

Laurie C. Anderson

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Education

- Ph.D., 1991: University of Wisconsin-Madison. In geology with a distributed minor in statistics and philosophy. Dissertation topic: Neogene corbulid bivalves of the Dominican Republic and Florida.
- M.S., 1987: Bowling Green State University. In geology. Thesis topic: Ostracoda of the Pliocene Pinecrest sand, Florida.
- B.A., with high distinction, 1985: University of Minnesota, Morris. Majors in geology, biology, and music; minor in chemistry.

Experience

- Harrison Family Field Camp Professoship, 2008-present, Department of Geology and Geophysics, Louisiana State University
- Temminck Fellow, Naturalis, Leiden, the Netherlands, December 2007-March 2008.
- Research Associate, Bell Museum of Natural History, University of Minnesota, Fall 2007.
- Dr. Henry V. Howe Distinguished Associate Professor, 2006-present, Department of Geology and Geophysics, Louisiana State University,
- Associate Professor, 1997-present. Department of Geology and Geophysics, Louisiana State University.
- Chair, 2003-2007. Department of Geology and Geophysics, Louisiana State University.
- Assistant Professor, 1991-1997. Department of Geology and Geophysics, Louisiana State University.
- Geologist, 1990 (summer). Offshore/Alaska Division, Exploration Department, Exxon Company, U.S.A.
- Teaching and Research Assistant, 1988-1990. Department of Geology and Geophysics, University of Wisconsin-Madison.
- Teaching and Research Assistant, 1985-1986. Department of Geology, Bowling Green State University.
- Teaching Assistant, 1984-1985. Discipline of Geology, University of Minnesota, Morris.

Other Appointments

- Adjunct Associate Curator, 1998-present. Museum of Natural Science, Louisiana State University.
- Associate Editor, 1998-present, Journal of Paleontology,
- Visiting Scholar, Fall 1998. University of Iowa.
- Research Associate, 1994-present. Division of Research and Collections, Virginia Museum of Natural History.

Honors and Awards

- Harrison Family Field Camp Professoship, 2008-present, Department of Geology and Geophysics, Louisiana State University
- Temminck Fellow, Naturalis, Leiden, the Netherlands, December 2007-March 2008.
- Commendations for Excellence in Teaching, College of Basic Sciences, Spring 2006, Spring 2007.
- Wesselingh (2006) named a species of Corbulidae *Pachydon andersonae*
- H.V. Howe Professorship, Department of Geology and Geophysics, 2006-present.
- Best Paper Award for 2003 volume Journal of Paleontology.
- Speaking of Science Lecturer, Louisiana Board of Regents, 1999-2002.
- Paleontological Society Distinguished Lecturer, 1998-2000.
- Faculty Research Award, College of Basic Sciences, Louisiana State University, 1997 (for untenured faculty).
- Burlington Resources Foundation Faculty Achievement Award, Department of Geology and Geophysics, 1997 (for instructional innovations in historical geology).
- Gulf Coast Association of Geological Societies, Second place award for paper by Heydari, Wade, and Anderson, 1995.
- Shell Companies Foundation Fellowship, 1989-1991.
- Wisconsin Alumni Research Foundation Fellowship, 1987-1988.
- Amoco Foundation Geology Fellowship, 1985-1987.

Major Areas of Research Interest

In the geologic column, biotic remains preserve a record of ancient life and provide a wealth of information as sediment grains, and I integrate both types of information into my research. The primary focus of my research is the paleobiology, paleoecology, taphonomy, and phylogeny of mollusks, particularly the Bivalvia. My work combines field research in both modern and ancient settings, museum studies, and laboratory analyses. One long-standing project is an investigation of the evolutionary history of Neogene Corbulidae (Bivalvia: Myoidea) in tropical America, especially as it relates to environmental, oceanographic, and climatic changes over the last 23 million years (Neogene). Recently, this work has led to the exploration of topics that include 1) the role of constraint, innovation and heterochrony in the morphologic evolution of the corbulid shell (Anderson and Roopnarine 2005; Goodwin et al. 2008); 2) phylogenetic reconstruction of Neogene corbulids of tropical America (Anderson and Roopnarine 2003); and 3) phylogenetic reconstruction of freshwater radiation(s) of corbulid bivalves from the Paleocene and Neogene of the Americas (Anderson et al. 2006; in prep). In future work my goal is to produce a systematic revision of the Corbulidae at a global scale, and examine the ecology and life-history characteristics of invasive members of this clade. In addition, I am exploring morphologic integration in heterodont bivalves in collaboration with Peter Roopnarine at the California Academy of Sciences, using an algorithm Peter developed to recognize modularity in landmark data. I also am participating in a multiyear international collaboration to inventory the aquatic animals of Alto Purús National Park and Purús Communal Reserve. Alto Purús, with Manu National Park and adjacent protected areas in Bolivia and Brazil, is the largest conservation corridor in the Amazon Basin. Nonetheless, only minimal baseline biodiversity data is currently available for the aquatic fauna of the region and Projecto Alto Purús will focus on fully characterizing diversity within the crustaceans, fishes, platyhelminths, mollusks, and sponges of this region.

Publications

Book chapters, articles in refereed journals, refereed bulletins

- Anderson, L.C., D.H. Geary, R.H. Nehm, and W.D. Allmon. 1991. A comparative study of naticid gastropod predation on *Varicorbula caloosae* and *Chione cancellata*, Plio-Pleistocene of Florida, U.S.A. *Palaeogeography, Palaeoclimatology, Palaeoecology*, v. 85, p. 29-46.
- Anderson, L.C. 1992. Naticid gastropod predation on corbulid bivalves: Effects of physical factors, morphological features, and statistical artifacts. *Palaios*, v. 7, p. 602-620.
- Anderson, L.C. 1994. Paleoenvironmental control of species distributions and intraspecific variability in Neogene Corbulidae (Bivalvia: Myacea) of the Dominican Republic. *Journal of Paleontology*, v. 68, p. 460-473.
- Anderson, L.C., M.R. Byrnes, and R.A. McBride. 1995. Paleoenvironmental and taphonomic evidence of diverse bioclast sources and their implications for the depositional settings of southwestern Louisiana cheniers. *Gulf Coast Association of Geological Societies Transactions*, v. 45, p. 21-29.
- Heydari, E., W.J. Wade, and L.C. Anderson. 1995. Depositional environments and accumulation of organic matter in the Smackover Formation, north-central Gulf of Mexico. *Gulf Coast Association of Geological Societies Transactions*, v. 45, p. 251-258.
- Anderson, L.C. 1996. Neogene Paleontology in the northern Dominican Republic. 16. The Family Corbulidae (Mollusca: Bivalvia). *Bulletins of American Paleontology*, v. 110, p. 5-34.
- Anderson, L.C. and R.A. McBride. 1996. Taphonomic and paleoenvironmental evidence of Holocene shell-bed genesis and history in the northeastern Gulf of Mexico shelf. *Palaios*, v. 11, p. 532-549.
- Gangopadhyay, T., L.C. Anderson, M.H. Jones, and R.A. McBride. 1996. Mollusca and benthic foraminifera of the Pensacola Bay and Perdido Bay estuarine systems, Florida and Alabama. *Gulf Coast Association of Geological Societies Transactions*, v. 46, p. 133-147.
- McBride, R.A., M.R. Byrnes, L.C. Anderson, and B.K. Sen Gupta. 1996. Holocene and Late Pleistocene sedimentary facies of a sand-rich continental shelf: A standard section for the northeastern Gulf of Mexico. *Gulf Coast Association of Geological Societies Transactions*, v. 46, p. 287-299.
- Anderson, L.C., B.K. Sen Gupta, R.A. McBride, and M.R. Byrnes. 1997. Reduced seasonality of Holocene climate and pervasive mixing of Holocene marine section: Northeastern Gulf of Mexico shelf. *Geology*, v. 25, p. 127-130.
- Heydari, E., W.J. Wade, and L.C. Anderson. 1997. Depositional environments, organic carbon accumulation, and solar-forcing cyclicity in Smackover Formation lime mudstones, northern Gulf Coast. *American Association of Petroleum Geologists Bulletin*, v. 81, p. 760-774.
- Anderson, L.C., R.A. McBride, M.J. Taylor, and M.R. Byrnes. 1998. Late Holocene record of community replacement preserved in time-averaged molluscan assemblages, Louisiana chenier plain. *Palaios*, v. 13, p. 488-499.
- McBride, R.A., L.C. Anderson, A. Tudoran, and H.H. Roberts. 2000. Holocene stratigraphic architecture of a sand-rich shelf and the origin of linear shoals: Northeastern Gulf of Mexico. In: K.M. Bergman and J.W. Snedden, eds. *Isolated Shallow Marine Sand Bodies: Sequence Stratigraphic Analysis and Sedimentologic Interpretation*. SEPM Special Publication, v. 64, p. 95-126.

- Anderson, L.C. 2001. Temporal and geographic size trends in Neogene Corbulidae (Bivalvia) of tropical America: Using environmental sensitivity to decipher causes of morphologic trends. *Palaeogeography, Palaeoclimatology, Palaeoecology*, v. 166, p. 101-120.
- Anderson, L.C. 2001. Transport and spatial fidelity. *In* D.E.G. Briggs and P.R. Crowther, eds. *Palaeobiology II*, Blackwell Scientific, London, p. 289-292.
- Henderson, W.G., L.C. Anderson, and C.R. McGimsey. 2002. Distinguishing Natural and Archaeological Deposits: Stratigraphy, Taxonomy, and Taphonomy of Holocene Shell-Rich Accumulations from the Louisiana Chenier Plain. *Palaios*, v. 17, p. 192-205.
- Taylor, M.J., R.A. McBride, L.C. Anderson, and M.R. Byrnes. 2002. Building on the research of our founders: 65 years of chenier plain studies at Louisiana State University. *In* M.K. Steinberg and P.F. Hudson, eds. *Cultural and Physical Expositions: Geographic Studies in the Southern United States and Latin America*. Geoscience Publications, Department of Geography and Anthropology, Louisiana State University, Baton Rouge, p. 261-276.
- Anderson, L.C. and P.D. Roopnarine. 2003. Evolution and phylogenetic relationships of Neogene Corbulidae (Bivalvia; Myoidea) of tropical America. *Journal of Paleontology*, 77: 1086-1102. (Received best paper award for journal for 2003.)
- Anderson, L.C. and Roopnarine, P.D. 2005. Role of constraint and selection in the morphologic evolution of *Caryocorbula* (Mollusca: Corbulidae) from the Caribbean Neogene. *Paleontologica Electronica*, 8.2.32A. (invited)
- Anderson, L.C., Hartman, J.H., and Wesselingh, F. 2006. Close evolutionary affinities between freshwater corbulid bivalves from the Neogene of Western Amazonia and Paleogene of the Northern Great Plains, USA. *Journal of South American Earth Sciences*, 21: 28-48. (invited)
- Nemésio, A., Aronowsky, A., and Anderson, L.C. 2006. *Exallocorbula* (Bivalvia: Corbulidae), a new name for the Amazonian molluscan fossil *Pebasia* Nuttall. *Veliger*, 48: 228-229.
- Goodwin, D. H., Anderson, L. C., and Roopnarine, P. D. 2008. Evolutionary origins of novel conchologic Growth Patterns in Tropical American corbulid bivalves. *Evolution and Development*, 10:643-656.

In Prep

- Anderson, L.C., Wesselingh, F., and Hartman, J.H. in prep. Phylogenetic relationships among freshwater taxa in the predominantly marine Corbulidae. *Paleobiology* (anticipated submission February 2009).

Reports

- Anderson, L.C., B.K. Sen Gupta, L. Smith. 2002. Molluscs and Benthic Foraminifers of Chevron ST23: Preliminary Biotic Survey and Evaluation of Biotechnology Potential. Minerals Management Service, Information Transfer Report.
- Anderson, L.C. 2003. Mollusca from Oil and Gas Platforms on the Louisiana Continental Shelf: A Biotechnology Survey. Minerals Management Service, Information Transfer Report.

Field Guides

- Byrnes, M.R., R.A. McBride, L.C. Anderson, M.J. Taylor, and R.R. Zenero. 1995. Sedimentary Processes, Geologic Framework, and Coastal Erosion Issues of the Chenier Plain in Southwestern Louisiana. *Gulf Coast Association of Geological Societies Field Guide*, 101 p.

McBride, R.A., L.C. Anderson, M.J. Taylor, C. McGimsey, and M.R. Byrnes. 1997. Linear Sand Bodies in Muddy Environments: Geologic Framework, Sedimentary Processes, and Geoarchaeology of the Southwestern Louisiana Chenier Plain. Friends of the Pleistocene--South Central Cell and American Association of Petroleum Geologists Field Guide, 151 p.

Book reviews

Anderson, L.C. 1998. History of a Land Bridge and Sea Barrier. *American Paleontologist*. v. 6, p. 12-13.

Abstracts (last 5 years)

- Agnew, J.G., and Anderson, L.C. 2004. Predation on decapod crustaceans through their ontogeny: applying reversed handedness metrics to the fossil record. *Geological Society of America Abstracts with Programs*, v. 36 (5), p. 380.
- Anderson, L.C., Ferrell, R.E., Lorenzo, J.M., Tomkin, J.H., Bart, P.J. 2004. LSU geoscience alliance to enhance minority participation: building partnerships with minority-serving institutions. *Eos Trans. AGU*, 85(47), Fall Meeting Suppl., Abstract ED44A-06.
- Anderson, L.C., Roopnarine, P.D., Aronowsky, A., and Callier, V. 2004. Morphometric network analysis of integration in morphologically conservative molluscan clades. *Geological Society of America Abstracts with Programs*, v. 36 (5), p. 316.
- Aronowsky, A., Agnew, J.G., Leighton, L.R., and Anderson, L.C. 2004. Inferring predation intensity on heterochelous decapod crustaceans: simulation studies and the handedness metric. *Integrative and Comparative Biology*, v. 44, p. 518.
- Aronowsky, A., Anderson, L.C., Goodwin, D.H., and Roopnarine, P.D. 2004. Testing constraints on shell shape and desirability as a prey item in corbulid bivalves. *Geological Society of America Abstracts with Programs*, v. 36 (5), p. 316.
- Belt, E.S., Hartman, J.H., Tibert, N.E., and Anderson, L.C., 2004. A newly recognized widespread bed containing both fresh and brackish organisms, lower Tongue River Member (Upper Paleocene), S.W. North Dakota. *Geological Society of America Annual Meeting, Abstracts with Programs*, v. 36 (2) p. 84.
- Ferrell, R., Anderson, L., Bart, P., Lorenzo, J.M., and Tomkin, J. 2004. The non-traditional student, a new geoscience resource. . *Trans. AGU*, 85(47), Fall Meeting Suppl, Abstract ED22A-05.
- Ferrell, R.E., Anderson, L.C., Bao, H., Bart, P., Blanford, W.J., Byerly, G.R., Ellwood, B.B., Lorenzo, J.M., Tomkin, J.H., and Wrenn, J.H. 2004. The "top-down" approach: a course design to stimulate minority interest in geoscience. *Geological Society of America Abstracts with Programs*, v. 36 (5), p. 279.
- Goodwin, D.H., Anderson, L.C., Roopnarine, P.D., and Aronowsky, A. 2004. Heterochronic evolution in tropical American corbulids. *Geological Society of America Abstracts with Programs*, v. 36 (5), p. 19.
- Leonard-Pingel, J.S., and Anderson, L.C. 2004. Differences in taphonomic signature of mollusk shells from siliciclastic and carbonate seagrass beds. *Geological Society of America Abstracts with Programs*, v. 36 (5), p. 382.
- Leonard-Pingel, J., Anderson, L.C., and Xie, X. 2004. The association between microstructure and dissolution patterns observed through scanning electron microscopy of extant *Epitonium tinctum*. *Geological Society of America Annual Meeting, Abstracts with Programs*, v. 36 (1), p. 8.

- Leonard-Pingel, J., Aronowsky, A., and Anderson, L.C. 2004. Taking the island biogeographic model into the water: are abundance and diversity of encrusters related to hard substrate proximity? *Integrative and Comparative Biology*, v. 44, p. 718.
- Lorenzo, J.M., Anderson, L.C., Bart, P.J., Ferrell, R.E., and Tomkin, J.H. 2004. A three-day seismic experiment in an urban setting: an introduction to seismology for minority students. *Eos. Trans. AGU*, 85(47), Fall Meeting Suppl, abstract ED23A-0088.
- Agnew, J.G. and Anderson, L.C. 2005. Developng a proxy for predation on fossil crabs: growth and reversal of handedness of the mud crab *Eurypanopeus depressus* under laboratory conditions. Geological Society of America Annual Meeting, abstract 34-2, Geological Society of America Abstracts with Programs, Vol. 37, No. 7, p. 86.
- Anderson, L.C., Aronowsky, A., and Roopnarine, P.D. 2005. Detecting and interpreting morphologic constraint in the fossil record. Joint Meeting Western Society of Malacologists and American Malacological Society, Program with Abstracts, p. 14.
- Aronowsky, A., and Anderson, L.C. 2005. Corbulid bivalve phylogeny and the facilitation of ecosystem invasion. *Integrative and Comparative Biology*, 45: p. 958.
- Aronowsky, A. and Anderson, L.C. 2005. Examining invasive taxa in a phylogenetic context: why corbulid bivalves are so interesting. Geological Society of America Annual Meeting, abstract 134-14, Geological Society of America Abstracts with Programs, Vol. 37, No. 7, p. 307.
- Aronowsky, A. and Anderson, L.C. 2005. Monospecific fossil assemblages: distinguishing between accumulation and aggregation using phylogeny and paleobiology. Joint Meeting Western Society of Malacologists and American Malacological Society, Program with Abstracts, p. 17.
- Lee, C.J., Anderson, L., Ellwood, B., Engel, A., Ferrell, R., Lambert, L., and Lorenzo, J. 2005. An alternative to the traditional introductory geology courser: a GAEMP initiative for minority students. Geological Society of America Annual Meeting, abstract 234-4, Geological Society of America Abstracts with Programs, Vol. 37, No. 7, p. 514.
- Leonard-Pingel, J.S. and Anderson, L.C. 2005. Molluscan taphonomy as a proxy for recognizing fossil seagrass beds. Geological Society of America Annual Meeting, abstract 181-14, Geological Society of America Abstracts with Programs, Vol. 37, No. 7, p. 405.
- Roopnarine, P.D., Angielczyk, K., Callier, V. and Anderson, L.C. 2005. Developmental and phenotypic integration in bivalves: adaptation and evolution of the Neogene venerid genus *Chione*. Joint Meeting Western Society of Malacologists and American Malacological Society, Program with Abstracts, p. 105.
- Agnew, J. G. and Anderson, L.C. 2006. Inferring diet of crabs using wear patterns on claws. Geological Society of America Abstracts with Programs, Vol. 38, No. 7, p. 442.
- Aronowsky, A. and Anderson, L.C. 2006. Geodispersal versus vicariance in the history of corbulid bivalves: Is there a link between biogeographic origin and invasiveness? Geological Society of America Abstracts with Programs, Vol. 38, No. 7, p. 445.
- Aronowsky, A., Anderson, L.C., and Hellberg, ME. 2006. Redescription of the freshwater bivalve *Guianadesma sinuosum* and implications for the historical biogeography of northern South America. *Integrative and Comparative Biology*, Vol. 46 (supplement 1), p. 28.4.
- Goodwin, D., Anderson, L.C., and Roopnarine, P.D. 2006. Tropical American corbulids: a new source of paleoenvironmental history. Geological Society of America Abstracts with Programs, Vol. 38, No. 7, p. 118.

- Roopnarine, P. D., Laumer, C., Angielczyk, K. D. and Anderson, L.C. 2006. Beyond the half-shell: Morphological intergration and modularity of venerid bivalves shells. Geological Society of America Abstracts with Programs, Vol. 38, No. 7, p. 557.
- Anderson, L. C., Dettman, D., and Hartman, J. 2007. Freshwater Corbulidae (Bivalvia) :using isotopic evidence to uncover ancient origins of freshwater invasion. Geological Society of America Abstracts with Programs, Vol. 39, No. 6, p. 305.
- Garcia, A. M., Thiessen, M., Aronowsky, A., Anderson, L., Bao, H., Engel, A. 2007. Evolutionary implications of endosymbiont diversity within lucinid bivalves. Eos Transactions AGU, 88 (52), Fall Meeting Supplement, Abstract B43E-1650.
- Green-Garcia, A. M., Thiessen, M., Aronowsky, A., Anderson, L., and Engel, A. S. 2007. Implications of bacterial diversity within a modern lucinid bivalve habitat. Geological Society of America Abstracts with Programs, Vol. 39, No. 6, p. 66.
- Nunn, J. A. and Anderson, L. C. 2007. Live interrogation and visualization of Earth systems (LIVES). Eos Transactions AGU, 88 (52), Fall Meeting Supplement, Abstract ED41C-04.
- Peng, Y., Bao, H., Anderson, L., and Engel, A. S. 2007. Carbonate-associated sulfate in lucinid (Bivalvia) shells. Eos Transactions AGU, 88 (52), Fall Meeting Supplement, Abstract B31D-0611.
- Anderson, L.C. 2008. Marathon Geoscience Diversity Enrichment Program (GeoDE): A Corporate/Academic Partnership In Achieving a Strong and Diverse Workforce. Geological Society of America Abstracts with Programs, 176-4.
- Anderson, L.C., Wesselingh, F. and Hartman, J.H. 2008. Phylogenetic Reconstruction of a Freshwater Radiation: Corbulidae In the Miocene of Western Amazonia. Geological Society of America Abstracts with Programs, 340-6.

Conference Proceedings

- Anderson, L.C. 1993. Statement: Important questions and problems facing evolution education today. Proceedings of the Evolution Education Research Conference, Louisiana State University, 12/92, p. 7-8.

Theses

- Anderson, L.C. 1987. Ostracoda of the Pinecrest Sand Member, Upper Tamiami Formation, Macasphalt Pit Mine, Sarasota, Florida. Masters Thesis. Bowling Green State University, 168 p.
- Anderson, L.C. 1991. Neogene corbulid bivalves of the Dominican Republic and Florida: Species distributions, intraspecific variability, and patterns of naticid gastropod predation. Ph.D. Dissertation. University of Wisconsin-Madison, 174 p.

Papers presented at professional meetings (organization, location, and date)

- Geological Society of America, St. Louis, MO, October 1989.
- Geological Society of America, Dallas, TX, October 1990.
- American Malacological Union, Berkeley, CA, June 1991.
- Geological Society of America, San Diego, CA, October 1991.
- Geological Society of America, Southeastern Section, Winston-Salem, NC, March 1992.
- North American Paleontological Convention-V, Chicago, IL, June 1992.
- Geological Society of America, Cincinnati, OH, October 1992.
- American Malacological Union, Houston, TX, July 1994.
- Geological Society of America, Seattle, WA, October 1994.

- Gulf Coast Association of Geological Societies, Baton Rouge, LA, October 1995.
- Geological Society of America, New Orleans, LA, November 1995.
- Geological Society of America, Denver, CO, November 1996.
- Geological Society of America, Salt Lake City, UT, October 1997.
- 1998 World Congress of Malacology, Washington, DC, July 1998.
- Panama Paleontology Project and Neogene Marine Invertebrates of Tropical America (NMITA) Molluscan Workshop, Naturhistorisches Museum, Basel Switzerland, June 1998 (invited).
- Geological Society of America, Toronto, Ontario, October 1998.
- Symposium: Cenozoic Paleobiology: the Last 65 Million Years of Biotic Stasis and Change, Gainesville, FL, February 1999 (invited).
- Geological Society of America, Reno, Nevada, November 2000.
- North American Paleontological Convention, Berkeley, CA, June 2001, (invited).
- Geological Society of America, Boston, Massachusetts, November, 2001.
- Minerals Management Service, Information Transfer Meeting, January 2002.
- First International Palaeontological Congress (Sydney, Australia), Symposium on evolutionary palaeoecology, chronofaunas and -floras: is biogeography punctuated?, July 2002, (invited).
- Geological Society of America, Denver, Colorado, October 2002 (invited).
- Minerals Management Service, Information Transfer Meeting, January 2003.
- Geological Society of America, Seattle, Washington, November 2003 (invited).
- Geological Society of America, Denver, Colorado, November 2004.
- American Geophysical Union, San Francisco California, December 2004.
- American Malacological Society/Western Society of Malacologists, Asilomar, California, June 2005 (invited).
- Geological Society of America, Denver, Colorado, October 2007.
- Geological Society of America, Houston, TX, October 2008.

Invited Lectures

- University of South Florida, Department of Geology, November 1991.
- Symposium: Evolution and biostratigraphy in the coastal plain, Geological Society of America, Southeastern Section, 1992.
- Southeastern Louisiana University, Department of Biology, March 1995.
- Geoscience Associates, Baton Rouge, October 1995.
- Louisiana State University, Museum of Natural Sciences, October 1995.
- Louisiana State University, Museum of Natural Sciences, October 1996.
- Panama Paleontology Project and Neogene Marine Invertebrates of Tropical America (NMITA) Molluscan Workshop, Naturhistorisches Museum, Basel Switzerland, June 1998.
- University of Wisconsin, Department of Geology and Geophysics, December 1998.
- University of Iowa, Department of Geology, December 1998.
- Cornell College, Department of Geology, December 1998.
- Symposium: Cenozoic Paleobiology: the Last 65 Million Years of Biotic Stasis and Change, Gainesville, FL, February 1999.
- University of Minnesota, Morris, Division of Science and Mathematics, January 1999.
- University of Minnesota, Minneapolis, Department of Geology and Geophysics, January 1999.

- Louisiana State University, Museum of Natural Sciences, February 1999.
- Louisiana State University, Dept of Physics and Astronomy (Science Saturday), March 1999.
- Louisiana State University, Department of Geology and Geophysics, September 1999.
- University of Louisiana at Lafayette, Department of Geology, March 2000.
- North American Paleontological Convention (UC Berkeley), Symposium on species-level and community-level stability: Case studies from the Dominican Republic Neogene, June 2001.
- First International Palaeontological Congress (Sydney, Australia), Symposium on Evolutionary palaeoecology, chronofaunas and -floras: is biogeography punctuated?, July 2002.
- University of North Dakota, October, 2002.
- Tulane University, October, 2002.
- Geological Society of America, Denver, Colorado, Theme Session on Evolution of the Bivalvia, October 2002.
- LSU Science Club, April 2003.
- Baton Rouge Area Society of Psychologists, August 2003.
- Geological Society of America, Denver, Colorado, Theme Session: Terrestrial Paleobiology of South America, Cretaceous through Neogene, November 2003.
- LSU Chapter Sigma Xi, February 2004.
- Southern University, Department of Physics, May 2004.
- American Malacological Society/Western Society of Malacologists, Asilomar, California, June 2005 (invited).
- Naturalis, Leiden, the Netherlands, February, 2008.
- Louisiana State University, Museum of Natural Sciences, October 2008.

Contributions to juried or refereed publications (e.g., editorships, associate editorships, referee) and review of research proposals

Editor	Manuscripts Edited
• Technical Editor, Journal of Paleontology, 1998-present	57
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Referee for publications	Manuscripts Reviewed
• <i>Palaios</i>	12
• <i>Gulf Coast Association of Geological Societies Transactions</i>	10
• <i>Journal of Paleontology</i>	4
• <i>Paleobiology</i>	2
• <i>Evolution</i>	2
• <i>Veliger</i>	2
• <i>Malacologia</i>	2
• <i>Zoological Journal of the Linnaean Society</i>	1
• <i>Geology</i>	1
• <i>Journal of Sedimentary Research</i>	1
• <i>Palaeogeography, Palaeoclimatology, Palaeoecology</i>	1
• <i>Historical Biology</i>	1
• <i>Journal of Experimental Marine Biology and Ecology</i>	1
• <i>Bulletins of American Paleontology</i>	1

• <i>Coral Reefs</i>	1
• <i>Malacologia</i>	1
• <i>GeoMarine Letters</i>	1
• <i>Texas Academy of Science</i>	1
• 7 th International Congress on Rudists	1
• Louisiana Geological Survey, Public Information Series	1
• Geological Society of America Field Trip Guidebook, 1995	1
• Textbook Proposal: <i>A Key to the Past</i> , Wadsworth Publ. Co.	1
• Book Chapter: <i>Deltas</i> , Harry Roberts, ed.	1
• Book Chapter: <i>Palynology, Climate, and Sequence Stratigraphy of the Pliocene</i> , J. Wrenn, ed.	1
• Book Chapter: <i>The Evolution of Cretaceous Ocean/Climate Systems</i> , E. Barrerra, ed.	1
• Book Chapter: <i>Modern Foraminifera</i> , B. K. Sen Gupta, ed.	1
• Book Chapter: <i>Central America: Geology, Resources, and Hazards</i> , J. Bundschuh and G. Alvarado	1
• Book Chapter: <i>Paleobiology of the Dominican Republic</i> , Budd, A.F. and Nehm, R., eds.	1
• Louisiana Geological Survey Newsletter	1

Other contributions to referred publications

- Member of committee to select best paper, *Journal of Paleontology*, 1991, 1998-2006.

Review Panels for research proposals

- National Science Foundation, Division of Geosciences, Professional Opportunities for Women in Research and Engineering (POWRE), April 1998.

Reviewer for research proposals	Proposals Reviewed
• National Science Foundation	26
• National Geographic Society	1
• Council on Research 1994 Summer Stipends Program	14
• LSU Chapter Sigma Xi, Student Grant-in-aid of Research	10
• Paleontological Society Student Grant-in-aid, committee chair, 1998.	47
• Paleontological Society Student Grant-in-aid, committee chair, 1999.	44
• Louisiana State University, Distinguished Dissertation Award, Science, Engineering, and Technology for 1998	8
• Louisiana State University, Distinguished Dissertation Award Committee, Science, Engineering, and Technology for 1999, committee chair	12

Grants and Contracts Funded

- Aquatic Faunal Survey of Alto Purús National Park, Peru. NSF Biotic Surveys and Inventories. PI: J. Albert (University of Louisiana Lafayette); 2008-2010.
- Corbulid Bivalves: Examining Invasive Species in a Phylogenetic Framework. Faculty Research Grant, LSU, \$10,000, PI: L.C. Anderson and M. Hellberg, 7/1/06-6/30/07.
- Geoscience Alliance to Enhance Minority Participation. National Science Foundation, GEO-Opport. for Enhancing Diversity. \$1,204,416. PI: R.E. Ferrell, co-PIs: L.C. Anderson, P.J. Bart, J.M. Lorenzo, J.H. Tomkin, 2003-2006.
- Funded for \$200,000. Recruitment of Superior Graduate Students in Earth, Ocean and Environmental Sciences. PI: Turner, R.E., R. Portier, L.C. Anderson. Louisiana Board of Regents, 2002-2006.
- Funded for \$200,000. Recruitment of superior graduate students in earth, ocean and environmental sciences. PI: Turner, Portier, R., Anderson, L.C. Louisiana Board of Regents. Duration: 2001-2005.
- Funded for \$581,320 (plus \$502,358 match). Evaluation of oil and gas platforms on the Louisiana Continental Shelf of organisms with biotechnology potential. PI: Rouse, L.J., L.C. Anderson, R.L. Chapman, D.W. Foltz, M.E. Hellberg, F.A. Rainey, B.K. Sen Gupta. Minerals Management Service, Coastal Marine Institute. Duration 10/01/00-12/30/02 (with extension to 7/31/03).
- Funded for \$100,000. Recruitment of Superior Graduate Students in Earth, Ocean and Environmental sciences. PI: Turner, R.E., B. Shane, L.C. Anderson. Louisiana Board of Regents. Duration: 2000-2004.
- Funded for \$4,984. Foraminiferal and molluscan tracers of ancient seagrass habitats: Ground truth from tropical seagrass beds, Mexico (Planning Visit). PI: B.K. Sen Gupta, L.C. Anderson. National Science Foundation, International Cooperative Activities. Duration: 3/15/98-8/31/98.
- Funded for \$134,300. LaCEPT Louisiana State University campus renewal project--the next steps. PI: M. Oliver, H. Silverman; Co-PI: L. Anderson, B. Sen Gupta, J. Madden, W. Wischusen. LaCEPT - The Board of Regents. Duration: 1997-1998 (calendar years).
- Funded for \$149,782. Synthesis of hard mineral resources of the Florida panhandle shelf: Spatial distribution, subsurface evaluation, and sediment budget. PI: M. Byrnes, R. McBride; Co-PI: L.C. Anderson, H. Roberts. U.S. Minerals Management Service (LSU-MMS Coastal Marine Institute). Duration: 12/5/95-9/30/97.
- Funded for \$120,000. LSU campus renewal project--the next step. PI: M. Oliver, H. Silverman, G. Byerly, J. Madden, W. Wischusen; Co-PI: L. Anderson, R. Ferrell, B. Sen Gupta. LaCEPT - The Board of Regents. Duration: 1996 (calendar year).
- Funded for \$4,000. Comparing surface and subsurface shell accumulations to integrate shelf stratigraphy and modern seafloor processes in the northeastern Gulf of Mexico. PI: L. C. Anderson. Council on Research 1996 Summer Stipend Program. Duration: 7/6/96-8/5/96.
- Funded for \$69,933. Taxonomic and phylogenetic study of Western Atlantic and Eastern Pacific Miocene to Recent Corbulidae (Bivalvia). PI: L.C. Anderson. National Science Foundation, Geology and Paleontology. Duration: 5/1/94-10/31/98.
- Funded for \$20,000. An integrated study of stratigraphy, petrography, and geochemistry of the lower laminated member of the Smackover Formation, northern Louisiana (renewal). PI: L.C. Anderson, E. Heydari. Energy Pass-Through Program. Duration: 8/2/93-6/30/94.

- Funded for \$23,000. An integrated study of stratigraphy, petrography, and geochemistry of the Smackover Formation, north Louisiana. PI: L.C. Anderson, E. Heydari. Center for Energy Studies Faculty Pass-Through Program. Duration: 9/1/92-6/31/93.
- Funded for \$4,000. Cenozoic corbulid bivalves of the Caribbean region. PI: L.C. Anderson. Council on Research 1992 Summer Stipend Program. Duration: 7/1/92-7/31/92.

Teaching History

Course #	Title (lecture courses in bold)	Location	Semester
GEOL 3011	Introduction to Paleontology	LSU	Spring 1992
GEOL 7911	Seminar in Paleontology. Taught with Drs. Hazel and Sen Gupta.	LSU	Spring 1992
GEOL 1003	Historical Geology	LSU	Fall 1992
GEOL 3011	Introduction to Paleontology	LSU	Spring 1993
GEOL 1003	Historical Geology	LSU	Fall 1993
GEOL 7120	Paleobiology	LSU	Fall 1993
GEOL 3011	Introduction to Paleontology	LSU	Spring 1994
GEOL 3909	Undergraduate Independent Study: <i>Holocene molluscan assemblages of the Florida shelf</i> by Julie Doucet.	LSU	Spring 1994
GEOL 1003	Historical Geology	LSU	Fall 1994
GEOL 7911	Seminar in Paleontology: Marine Paleocology. Taught with Dr. Sen Gupta.	LSU	Fall 1994
GEOL 3011	Introduction to Paleontology	LSU	Spring 1995
GEOL 3909	Undergraduate Independent Study: <i>Microfauna of Pensacola and Perdido Bay</i> by Julie Leber	LSU	Spring 1995
GEOL 7120	Paleobiology	LSU	Fall 1995
GEOL 7909	Graduate Independent Study: <i>Mollusca of the Pensacola Bay and Perdido Bay estuarine systems</i> by Tanwi Gangopadhyay	LSU	Fall 1995
GEOL 1003	Historical Geology	LSU	Spring 1996
GEOL 1602	Historical Geology Laboratory	LSU	Spring 1996
GEOL 3909	Undergraduate Independent Study: Louisiana Geology Lab	LSU	Spring 1996
GEOL 3909	Undergraduate Independent Study: Gulf Coast Paleontology	LSU	Spring 1996
GEOL 7909	Graduate Independent Study: <i>Mollusca of the Pensacola Bay and Perdido Bay estuarine systems</i> by Tanwi Gangopadhyay.	LSU	Spring 1996
GEOL 3909	Undergraduate Independent Study: Paleocology	LSU	Fall 1996
GEOL 7115	Paleocology	LSU	Fall 1996
GEOL 3011	Introduction to Paleontology	LSU	Spring 1997
GEOL 1003	Historical Geology	LSU	Spring 1997
GEOL 1602	Historical Geology Laboratory	LSU	Spring 1997
GEOL 7909	Graduate Independent Study: <i>Paleocology of the "Ostrea thirsae beds" of the Paleocene Nanafalia Formation, western Alabama</i> by Candace Hays.	LSU	Spring 1997

Course #	Title (lecture courses in bold)	Location	Semester
GEOL 1003	Historical Geology	LSU	Fall 1997
GEOL 1003	Historical Geology	LSU	Spring 1998
GEOL 7120	Paleobiology	LSU	Spring 1998
GEOL 3909	Undergraduate Independent Study: <i>Growth rates in Neogene corbulid bivalves</i> by Sarah Carr.	LSU	Spring 1998
GEOL 3909	Undergraduate Independent Study: Paleobiology	LSU	Spring 1998
GEOL 3011	Introduction to Paleontology	LSU	Spring 1999
GEOL 7120	Paleobiology	LSU	Fall 1999
GEOL 3011	Introduction to Paleontology Taught with Steven Benoist	LSU	Spring 2000
GEOL 1003	Historical Geology	LSU	Fall 2000
GEOL 7911	Seminar in Paleontology: Critical Intervals in the History of Life. Taught with Schiebout & Sen Gupta.	LSU	Fall 2000
GEOL 3011	Introduction to Paleontology	LSU	Spring 2001
GEOL 7120	Paleobiology	LSU	Fall 2001
GEOL 3011	Introduction to Paleontology	LSU	Spring 2002
GEOL 7911	Seminar in Paleontology	LSU	Fall 2002
GEOL 3011	Introduction to Paleontology	LSU	Spring 2003
GEOL 3011	Introduction to Paleontology	LSU	Fall 2003
GEOL 7931	Seminar in Sedimentology: Carbonate Depositional	LSU	Spring 2004
GEOL 3909	Environments of the Bahamas		
GEOL 3011	Introduction to Paleontology	LSU	Fall 2004
GEOL 3011	Introduction to Paleontology	LSU	Fall 2005
GEOL 2061	History of the Biosphere	LSU	Spring 2007
GEOL 1001/1003/1601/1602	Freshman Geology Field Camp	LSU Camp Barney	Summer 2008
GEOL 2061	History of the Biosphere	LSU	Spring 2009
GEOL 7911	Seminar in Paleontology: Reconstructing Paleocommunity Dynamics	LSU	Spring 2009

New Courses Developed

- GEOL 7120. Paleobiology. Developed and taught at LSU Fall 1993, Fall 1995, Spring 1998, Fall 1999, and Fall 2001.
- GEOL 2061. History of the Biosphere. Developed and taught at LSU Spring 2007.

Graduate Committees

Chair

- Yufa Song (Ph.D., 1994-1995, discontinued).
- Wayne Henderson (M.S., 1999).
- Jill Leonard-Pingel (M.S., 2005)
- Jeffrey Agnew (Ph.D., 2008)
- Jacob Grosskoph (M.S., 2008-present)

Committee Member

- Ph.D., Geology and Geophysics: 14.
- Ph.D., Dean's Representative, Civil Engineering: 1.
- Ph.D., Dean's Representative, Geography: 2
- Ph.D., Dean's Representative, Oceanography and Coastal Sciences, 1.
- M.S., Geology and Geophysics: 10.
- M.S., Education: 1.
- M.S., Biological Sciences: 1

Independent Research Projects

- Undergraduate: 5 (Julie Doucet, Julie Leber, Sarah Carr, Rebecca Tedford, Danielle Duhe, Mike Lowe, Cierra Rousseau).
- Graduate: 2 (Tanwi Gangopadhyay, Candace Hays).

Postdoctoral Advising

- David Goodwin, 2003.
- Audrey Aronowsky, 2003-2007.

Teaching Evaluations

Course	Semester/year	Weighted average of questions 1-8*	Weighted average of question 9 (overall evaluation of instructor)*
Scale out of 10			
GEOL 3011	Spring 1992	7.020	6.364
GEOL 1003.3	Fall 1992	8.821	8.205
Course	Semester/year	Weighted average of questions 1-8	Weighted average of question 9 (overall evaluation of instructor)
Scale out of 10			
GEOL 3011	Spring 1993	8.704	8.889
GEOL 1003.2	Fall 1993	9.152	8.939
GEOL 7120	Fall 1993	8.203	7.500
GEOL 3011	Spring 1994	9.417	9.667
GEOL 1003.1	Fall 1994	8.247	7.926
GEOL 3011	Spring 1995	9.611	9.333
GEOL 7120	Fall 1995	8.426	7.778
GEOL 1003.5	Spring 1996	9.124	9.231
GEOL 7115	Fall 1996	9.861	10.00
GEOL 3011	Spring 1997	7.585	7.949
GEOL 1003.4	Spring 1997	7.917	8.056
GEOL 1003.2	Fall 1997	8.742	8.333
GEOL 1003.1	Spring 1998	8.442	8.333
GEOL 7120	Spring 1998	9.762	9.048
GEOL 3011	Spring 1999	8.287	7.593
GEOL 7120	Fall 1999	9.028	9.167
GEOL 3011	Spring 2000 ²	8.127	8.056

GEOL 1003	Fall 2000	8.381	7.582
GEOL 3011	Spring 2001	8.426	8.889
GEOL 7120	Fall 2001	8.611	8.889
GEOL 3011	Spring 2002	9.167	9.333
GEOL 3011	Spring 2003	8.741	8.148
GEOL 3011	Fall 2003	6.746	5.714
GEOL 3011	Fall 2004	8.681	8.333
GEOL 3011	Fall 2005	9.596	9.697
Scale from out of 4			
GEOL 2061.1	Spring 2007	3.75	3.74
GEOL 2061.2	Spring 2007	3.73	3.86
Freshman Field Camp	Summer 2008	3.79	3.70

²Team taught with Steven Benoist.

Field Trips Led

- Stratigraphy and Paleontology of the Gulf Coastal Plain. For GEOL 3011 in Spring 1992-1995, 1997, 2000-2001; for GEOL 1003 in Spring 1996; for GEOL 7115 in Fall 1996.
- Tertiary Stratigraphy and Paleontology of the Florida Panhandle and western Florida Peninsula. For LSU chapter of Sigma Gamma Epsilon in February 1995.
- Landscape Evolution of the Baton Rouge Area, with J. Kruger. Donated for Charitable Auction in June, 1995 and June, 1996.
- Sedimentary Processes and Geologic Framework of the Chenier Plain in Southwestern Louisiana, with M. Byrnes and R. McBride. For Gulf Coast Association of Geological Societies in October, 1995.
- Linear Sand Bodies in Muddy Environments: Geologic Framework, Sedimentary Processes, and Geoarchaeology of the Southwestern Louisiana Chenier Plain, with R. McBride, M. Taylor, C. McGimsey. For Friends of the Pleistocene in April 1997.
- Louisiana's Chenier Plain. For GEOL 1003 in Spring 1996, 1997; for GEOL 7115 in Fall 1996; for GEOL 3011 in Spring 1997, 2000, Fall 2004.
- Louisiana Coastal Environments. For GEOL 1003 in Spring 1996.
- Geology of the Baton Rouge Area. For GEOL 1003 in Spring 1996, 1997.
- Geology of northeastern Louisiana. For GEOL 1003 in Spring 1997.
- Geology of the Bahamas. For GEOL 7931/3909 and LSU Chapter of AAPG in April 2004.
- Sedimentology and paleontology of fossil Mastodon Site, Tunica Hills. For GEOL 3011 in Fall 2005.
- Freshman Geology Field Camp, numerous trips throughout southeastern Rocky Mountains. For GEOL 1001/1003/1602/1602 in summer 2008.

Committees and Other Service

Departmental Committees at LSU

- Chair, Field Camp Committee, 2007-08 (chair), 2008-present.
- Faculty Search Committee 2008-09 (Geochemistry).
- Faculty Search Committee 2008-09 (Field Camp Director).
- Executive Committee, 2008-09.

- Undergraduate Recruiting Committee, 2008-09 (chair).
- Faculty Search Committee, 2004 (biogeoscience).
- Faculty Search Committee, 2004 (geomicrobiology).
- Applied Depositional Geosystems, 2003-present.
- Chair, Faculty Search Committee, 2002-03 (sedimentary geology).
- Graduate Curriculum, 1999-2000 (chair), 2002-03.
- Graduate Advisor, 1999-2002.
- Graduate Recruitment & Admissions, 1992-93, 1999-2000 (chair), 2000-02.
- Faculty Search Committee, 2001-02 (surface processes)
- Faculty Search Committee, 2002 (physical geology and field camp instructor)
- Faculty Search Committee, 2002 (historical geology instructor)
- Faculty Search Committee, 2000-01 (multiple disciplines)
- Undergraduate Geology Advisor, 1997-99.
- Wilbert Seminar Series Coordinator, 1999, 1994-95.
- Undergraduate Recruiting, 1995-99; committee chair, 1996-97.
- Undergraduate Curriculum, 1991-92, 1996-99.
- Faculty Search Committee, 1998 (sedimentary geology)
- Faculty Mentoring, 1997-98, committee chair 1997-98.
- BS Program Assessment, 1996-97.
- Student Awards, 1995-97.
- Faculty and Staff Awards, 1993-94.
- Speakers, 1992-93.
- Departmental Computer Facilities, 1991-92.
- Public Information, 1991-92.
- Howe-Russell Display Committee, 1991-92.

College Committees

- Policy Committee, 2008-present.
- Biological Sciences Professorship Selection Committee, Spring 2007
- Search Committee, Associate Dean for Academic Services, College of Basic Sciences, 2004.
- Chairs Committee, 2003-07.
- Campus Visitors, 2003-07; 2008-09.
- Advising, 1997-1999.
- High School Relations (Recruitment), 1996-98.
- Ad hoc committee to review M.S. and Ph.D. degree programs in Biological Sciences, 2001.

University Committees

- Search Committee, Vice Provost for Academics & Planning, 2007.
- LSU Commission on the Status of Women, 2006-07.
- Ad Hoc Committee developing BOR proposal for PhD in Env Sciences, spring 2007.
- Co-leader, Chair's Brown Bag Discussion Group, 2003-2007.
- Executive Vice Chancellor and Provost Search Committee, 2002, 2002-2003.
- Ad Hoc Taskforce of Athletic Council Policy, 2002-03.
- LSU Budget Committee, ex officio, 2002-03.
- Faculty Senate Review and Long Range Planning Committee, ex officio, 2002-03.
- Ad Hoc Committee on Graduate Tuition Waivers, Fall 2002.

- Distinguished Dissertation Award Committee, 1999 (for 1998), committee chair 2000 (for 1999).
- Faculty Mentoring Committee, Museum of Natural Science, 1998-2000.

Faculty Senate Committees and Offices

- Past President, LSU Faculty Senate, 2003-04.
- President, LSU Faculty Senate, 2002-03.
- Chair, LSU System Council of Faculty Advisors, 2001-2003.
- Vice President, LSU Faculty Senate, 2001-2002.
- LSU Representative to Conference of Louisiana Colleges and Universities, April 2001, hosted by Delgado Community College, New Orleans.
- Secretary, LSU Faculty Senate, 2000-2001.
- Senator, LSU Faculty Senate, 1997-2000.
- Faculty Senate Library Committee, 1992-95.

Professional Societies and Panels

- Symposium Co-convener for American Malacological Society and Western Society of Malacologists Joint meeting, 2005. Symposium: From development to extinction: molluscan neontology and paleontology.
- Executive Committee, Heads and Chairs of Earth and Space Science Departments, 2004-07.
- Advisory Board, World Oil Awards, 2004.
- Associate Editor, Journal of Paleontology, 1998-present.
- Paleontological Society Distinguished Lecturer, 1998-2000.
- Review-panel member, National Science Foundation, Division of Geosciences, Professional Opportunities for Women in Research and Engineering (POWRE), April 1998.
- Chair, Student Grant-in-Aid Committee, Paleontological Society, 1998 and 1999.

Membership in Professional Organizations

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|--|---------------------------------------|
| • Geological Society of America | • The Paleontological Society |
| • Paleontological Research Institution | • American Malacological Society |
| • Society of Sedimentary Geology (SEPM) | • Sigma Xi |
| • AAAS | • Association of Women Geoscientists |
| • American Assoc. of University Professors | • Nat'l Assoc. of Geoscience Teachers |