 12th Symposium of the Geology of the Bahamas and Other Carbonate Regions, Gerace Research Center, San Salvador, Bahamas: 99-112.

- Buatois, L.A., Gingras, M.K., MacEachern, J., Mángano, M.G., Zonneveld, J.-P., Pemberton, S. G., Netto, R.G., and Martin, A.J. 2005. Colonization of brackish-water systems through time: Evidence from the trace-fossil record. *Palaios*, 20: 321-347.
- Martin, A.J., and Pyenson, N.D. 2005. Behavioral significance of vertebrate trace fossils from the Union Chapel Mine Site. *In* Buta, R J., Rindsberg, A.K., and Kopaska-Merkel, D.C. (editors), *Pennsylvanian Footprints in the Black Warrior Basin of Alabama*, Alabama Paleontological Society, Monograph No. 1, Birmingham, Alabama: 59-73.
- Buta, R.J., Kopaska-Merkel, D.C., Rindsberg, A.K., and Martin, A.J. 2005. Atlas of Union Chapel Mine invertebrate trackways and other traces. *In* Buta, R.J., Rindsberg, A.K., and Kopaska-Merkel, D.C. (editors), *Pennsylvanian Footprints in the Black Warrior Basin of Alabama*, Alabama Paleontological Society, Monograph No. 1, Birmingham, Alabama: 277-337.
- Gregory, M.R., **Martin, A.J.**, and Campbell, K.A. 2004. Composite trace fossils formed by plant and animal behavior in the Quaternary of northern New Zealand and Sapelo Island, Georgia (USA). *Fossils and Strata*, 51: 88-105.
- Hasiotis, S.T., Wellner, R.W., **Martin, A.J.**, and Demko, T.M. 2004. Vertebrate burrows from Triassic and Jurassic continental deposits of North America and Antarctica: their paleoenvironmental and paleoecological significance. *Ichnos*, 11: 103-124.
- Bromley, R.G., Uchman, A., Gregory, M.R., and Martin, A.J. 2003. *Hillichnus lobosensis* igen. et isp. nov., a complex trace fossil produced by tellinacean bivalves, Paleocene, Monterey, California, U.S.A. *Palaeogeography, Palaeoclimatology, Palaeoecology*, Special Issue (Complex Trace Fossils), 192: 157-186.
- Curran, H.A., and Martin, A.J. 2003. Intertidal mounds of tropical callianassids provide substrates for complex upogebiid shrimp burrows: Modern and Pleistocene examples from the Bahamas. *Palaeogeography, Palaeoclimatology, Palaeoecology*, Special Issue (Complex Trace Fossils), 192: 229-245.
- Rindsberg, A.K., and Martin, A.J. Arthrophycus and the problem of compound trace fossils. Palaeogeography, Palaeoclimatology, Palaeoecology, Special Issue (Complex Trace Fossils), 192: 187-219.
- Martin, A.J. 2002. Dinosaur evolution: From where did they come and where did they go? In Scotchmoor, J.D., Breithaupt, B.H., Springer, D.A., and Fiorillo, A.R. (editors), Dinosaurs: The Science Behind the Stories, American Geological Institute, Alexandria, Virginia: 23-30.
- Martin, A.J. 1999. Fossil upogebiid burrows and their geologic significance: Grotto Beach Formation (Pleistocene), San Salvador, Bahamas. In Curran, H.A., and Mylroie, J.E. (editors), Proceedings of the 9th Symposium on the Geology of the Bahamas and Other Carbonate Regions, Bahamian Field Station, San Salvador: 81-92.
- Hasiotis, S.T., and Martin, A.J. 1999. Probable reptile nests from the Upper Triassic Chinle Formation, Petrified Forest National Park, Arizona. *In* Santucci, V. L., and McClelland, L. (editors), *National Park Service Paleontological Research Volume 4*, Geologic Resources Division Technical Report NPS/NRGRD/GRDTR-99/03: 85-90.
- Martin, A.J., and Hasiotis, S.T. 1998. Vertebrate tracks and their significance in the Chinle Formation (Late Triassic), Petrified Forest National Park, Arizona. *In* Santucci, V. (editor), *National Park Service Paleontological Research Volume 3*, Geologic Resource Division Technical Report NPS/NRGRD/GRDTR-98/01: 138-143.

- Wahl, A., Martin, A.J., and Hasiotis, S.T. 1998. Vertebrate coprolites and coprophagy traces, Chinle Formation (Late Triassic), Petrified Forest National Park, Arizona. *In* Santucci, V. (editor), *National Park Service Paleontological Research Volume 3*, Geologic Resource Division Technical Report NPS/NRGRD/GRDTR-98/01: 144-148.
- Martin, A.J., and Crawford, R.F., III. 1996. Trace fossils in the Pinelog Formation, Piedmont-Blue Ridge, Georgia, and their application to sedimentology, stratigraphy, and structural geology. *Georgia Geological Society Guidebook*, 16: 89-96.
- Moon, J.W., and Martin, A.J. 1994. Trace fossils and ichnofacies of the Lower Ordovician Mungok Formation, Yeongweol, Kangweondo, Korea. KORDI Research Papers, 11:1421-1432.
- Martin, A.J. 1992. Semiquantitative and statistical analysis of bioturbate textures in the Sequatchie Formation (Upper Ordovician), Georgia and Tennessee. U.S.A. *Ichnos*, 2: 117-136.
- Martin, A.J. 1992. Peritidal and estuarine facies in the Shellmound and Mannie Shale Members, Sequatchie Formation. *In* Chowns, T.M., and O'Connor, B.J. (editors), *Cambro-Ordovician Strata in Northwest Georgia and Southeast Tennessee; The Knox Group and the Sequatchie Formation*, Georgia Geological Society Guidebook, 12: 107-124.
- Martin, A.J. 1992. Stratigraphy and depositional environments of the Sequatchie Formation. In Chowns, T.M., and O'Connor, B.J. (editors), Cambro-Ordovician Strata in Northwest Georgia and Southeast Tennessee; The Knox Group and the Sequatchie Formation, Georgia Geological Society Guidebook, 12: 89-106.

MANUSCRIPTS REVIEWED OR IN PREPARATION

- Martin, A.J., Kool, L., and Garvey, J. Enormous freshwater decapod burrows from the Early Cretaceous of Victoria, Australia. To be submitted to *Palaeontologia Electronica* by September 2011.
- Martin, A.J., and Varricchio, D.J. Evidence for oldest known insect-on-insect parasitoid behavior in the Late Cretaceous of Montana. To be submitted to *PLoS One* by October 2011.

ABSTRACTS IN PROCEEDINGS VOLUMES (in chronological order, since 2002)

- Martin, A.J., Noto, C. and Chiappe, L. 2011. A burrow runs through it: unusual co-occurrence of a large mammal burrow system and dinosaur skeleton in the Morrison Formation of Utah. *Journal of Vertebrate Paleontology*, 31 *[Suppl. to No. 3]*: in press.
- Martin, A.J., Skaggs, S.A., Vance, R.K., and Greco, V. 2011. Ground-penetrating radar investigation of gopher-tortoise burrows: refining the characterization of modern vertebrate burrows and associated commensal traces. *Geological Society of America Abstracts with Programs*, 44: in press.
- Martin, A.J. 2011. Ichnology in a time of climate change: predicted effects of rising sea level and temperatures on organismal traces of the Georgia coast. *Geological Society of America Abstracts with Programs*, 43(2): 86.
- Rindsberg, A.K., and Martin, A.J. 2011. Ringgold Gap, Georgia: a classic locality for Ordovician and Silurian trace fossils. *Geological Society of America Abstracts with Programs*, 43(2): 13.

- Shope, J.M., and **Martin, A.J**. 2011. Lithology, physical sedimentary structures, and trace fossils of the Pinelog Formation, and their applications to mapping in the Blue Ridge Province of Georgia. *Geological Society of America Abstracts with Programs*, 43(2): 68.
- Martin, A.J., and Rindsberg, A.K. 2010. Neoichnology of storm washover fans on the Georgia coast and its uses in paleoecology. *Geological Society of America Abstracts with Programs*, 42(1): 104.
- Rindsberg, A.K., and **Martin, A.J.** 2010. The bioprint of burrowing Paleozoic arthropods. *Geological Society of America Abstracts with Programs*, 42(1): 105.
- Goldstein, D., McKinney, M., and Martin, A.J. 2010. Mobile predators and mobile prey: compound traces indicate active hunting behavior. *Geological Society of America Abstracts* with Programs, 42(1): 104.
- Martin, A.J., Rich, T.H., Vickers-Rich, P., Kool, L., and Trusler, P. 2009. From crayfish to dinosaurs: Early Cretaceous trace fossils of Victoria, Australia and their uses in interpreting circumpolar environments. *Geological Society of America Abstracts with Programs*, 41(7): 162.
- Martin, A.J., and Varricchio, D.J. 2009. Paleoecological utility of insect trace fossils in dinosaur nesting sites of the Two Medicine Formation (Campanian), Choteau, Montana. In Varricchio, D.J., Horner, J.R., Jackson, F.D., and Zelenitsky, D. (editors), *Fourth International Symposium on Dinosaur Eggs and Babies Conference*, Museum of the Rockies Occasional Paper No. 4: 25.
- Martin, A.J., and Kool, L. 2009. Burrows of unusual size: enormous decapod trace fossils in fresh-water facies of Early Cretaceous polar environments, Victoria, Australia. *North American Paleontological Convention (NAPC) Abstracts*, 9: 385.
- Martin, A.J., and Rindsberg, A.K. 2009. Take continental ichnology to the masses. *North American Paleontological Convention (NAPC) Abstracts*, 9: 21.
- Martin, A.J., and Rindsberg, A.K. 2008. Ichnological signatures of storm-washover fan deposits: Yellow Banks Bluff, St. Catherines Island, Georgia. *Geological Society of America Abstracts with Programs*, 40(4): 15.
- Martin, A. J. 2008. Neoichnology of an Arctic fluvial point bar, Colville River, Alaska (USA). *Ichnia 2008, Abstracts and Program*, Cracow, Poland, v. 2: 75.
- Martin, A.J. 2008. Tetrapod tracks and landscapes. Ichnia 2008, Abstracts and Program, Cracow, Poland, 2: 74.
- Martin, A.J., and Varricchio, D.J. 2008. Composite trace fossils in terrestrial environments and their resultant ichnofabrics. *Ichnia 2008, Abstracts and Program*, Cracow, Poland, 2: 76.
- Martin, A.J., Rich, T.H., Poore, G.B.C., Schultz, M.B., Austin, C.M., Kool, L., and Vickers-Rich, P. 2008. Early Cretaceous trace and body fossils in Australia establish the oldest known Gondwanan crayfish in their probable place of origin. *Geological Society of America Abstracts and Program*, 40(6): 284.
- Tacker, R.C., **Martin, A.J.**, Weaver, P.G., Lawver, D., and Williams, L., 2008. Body fossil vs. ichnofossil: *Oldhamia recta* revisited. *Geological Society of America Abstracts and Program*, 40(6): 392.
- Henderson, S.W., and **Martin, A.J.** 2007. Exploring connections: Field-based geology courses in the liberal arts. *Geological Society of America Abstracts with Programs*, 39(2): 90.
- Martin, A.J., and Rindsberg, A.K. 2007. Neoichnological novelties from Sapelo Island (Georgia) and their applications to the fossil record. *Geological Society of America Abstracts with Programs*, 39(2): 73.

- Martin, A. J., Vickers-Rich, P., Rich, T.H., and Kool, L. 2007. Polar dinosaur tracks in the Cretaceous of Australia: though many were cold, few were frozen. *Journal of Vertebrate Paleontology*, 27 [Suppl. to No. 3]: 112A.
- Rindsberg, A.K., and Martin, A.J. 2007. Ichnodiversity does not equal biodiversity: Bivalve trace fossils from the Pennington Formation (Upper Mississippian) of Georgia. *Geological Society of America Abstracts with Programs*, 39(2): 36.
- Varricchio, D.J., Martin, A. J., and Katsura, Y. 2007. Burrowing behavior in a new ornithopod dinosaur from the mid-Cretaceous of Montana. *Journal of Vertebrate Paleontology*, 27, [Supplement to No. 3): 162A.
- Gregory, M.R., Hikuroa, D., Phillips, K., Campbell, K.A., and Martin, A.J. 2006. Moa trackways and footprints: three new discoveries. *In* Stewart, B., Wallace C., Lecointre, J., and Reyners, K. (*editors*), *Geosciences '06: Our Planet, Our Future*: Geological Society of New Zealand and New Zealand Geophysical Society, Programme and Abstracts, 122: 26.
- Martin, A.J., and Rindsberg, A.K. 2006. Cubichnia revisited: When is a resting trace just a resting trace? *Geological Society of America Abstracts with Programs*, 38(7): 476.
- Martin, A.J., and Rindsberg, A.K. 2006. So happy together: Multiphyletic group behavior at the Union Chapel tracksite (Pennsylvanian, Alabama). *Geological Society of America Abstracts with Programs*, 38(2): 72.
- Buatois, L.A., Gingras, M.K., MacEachern, J., Mángano, M.G., Zonneveld, J.-P., Pemberton, S.G., Netto, R.G., and Martin, A.J. 2005. Colonization of brackish-water systems through time: Evidence from the trace-fossil record. *American Association of Petroleum Geologists Bulletin*, 89.
- **Martin, A.J.** 2005. Mudcracks as cryptic ichnofabrics: avian footprints as catalysts for mudcrack development. *In* Campbell, K.A., and Gregory, M.G. (editors), 8th International Ichnofabric Workshop, Programme and Abstracts, Auckland, New Zealand: 53-54.
- Martin, A.J. 2005. Avian tracks as initiators of mudcracks: Models for similar effects of nonavian theropods? *Journal of Vertebrate Paleontology*, 25 [Supplement to No. 3]: 89A.
- Martin, A.J. 2004. A composite trace fossil of decapod and hymenopteran origin from the Rice Bay Formation (Holocene), San Salvador, Bahamas. *In* Gamble, D., and Davis, R.L. (editors), 12th Symposium of the Geology of the Bahamas, Abstracts and Programs, Gerace Research Center, San Salvador, Bahamas: 21-22.
- Martin, A.J. 2004. Tracking as neoichnology: contributions to the science, limitations, and future applications. *In* Buatois, L.A., and Mángano M.G. (editors), *Ichnia 2004: First International Congress on Ichnology Abstract Book*, Museo Paleontológico Egidio Ferluglio, Trelew, Argentina: 51-52.
- Martin, A. J., and Rainforth, E.M. 2004. A theropod resting trace that is also a locomotion trace: case study of Hitchcock's specimen AC 1/7. *Geological Society of America Abstracts with Programs 36*(2): 96.
- Martin, A.J., and Rindsberg, A.K. 2004. Insights from the Union Chapel Mine, Alabama (USA) on Carboniferous vertebrate behavior. *In* Buatois, L.A., and Mángano, M.G. (editors), *Ichnia* 2004: First International Congress on Ichnology Abstract Book, Museo Paleontológico Egidio Ferluglio, Trelew, Argentina: 52.
- Rindsberg, A. K., and Martin, A.J. 2004. Invertebrate trace fossils from the Union Chapel Mine of Alabama (Early Pennsylvanian: Langsettian). *In* Buatois, L.A., and Mángano, M.G. (editors), *Ichnia 2004: First International Congress on Ichnology Abstract Book*, Museo Paleontológico Egidio Ferluglio, Trelew, Argentina: 68-69.

- Rindsberg, A.K., and Martin, A.J. 2004. One ichnology. *In* Buatois, L.A., and Mángano, M.G. (editors), *Ichnia 2004: First International Congress on Ichnology Abstract Book*, Museo Paleontológico Egidio Ferluglio, Trelew, Argentina: 69.
- Sedgwick, C.W., and **Martin, A.J.** 2004. Monitoring of urban beaver (*Castor canadensis*) through tracking methods, Atlanta, Georgia. *Southeastern Ecology and Evolution Conference Abstracts*, Georgia Tech University, Atlanta, Georgia: 52.
- Martin, A.J. 2003. Terrestrial vertebrate traces as biofacies indicators: insights from neoichnology. Geological Society of America Abstracts with Programs 35(3): 25.
- Martin, A.J. 2003. *Undichna*: a trace fossil bridging the gap between fish and tetrapods. *In* Martin, A. J. (editor), *Permo-Carboniferous Ichnology Workshop*, Alabama Museum of Natural History, Tuscaloosa, Alabama: 19-20.
- Martin, A.J., and Henderson, S.W. 2003. When does a taphocoenose become a biocoenose? A storm-generated inland molluscan assemblage, San Salvador Island, Bahamas. *Geological Society of America Abstracts with Programs*, 35(2): 64.
- Martin, A.J., Gregory, M.R., and Campbell, K.A. 2003. Composite plant and invertebrate ichnofabric relationships: examples from northern New Zealand and Sapelo Island, Georgia. *In* Wetzel, A. (editor), *International Ichnofabric Workshop VII*, Basel, Switzerland, Abstracts and Program, 7: 38-39.
- McGee, D.K., and Martin, A.J. 2003. Comparative analysis of fossil reefs on San Salvador Island, Bahamas: similarities and differences in species and facies. *Geological Society of America Abstracts with Programs* 35(2): 16.
- Traynham, B.N., and **Martin, A.J.** 2003. Comparison of Pleistocene and modern root traces on Man Head Cay, San Salvador Island, Bahamas, and implications for plant biogeography over time. *Geological Society of America Abstracts with Programs*, 35(2): 16.
- Bromley, R.G., Uchman, A., Gregory, M.R., and Martin, A.J. 2003. *Hillichnus lobosensis* igen. et isp. nov., a complex trace fossil produced by tellinacean bivalves, Paleocene, Monterey, California, USA. *International Palaeontological Congress 2002*, Geological Society of Australia, Abstracts, 68: 24-25.
- Martin, A.J. 2002. The study of trace fossils as a component of paleontological education. *Geological Society of America Abstracts with Programs*, 34(2): 91.
- Martin, A.J., and Gregory, M.R. 2002. Compound and complex trace fossils formed by plant and animal behavior in the Pleistocene of Sapelo Island, Georgia, (*USA*). *International Palaeontological Congress 2002*, Geological Society of Australia, Abstracts, 68: 107-108.
- Martin, A.J. 2002. The ones that got away: fish swimming traces from the Carboniferous (Westphalian A) of Alabama, and their paleontological value. *Journal of Vertebrate Paleontology*, 22 [Supplement to No. 3]: 83A.
- Pyenson, N.D., and Martin, A.J. 2002. Quantified approach for predicting tracemaker size: applications in tetrapod ichnology using Carboniferous temnospondyl trackways from the Union Chapel Mine site, Alabama. *Journal of Vertebrate Paleontology*, 22 [Supplement to No. 3]: 97-98A.

PUBLIC-OUTREACH ARTICLES

Martin, A.J. 2011. The Cretaceous Crayfish of Victoria. *Australian Age of Dinosaurs Journal*, Issue 8: in press.

- Martin, A.J. 2011. Sleeping with the Dinosaur Tracks. *Australian Age of Dinosaurs Journal*, Issue 8: in press.
- Martin, A.J. 2010. Evolution Down Under. Emory in the World Magazine, Spring 2010.
- Martin, A.J. 2009. Dinosaurs Down Underground. *Australasian Science Magazine*, October, 2009: 14-16. [Cover article]

RESEARCH COLLABORATIONS

• Research Associate in Paleontology, North Carolina Museum of Natural Sciences (Raleigh); research on Ediacaran fossils from the Carolina Terrane: ongoing.

• Honourary Research Associate, 2006-present, School of Geosciences, Monash University, Victoria, Australia.

• Research Collaborator, Australian Research Council (ARC) Linkage Grant LP0775020 (2006-7), *A New Approach to the Collection of a Large Suite of Dinosaur Specimens ("Dinosaurs on Ice"*); primary investigators Thomas H. Rich (Museum of Victoria) and Patricia Vickers-Rich (Monash University); research role as ichnologist in investigating Liscomb dinosaur bone bed in Prince Creek Formation (Upper Cretaceous), North Slope, Alaska, August, 2007.

AWARDS, GRANTS, AND SCHOLARSHIPS (since 2003)

• Nominated for Albert E. Levy Award for Excellence in Scientific Research, Emory University, 2008, 2009.

• Co-winner of the Paleonturology Award 2008, an international award for best paper in paleontology, by the Fundación Conjunto Paleontológico de Teruel-Dinópolis (Spain), for the paper *First Trace and Body Fossil Evidence of a Burrowing, Denning Dinosaur*, published in Proceedings of the Royal Society of London B in 2007.

• Center for Creativity and the Arts grant, Emory University, *The Art and Science of Ray Troll: A Visual Celebration of Evolution and Natural History*, spring semester, 2009: \$3,000.

• Excellence in Teaching Award, Center for Teaching and Curriculum, Emory College, 2007.

• Participating faculty in Emory University's Science Experience Abroad Program (SEA), recognized as a "Best Practice" in international education by the Institute of International Educators (IIE); 2007 Andrew Heiskell Award for Innovations in International Education.

• Winship Award, Center for Teaching and Curriculum, Emory University, 2005-2006, Educational Enhancement of Environmental Studies Courses through Incorporation of Indigenous Australian Tracking Perspectives.

Theory-Practice Learning at Emory, 2005-2006, supplemental grant for Winship Award, \$500.
Piedmont Project III, Emory University, 2003, *Course Revision of 'How to Interpret Behavior You Did Not See'* (Environmental Studies/Neuroscience and Behavioral Biology 190)": \$1,000.

GRANT APPLICATIONS SUBMITTED (since 2006)

• University Research Committee, Emory University, *Field Investigation of Trace Fossils in Early Cretaceous Rocks of Coastal Victoria, Australia*, \$11,238, resubmitted September 2008, rejected January 2009. (Originally submitted February 2008.)

• National Geographic Society, Research and Exploration Grant, *Field Investigation of Trace Fossils in Early Cretaceous Rocks of Coastal Victoria, Australia*, \$10,100. Pre-application

submitted December 2006 and approved in February 2007; full application submitted in June 2007; rejected December 2007.

• Since these grants were rejected, I have: documented the oldest fossil crayfish in the Southern Hemisphere; interpreted the oldest dinosaur burrows from the geologic record; discovered and described the largest assemblage of polar-dinosaur tracks from the Southern Hemisphere; and made other significant trace-fossil discoveries in Victoria, Australia, reported in seven peer-reviewed articles and abstracts thus far. Results matter.

TEACHING RECOGNITION: AWARDS AND NOMINATIONS

• Lecturer with <u>*The Teaching Company*</u> (Chantilly, Virginia) for course titled *Major Transitions in Evolution*, course released on DVD in October 2010.

• Phi Beta Kappa, selected as professor exemplifying excellence in teaching, Emory College, spring 2008.

• Center for Teaching and Curriculum (CTC) Excellence in Teaching Award, Emory College, 2007.

• Nominated for Williams Excellence in Teaching Award and Center for Teaching and Curriculum Excellence in Teaching Award, Emory College: 2005, 2006, and 2007.

• Winship Award, 2005-2006, Center for Teaching and Curriculum, Emory University, for project titled: *Educational Enhancement of Environmental Studies Courses through Incorporation of Indigenous Australian Tracking Perspectives*; one-semester sabbatical awarded for teaching development, conducted at Monash University, Melbourne, Australia.

• Participating faculty in Emory University's Science Experience Abroad Program (SEA),

recognized as a "Best Practice" in international education by the Institute of International

Educators (IIE); 2007 Andrew Heiskell Award for Innovations in International Education.

• Nominated for Outstanding Teacher, Most Innovative Teacher, and Dedicated Service awards by Student Government Association of Emory University, 1995 and 1997.

• Excellence in Teaching by Alpha Epsilon Upsilon honor society, Emory University, 1994.

• Outstanding Graduate Teaching Assistant award, University of Georgia, 1989.

UNIVERSITY AND DEPARTMENTAL SERVICE

• Department of Environmental Studies, Study-Abroad Coordinator, 2008-present.

• Faculty participant, Center for Science Education workshop for Teacher Evolution Workshop, July 2009.

• Department of Environmental Studies, Search Committee, 2008.

• Department of Environmental Studies, Curriculum Committee, 2008-present.

• Williams/Center for Teaching and Curriculum, Teaching Award Committee, 2008.

• Rhodes Scholarship Committee, 2007.

• Education Abroad Committee, Center for International Programs Abroad, Emory University, 2006-2009; chair, Fall, 2008.

• Non-Emory Study Abroad Subcommittee (Education Abroad Committee), 2008.

- Science Education Abroad Committee, Center for International Programs Abroad, 2007.
- Center for Teaching and Curriculum Peer Mentoring Program, 2007-2008.
- Marshall Scholarship Committee, Emory University, 2006.
- Winship Award Committee, 2006-2007.

• Organizer of Department of Environmental Studies seminar series, 2003-2005. Invited, scheduled, and hosted speakers in a wide variety of topics in environmental studies from the natural sciences, social sciences, and humanities.

• Faculty participant in *Teaching Evolution*, workshop for Atlanta public high school teachers, coordinated through the Center for Science Education, Emory University, July 2003.

- Freshman Advising and Mentoring at Emory, faculty leader and freshman advisor, 1993-2006.
- Elementary Science Education Partners, faculty mentor, 1996-1998.

• Emory University Experts Guide (News and Information), listed as expert in paleontology and geology for media consultation, 1993-Present.

- Member of Faculty Senate Committee on the Environment, 1991-2002.
- Member of Carpool Task Force, 1997-1999.
- Member of Educational Policy Committee, Member, 1998-2001.

• Project LearnLink (electronic bulletin-board system), moderator of public-outreach conference *Ask A Scientist*, 1995-2000.

CONTINUING EDUCATION (Since 2002)

2010 – Society of Vertebrate Paleontology field trip, Devonian environments of the Catskill Formation, Pennsylvania, October 2010; poster presentation in Education and Outreach session at Society of Vertebrate Paleontology meeting, Pittsburgh, Pennsylvania, October 2010; Atlanta Bloggers Workshop, December 2010.

2009 – Caldwell Conference (American Museum of Natural History), geoarchaeology field trips on St. Catherines Island, Georgia, March 2009; North American Paleontological Convention field trip, Devonian-Carboniferous strata and fossils of northern Kentucky, June 2009; Dinosaur Eggs and Babies Conference, field trip to Choteau, Montana, August 2009. Geological Society of America field trip, geology and post-eruption ecology of Mt. St. Helens, Washington. 2008 – Spatial Analysis in Environmental Health Workshop, March 2008, Emory University. 2007 – Society of Vertebrate Paleontology, media workshop; Geological Society of America (Southeastern Section) meeting field trips: geology and archaeology of St. Catherines Island, Georgia; comparative environmental geology of Wassaw Island and Tybee Island (Georgia). **2006** – Semester sabbatical as Honorary Research Associate in the School of Geosciences. Monash University, Melbourne, Australia, working with personnel in the Palaeontology Research Group, Monash Centre for Science Education, and Victoria Museum of Melbourne; Georgia Geologic Society annual field trip, Jekyll Island (Georgia coast). **2005** – Society of Vertebrate Paleontology field trip, geology and paleontology of Triassic formations of the Colorado Plateau, Arizona; Basic and Advanced Tracking Courses, A Naturalist's World, Montana and Wyoming (Yellowstone National Park). **2004** – Southeastern Geological Society of America (G.S.A.) field trip, paleontology of Chesapeake Bay, Maryland and Virginia; International Ichnological Congress field trip, Patagonia, Argentina; Symposium on Geology of the Bahamas field trips, Long Island and San Salvador, Bahamas; Georgia Geologic Society annual field trip; Society of Vertebrate Paleontology field trip, dinosaur tracks of Dinosaur Ridge, Denver, Colorado. 2003 – Southeastern G.S.A. field trip, Late Cretaceous paleontology of Coon Creek, Tennessee; International Ichnofabric Workshop field trip, Switzerland; Georgia Geologic Society annual field trip; Tracker School Expert Tracking Course, New Jersey.

2002 – International Paleontological Congress field trip, Permian paleontology and paleoenvironments, South Sydney Basin (New South Wales), Australia; Wilderness Awareness School Wolf Tracking Expedition, Idaho; Society of Vertebrate Paleontology field trip, dinosaur tracks of Oklahoma, Colorado, and New Mexico; Georgia Geologic Society annual field trip.

PROFESSIONAL MEMBERSHIPS

- Atlanta Geological Society, vice president, 1999-2001.
- Georgia Geologic Society, president, 1994-1995, 2001-2002.
- Geological Society of America.
- National Association of Geoscience Teachers.
- Paleontological Society, chair of Southeastern Section, 2011-2012.
- Society of Vertebrate Paleontology.

INVITED LECTURES: VENUES (in alphabetical order)

- Atlanta Geological Society: Atlanta, Georgia.
- Atlanta Science Tavern: Atlanta, Georgia.
- Auburn University: Department of Geology, Auburn, Alabama.
- Berry College: Department of Physics, Astronomy, and Geology, Rome, Georgia.
- Clemson University: Department of Geological Sciences, Clemson, South Carolina.
- Department of Natural Resources (State of Georgia): Atlanta, Georgia.
- Emory University: Department of Environmental Studies, Atlanta, Georgia.
- Emory University: Emeritus Faculty (monthly meeting).
- Environmental Protection Division (Region VI): Atlanta, Georgia.
- Fernbank Museum of Natural History: Atlanta, Georgia.

• Georgia College and State University: Department of Biology and Environmental Science, Milledgeville, Georgia.

- Georgia Mineral Society: Atlanta, Georgia.
- Georgia Ornithological Society: St. Catherines Island, Georgia.
- Georgia Southern University: Statesboro, Georgia.
- Georgia State University: Department of Geology, Atlanta, Georgia.
- Gerace Research Centre: San Salvador, Bahamas
- LaTrobe University: Department of Zoology, Melbourne, Australia.
- Macon Museum of Art and Science: Macon, Georgia.
- Meredith College: Raleigh, North Carolina (sponsored by Templeton Foundation).
- Monash University: School of Geosciences, Clayton (Victoria), Australia.
- Monash Science Centre: Clayton (Victoria), Australia
- Montana State University: Bozeman, Montana.
- North Carolina Museum of Natural Sciences: Raleigh, North Carolina.
- North Carolina State University: Raleigh, North Carolina.
- University of Auckland: Department of Geology, Auckland, New Zealand.
- Universidad de Salamanca: Departmento de Geología, Salamanca, Spain.
- University of Georgia: Department of Geology, Athens, Georgia.
- University of South Florida: Department of Geology, Tampa, Florida.

• University of West Alabama: Department of Biology and Environmental Sciences, Livingston, Alabama.

MEDIA INTERACTIONS

• Participated in panel discussion of science authors at Decatur Book Festival (Georgia), the largest independent book festival in the U.S., <u>From Page to Pub to Podcast: Science Writers</u> Address New Venues and New Media, September 4, 2011.

• Various media venues reporting on discovery of largest assemblage of polar-dinosaur tracks in the Southern Hemisphere (Martin *et al.*, 2011): *Wired Magazine, LiveScience, El Mundo, Smithsonian Magazine, Cosmos,* and *Australian Geographic,* from August 10-15, 2011, with most linking to story by Emory Media Relations (eScience Commons): <u>Polar Dinosaur Tracks</u> Open New Trail to the Past, August 9, 2011.

• *Science NOW*, quoted for commentary on article about bite marks in Cretaceous ichthyosaur of Australia: <u>Sea Monster Battle Preserved for the Ages</u>, May 5, 2011.

• *Wired Magazine*, rated an article (Martin and Varricchio, 2010) as one of "<u>The Year's Best</u> Fossil Finds," October 13, 2010.

• Subject of video and news story done through Emory Media Relations (eScience Commons) on course field trip to St. Catherines Island, Georgia: <u>Insider's Guide to Georgia Barrier Islands</u>, August 24, 2010.

• *New York Times (Science Times: Observatory)*, published study (Martin et al. 2010) that was subject of news story, <u>A Bottom Feeder Leaves Traces Below</u>, May 10, 2010

• BBC, 2009-2010, provided scientific content in association with new TV series on dinosaurs.

• *Science News*, January 5, 2010, quoted for commentary on discovery of oldest known fossil tetrapod tracks: Footprints Could Push Back Tetrapod Origins.

• *Discovery Channel News*, September 25, 2009, story about dinosaur burrows and other trace fossil discoveries in Victoria, Australia: <u>Cold, Scared Dinosaurs Dug Burrows</u>.

• *Georgia Public Broadcasting*, radio and television interviews about dinosaurs and other aspects of paleontology for Dinosaur Week (September 13-20, 2009): video at <u>Dinosaur Week</u> (Georgiasaurs), audio at <u>Dinosaur Week on GPB Radio</u>.

• *Australasian Science Magazine*, October 2009 issue, cover story "<u>Dinosaurs Down</u> Underground," written by me, invited by the editor.

• *BBC News, New Scientist, National Geographic*, and other news outlets: news story about discovery of oldest dinosaur burrows from Australia, July 2009; also covered by Emory University: Dinosaur Burrows: Australian Trace Fossils Found.

• *Good Morning America* (ABC), April 22, 2009, featured in segment about effects of global warming on Jekyll Island, Georgia.

• *Science News*, April 10, 2009, quoted for commentary on hermit-like behavior in Cambrian invertebrate trace fossil in Wisconsin, USA, <u>Early Land Arthropods Sported Shells</u>.

• *Atlanta Journal-Constitution*, March 15, 2009, mentioned as a consulting paleontologist for dinosaur display at Fernbank Museum of Natural History, <u>Fernbank Museum Rebuilding the</u> Past: Dinosaur Statues Meticulously Constructed.

• *Science News*, March 5, 2009, quoted for commentary on sitting-dinosaur trace fossil in Utah, USA, <u>Dinosaur Handprints Reveal Birdlike Arm Anatomy</u>.

• *Science News*, October 9, 2008, quoted for commentary on Cambrian fossil find in China, <u>New</u> Arthropod Species Really Stuck Together.

Anthony Martin

• *National Geographic Society News*, June 9, 2008, quoted for commentary on Triassic mammal burrows in Antarctica, <u>Ancient Mammal Relative Dug Burrows in Antarctica?</u>

National Geographic Society News, February 8, 2008, interviewed about discovery of oldest known Gondwanan crayfish in Australia, <u>Ancient Crayfish Fossils Unravel Evolution Mystery</u>. *National Geographic Society News*, MSNBC, *The Age* (Melbourne, Australia).

LiveScience.com, Science Daily, and various other international media outlets, interviews associated with finds of large theropod dinosaur tracks in Victoria Australia, starting October 19, 2007 with press release. Sample Links: <u>National Geographic News</u>, <u>MSNBC</u>. Podcast interview with *National Geographic News*, week of October 26, 2007:

http://www.nationalgeographic.com/podcasts/ngnews.html

• *Atlanta Journal-Constitution* interviewed about scientific accuracy of the BBC *Walking with Dinosaurs* show in Atlanta, Georgia, September 5, 2007.

• *Big Island Films* (Australia), interviews associated with documentary films *Dinosaurs on Ice* and *Arctic Dinosaurs*, filmed in Alaska in August-September 2007; *Arctic Dinosaurs* broadcast on *Nova* (PBS) in October 2008.

• *Nature News*, BBC, *National Geographic Society News*, *The Guardian*, and various other international media outlets, interviews related to the first known burrowing and denning dinosaur, (*Oryctodromeus cubicularis*) reported by Varricchio, Martin, and Katsura (2007) in *Proceedings of the Royal Society of London B*, March 21, 2007. Links: <u>Nature, BBC</u>, <u>National Geographic</u>.

• WGST radio (AM 640, Atlanta, Georgia), March 28, 2005, interviewed about *Tyrannosaurus rex* soft-tissue discovery reported in the news that week.

• *Boston Globe Magazine*, November 11, 2004; interviewed about "sitting dinosaur" trace fossil and the controversy regarding evidence of "feathers" from the Early Jurassic.

• *Discovery Channel (The Daily Planet)*, September 8, 2003; interviewed about Union Chapel fossil tracks and Carboniferous paleoenvironments of Alabama.

• *National Geographic Online*, March 10, 2003; interviewed about the scientific value of dinosaur tracks: J. Roach, 2003, Dinosaur Footprints: Tracks Tell Prehistoric Secrets.

• *Science Magazine*, August 8, 2003; interviewed about Union Chapel fossil tracks: E. Stokstad, 2003, "Ancient Trackways in Strip Mine Threatened by Reburial," *Science*, 301: 746.

• *Atlanta Journal-Constitution*, September 7, 2003; interviewed about Union Chapel fossil tracks: M. Toner, 2003, "Ancient Footprints in Peril: Mine Reclamation May Bury History."

• *Montana State University News*, July 23, 2002; interviewed about possible mammal burrows in Two Medicine Formation (Late Cretaceous) of Montana: E. Boswell, 2002, <u>Researcher</u> Investigates Possible Burrows at Egg Mountain.

• *WABE* (NPR, Atlanta, Georgia), *Science in Your Life*: interviewed about the importance and applications of ichnology to society: <u>Tracking Through Time</u>.

• *Science News*, June 9, 2001; interviewed about trace fossils and their applications to paleontology: S. Perkins, 2001, "Beyond Bones: Trace Fossils Reveal Important Clues to Ancient Life." Science News, 159(23): 362.

• *Science Daily,* interviewed about co-discovery of oldest reptile nests in the geologic record from the Late Triassic of Arizona, October 26, 1998, <u>World's Oldest Known Fossil Reptile Nests</u> Discovered in Arizona's Petrified Forest.

• *Emory Report*, staff and faculty newspaper for Emory University: (1) <u>Emory Paleontologist</u> <u>Tracks Clues to Ancient Life</u>: v. 60(12), Nov. 26, 2007 [news story about applications of ichnology in teaching and research, particularly recent paleontological discoveries in Australia].

Anthony Martin

(2) <u>Barrier Island is No Barrier to Science Education for Martin's Class</u>: v. 60(7), Oct. 1, 2007 [news story about teaching geology and ecology in the field on Sapelo Island, Georgia]. (3) *Fossil Sales Say Much about Ethics and Future of Paleontology* [editorial on ethics in paleontology]: Emory Report, v. 50(12), Nov. 10, 1997, p. 2; (4) *Challenges, Solutions to Folding Research into Curriculum*, [editorial about the intersections between teaching and research using ichnology as an example]: Emory Report, v. 51(12), November 16, 1998, p. 2; (5) *Martin Uses Apache Methods for Tracking Dino-Behavior* [news story about applications of "Apache" tracking methods to fossil tracks]: Emory Report, v. 53(5), September 25, 2000, p. 3.

ELECTRONIC PUBLIC OUTREACH (WEB PAGES)

The Great Cretaceous Walk – online since May 2010, with more than 15,000 page views and from 30+ countries by end of August 2011. Introduction to Ichnology, the Study of Plant and Animal Traces - online since August 1995. Dinosaur Trace Fossils - online since July 1996. The Paleontology Portal (Georgia)

FOREIGN LANGUAGE TRAINING

• One year of Chinese (standard Mandarin), University of Georgia, 1988-1989.

• Summer intensive course in Spanish, Universidad de Salamanca, Salamanca, Spain, 1998.

INTERNATIONAL FIELD EXPERIENCE (by country, in alphabetical order)

Argentina, Australia, Bahamas, Brazil, Costa Rica, Denmark, Ecuador, Germany, Mexico, New Zealand, Poland, Republic of Korea, Spain, Switzerland, United Kingdom.

U.S. FIELD EXPERIENCE (by state, in alphabetical order)

Alabama, Alaska, Arizona, California, Colorado, Florida, Georgia, Hawaii, Idaho, Indiana, Kentucky, Ohio, Mississippi, Louisiana, Montana, New Jersey, New Mexico, North Carolina, Oklahoma, Pennsylvania, South Carolina, Tennessee, Texas, Utah, Virginia, Washington, West Virginia, Wyoming.

OUTDOOR-RELATED SKILLS

• Red Cross CPR/First-Aid (infant, child, adult), re-certified 2009.

• SCUBA certified (YMCA), Open Water I, certified 2005.

Tracking training: *The Tracker School*: Basic Tracking, 1999; Advanced Tracking and Awareness, 2000; Expert Tracking, 2002 (all in New Jersey); *Wilderness Awareness School*: Introduction to CyberTracker, 2000 (California); Wolf Tracking Expedition, 2002 (Idaho); *A Naturalist's World*, Basic Tracking, Advanced Tracking, 2005 (Montana and Wyoming). *National Outdoor Leadership School* (NOLS), Outdoor Educators course (Wyoming), 1993.