

## CURRICULUM VITAE

### MAUREEN A. O'LEARY

Department of Anatomical Sciences, Health Sciences Center T-8 (040)

Stony Brook University, Stony Brook, NY 11794-8081

Tel: 631-444-3730; Fax: 631-444-3947

E-mail: maureen.oleary@stonybrook.edu

### POSITIONS

#### CURRENT POSITIONS

Professor, Stony Brook University, Stony Brook, New York, 2014-present

Member, Interdepartmental Doctoral Program in Anthropological Sciences, Stony Brook University, 1998-2020

Joint Faculty Member, Department of Geosciences, Stony Brook University, 2000-present

Research Associate, Department of Vertebrate Paleontology, American Museum of Natural History, New York, 1999-present

#### PRIOR POSITIONS

Associate Professor, Stony Brook University, Stony Brook, New York, 2007-2014

Assistant Professor, Stony Brook University, Stony Brook, New York, 1999-2007

Postdoctoral Associate, Stony Brook University, Stony Brook, New York, 1997-1999

Postdoctoral Associate, Dept. of Cell Biology, New York University Medical Center, 1996-1997

### EDUCATION

Ph.D. (Anatomy: Vertebrate Paleontology), Johns Hopkins University, School of Medicine, 1990-1996

B.S. (Biology), Yale University, 1983-1987, cum Laude

### RESEARCH SUPPORT

#### PRIOR RESEARCH SUPPORT

National Science Foundation (PI – **O’Leary** with subaward to Phoenix Bioinformatics) “Supplement to ABI Sustaining Award”. **\$85,556**, 2019-2020.

National Science Foundation (PI – **O’Leary**, co-PIs, D. Ferguson, N. Simmons) “Innovative tools for incorporating continuous data from fossils in phylogenetic tree building: leveraging the MorphoBank platform” **\$189,898**, 2016-2019.

National Science Foundation (PI – **O’Leary**, co-PIs D. Ferguson, N. Simmons) “ABI Sustaining – MorphoBank: the web tool and database for phylogenetic tree-building with phenotypes and and the interpretation of trait evolution.” **\$462,551**. 2015-2019

National Science Foundation (PI – Ramakrishnan, C. R., co-PIs, D. S. Warren, Y. Liu, S. A. Smolka, I.V. Ramakrishnan, and M. A. O’Leary) “BIGDATA: F:DKM:DKA: Big Data Modeling and Analysis with Depth and Scale.” \$982,467 (O’Leary budget **\$113,746**), 2014-2019.

National Science Foundation (PI - **OLeary**) “Supplement for Special Creativity for Collaborative Research: AVAToL – Next Generation Phenomics for the Tree of Life” (O’Leary budget **\$182,443**), 2014-2016.

- National Science Foundation (PI – O’Leary) “Collaborative Research: AVAToL – Next Generation Phenomics for the Tree of Life” (O’Leary budget **\$798,802**, Stony Brook University is lead institution of 11 collaborators, total project budget \$3.4 million), 2012-2015.
- National Science Foundation (**PI-O’Leary**, co-PIs, D. Ferguson, J. Bloch, M. Silcox, E. Sargis) “ATOL: Collaborative research: resolving mammalian phylogeny with genomic and morphological approaches,” **\$388,146** (O’Leary budget, \$252,213, University of Florida subaward, \$135,933), 2006-2011)
- National Science Foundation (**PI-O’Leary**, co-PI D. Ferguson) “Cloud computing the phenotype: migrating key functions of MorphoBank from a “local cloud” to a production level cloud on the MS Azure platform – support for expanded phenomics research” **\$118,165**, 2009-2010
- National Science Foundation (**PI-O’Leary**, co-PIs: C. Baru, D. Ferguson, K. Lin) “Transforming morphological systematics from desktop to web applications: Development of the online workspace MorphoBank.org 3.0” **\$610,614** (O’Leary budget \$358,614, SDSC subaward, \$252,000), 2007-2010
- National Geographic Society. (**PI-O’Leary**, co-PIs, E. Roberts, L. Tapanila, D. Goodwin, and R. Speijer) “The Trans-Saharan Seaway Project: An Examination of Cretaceous-Eocene Strata in a Section with Vertebrate Fossils in the Tropics of Continental Africa” **\$25,564**, 2007
- National Science Foundation (**PI-O’Leary**, co-PI D. Ferguson) “Geoinformatics: MorphoBank, Web-based systematics software and archive for transforming the study of fossils in contemporary geoscience research,” **\$196,335**. 2006-2010
- National Science Foundation (**PI-O’Leary**, co-PIs E. Roberts, L. Tapanila, D. Goodwin) “SGER: Intensive Collection of Paleocene-Eocene Mammal Fossils and Development of a Stratigraphic Section in the Trans-Saharan Seaway (Mali),” **\$29,988**, Division of Earth Sciences, 2008-2010
- National Science Foundation, National Evolutionary Synthesis Center (**PI - O’Leary**) “Enhancing the interoperability of Morphbank and MorphoBank,” **\$25,000**, 2005-2006
- National Oceanic and Atmospheric Administration, (PI - Eleanor Sterling, American Museum of Natural History; **subcontractor-O’Leary**) “Understanding aquatic environments: Education, outreach and research at the American Museum of Natural History,” **\$61,400**, 2004-2005
- National Science Foundation, (**PI-O’Leary**; co-PI D. W. Krause) “Acquisition of instruments and technical support for an interdepartmental fossil preparation laboratory,” **\$325,620**, Division of Earth Sciences, 2001-2005
- National Science Foundation (**PI-O’Leary**, Grant for Ph.D. candidate Robert V. Hill) “Dissertation Research: New Data from the Integument and Osteoderms for Amniote Phylogeny,” Division of Environmental Biology **\$8,723**, 2002-2004
- National Science Foundation (**PI-O’Leary**), “Workshop to plan an interactive web data matrix (MorphoBank) for storage and retrieval of morphological data for phylogenetic analysis,” **\$51,954**, Division of Environmental Biology and Division of Earth Sciences, 2001-2004
- National Science Foundation, (**PI-O’Leary**; collaborative with J. Gatesy) “Cetacean phylogeny: A reconciliation of fossil and neontological data and the importance of taxonomic sampling,” Division of Environmental Biology (Systematics), **\$138,044**, 1999-2004
- Leakey Foundation (**PI-O’Leary**) “Continued search for Paleogene anthropoids from Mali including detailed biostratigraphy,” **\$20,000**, 2000

- National Geographic Society (**PI-O'Leary**) "Preparation of fossils recovered from Mali expedition," **\$1,500**, 1999-2000
- National Geographic Society (**PI-O'Leary**) "Fossil mammals from the Cretaceous and Tertiary of Mali," **\$19,960**, 1999
- Leakey Foundation (**PI-O'Leary**), "Paleogene anthropoids from West Africa: Exploration of northeastern Mali," **\$11,807**, 1999
- Theodore Roosevelt Fund (**PI-O'Leary**), American Museum of Natural History, "Fossil mammals from the Sand Wash Basin," **\$2,000**, 1998
- National Science Foundation Doctoral Dissertation Improvement Grant (PI: Kenneth D. Rose, O'Leary's Ph.D. advisor), "Documentation of gradual evolution in the oldest true primates," **\$10,300**, 1993-1996

### **HONORS, AWARDS, FELLOWSHIPS**

- Excellence in Senior Research Award, Renaissance School of Medicine, Stony Brook University, 2019
- Jack T. Stern Award for outstanding teaching, Department of Anatomical Sciences, Stony Brook University, 2017
- Hennig Society Fellow, elected 2016
- Hero of the Year Award for science research mentorship of minorities at Uniondale High School, 2004
- Aleš Hrdlička Prize for graduate student research, American Association of Physical Anthropologists, 1996
- Johns Hopkins School of Medicine Graduate Student Scholarship, 1990-1995
- Fellows Prize, Saybrook College, Yale University, 1987
- Bates Fellowship for undergraduate scientific research, Yale University, 1986
- Jackson Laboratory, "Training for Research" program, Bar Harbor, Maine, 1982

### **LECTURES**

#### **INVITED SCIENTIFIC AND PUBLIC LECTURES**

- University of Bari, Department of Geology, Bari, Italy, 2022
- Museo Paleontológico Egidio Feruglio, keynote speaker, Reunión Argentina de Cladística y Biogeografía, 2022
- Richard Gilder Graduate School, American Museum of Natural History, Comparative Biology Seminar Series, 2009
- Johns Hopkins University, Department of Functional Anatomy and Evolution, 2009
- Rutgers University, Department of Geosciences, 2007
- George Washington University, Department of Biology, 2007
- Duke University, Department of Biology, Tree of Life Symposium, 2006
- National Academy of Sciences, 16<sup>th</sup> Beckman Frontiers of Science conference, Beckman Center, Irvine, California, 2004
- Stony Brook University, public lecture on systematics, Stony Brook, New York, 2004
- University of Massachusetts, Department of Organismic and Evolutionary Biology, Amherst, 2004
- Cold Spring Harbor Laboratories, Dolan Center, Cold Spring Harbor, New York, 2002
- American Museum of Natural History, "Tree of Life" conference, 2002
- University of California, Berkeley, Department of Integrative Biology, 2002
- University of Connecticut, Department of Ecology and Evolutionary Biology, 2001
- American Museum of Natural History, Systematics Seminar Series, 2001

University of Chicago, Department of Organismal Biology, Evolutionary Morphology Seminar Series, 2000  
 Universität Tübingen, Spezielle Zoologie, 1999  
 Harvard University, Department of Organismal and Evolutionary Biology, 1998  
 Queens College, Department of Biology, 1998  
 State University of New York at Stony Brook, Dept. of Anatomical Sciences, Paleobiology seminar series, 1997

#### **INVITED SCIENTIFIC WORKSHOPS AND SYMPOSIA**

International Legume Morphology Symposium & Workshop, Brazil, 2015  
 National Science Foundation, Ideas Lab, Division of Environmental Biology, Lake Placid, New York, 2011  
 National Science Foundation, Future of Systematics Workshop, Chicago, 2009  
 National Science Foundation, Assembling the Tree of Life, multi-project Principal Investigators Meeting, New Orleans, 2008  
 National Science Foundation, Ppod - Phylogenetics Workshop, National Evolutionary Synthesis Center, Durham, North Carolina, 2007  
 National Science Foundation, Building a Geoinformatics Infrastructure, Denver, Colorado, 2007  
 National Evolutionary Synthesis Center, Meta-Data workshop, Wilmington, North Carolina, 2005  
 NSF-National Evolutionary Synthesis Center, Morphobank-Morphbank Collaboration, Durham, North Carolina, 2005  
 National Science Foundation "A Tree of Life", workshop on databasing morphology, 2004  
 National Center for Biotechnology Information (NCBI) - National Institutes of Health (NIH), workshop on DNA barcoding, 2004  
 University of Florida, Tallahassee, workshop to develop a consortium on morphological databases for systematics, 2004  
 University of Florida, Gainesville "An NSF workshop on establishing a comprehensive database for plant systematics," 2004, NSF  
 New York Botanical Garden, "Development of a National Systematics Infrastructure: A Virtual Instrument for the 21<sup>st</sup> Century," conference 2003  
 Cold Spring Harbor, Banbury Center, "Taxonomy and DNA," conference 2003  
 University of Florida, Gainesville, "Deep Time," conference, 2002  
 University of Texas, Austin, NSF- A Tree of Life program development Conference, 2000  
 Yale University and the National Science Foundation - A Tree of Life program development conference, 1999

#### **TEACHING**

#### **GRADUATE COURSES TAUGHT**

Gross Anatomy of the Head, Neck and Trunk/Regional Human Anatomy (dissection-based), Stony Brook University, 1997-present  
 Systematics, Comparative Methods and Biogeography (co-Course Director), 2010 – 2015  
 Gross Anatomy, New York University School of Medicine, 1996  
 Participation in the following Stony Brook University Graduate courses:  
     Primate Evolution, Vertebrate Evolution, Human Evolution, Geosciences  
 Gross Anatomy (Teaching Assistant), Johns Hopkins University, School of Medicine, 1995  
 Research Seminar, Macroevolution, 1998-2020

**UNDERGRADUATE COURSES TAUGHT**

Regional Human Anatomy (undergraduate, with dissection) 1998-present  
 Building Web Applications for Bioinformatics, 2012, 2016  
 Life Through Time, Stony Brook University, 2000-2006

**PALEONTOLOGICAL FIELD PROJECTS****LEADER**

Faculty of Sciences, Chouaib Doukkali University-American Museum of Natural History  
 – Stony Brook University – Expedition to Cretaceous and Tertiary rocks of northern Morocco, 2014  
 Stony Brook University – Cheik Anta Diop University Paleontological Expedition to Cretaceous and Tertiary rocks of Senegal, 2010  
 Stony Brook University – Centre National de la Recherche Scientifique et Technologique, Bamako Paleontological Expedition to Cretaceous and Tertiary rocks of northeastern Mali, 1999, 2003, 2008  
 Stony Brook University - American Museum of Natural History Paleontological Expedition, Early Tertiary rocks of the Sand Wash Basin, Colorado, 1998

**MEMBER**

American Museum of Natural History Expedition, Washakie Basin, Wyoming, 1997  
 Duke University Paleontological Expedition, Fayum, Egypt, 1993  
 Johns Hopkins-USGS Paleontological Expedition, Bighorn Basin, Wyoming, 1991-1993  
 Iowa State Geology Field Course, Shell, Wyoming, 1993

**UNIVERSITY AND PROFESSIONAL SERVICE****MEMBERSHIP IN PROFESSIONAL SOCIETIES**

Hennig Society, 1997-present  
 Society of Vertebrate Paleontology, 1992-present  
 Society of Systematic Biologists, 1993-2005

**Stony Brook University Service**

Co-chair, East Campus Environmental Committee, 2008-2011  
 Campus Safety Advisory Committee, Office of the President, member, 2008  
 Curriculum Review Committee, Course Evaluator, 2009  
 Executive Committee of Faculty Senate, School of Medicine, member 2006-08  
 Medical Admissions Committee, Stony Brook University, member, 2002-05  
 Representative to the Campus Environmental Committee for the Department of Anatomical Sciences, 2007  
 Lecturer in "Living World Lecture Series," Stony Brook University 2004  
 Scientific Seminar, Geosciences Department, Stony Brook University, 2004  
 Faculty Senate, School of Medicine, Stony Brook University, 2002-2009

**DEPARTMENTAL SERVICE**

Graduate Program Director, Department of Anatomical Sciences, 2007-2020  
 Departmental website redesign (with Alan Turner), Department of Anatomical Sciences, 2008, 2019  
 Department of Anatomical Sciences Laboratory Safety Coordinator, 2007-present  
 Department of Anatomical Sciences gross dissection laboratory supervisor, Stony Brook University, 2002-present

Associated Medical Schools Anatomical Materials Subcommittee, member,  
2004-2019  
Member, Assistant Professor Search Committee, Department of Anatomical Sciences, 2004  
Chair, Teaching Assistant Committee, Interdepartmental Doctoral Program in Anthropological Sciences, SUNY Stony Brook, 2000-2002

#### **PROFESSIONAL SERVICE**

Council member Willi Hennig Society 2022-2025  
Director of MorphoBank, 2000-2021  
National Science Foundation, panel member, Office of Cyberinfrastructure (CISE), 2021  
National Science Foundation, panel member, Division of Environmental Biology, 2021  
National Science Foundation, panel member, Division of Environmental Biology, 2020  
National Science Foundation, panel member, Division of Environmental Biology, 2015  
National Science Foundation, panel member, Division of Earth Sciences, Sedimentary Geology and Paleontology, 2014  
Director of the MorphoBank project, a federally supported and publicly available scientific web application and database, 2001-present  
National Science Foundation, panel member, Geoinformatics, Division of Earth Sciences, 2009  
Associate Editor, *Cladistics*, 2009-present  
National Science Foundation, panel member, Assembling the Tree of Life, Division of Environmental Biology, 2009  
AmpibAnat, NSF-sponsored databasing effort, board member, 2007-08  
National Science Foundation, panel member, Systematics, 2007  
Council Member (elected), Society of Systematic Biologists, 2004-07  
Chair, Skinner Prize Committee, Society of Vertebrate Paleontology, 2000-04  
National Science Foundation, panel member, Division of Geosciences (Geology and Paleontology), 2003  
Associate Editor, *Journal of Vertebrate Paleontology*, 2000-02  
National Science Foundation, panel member, Division of Environmental Biology (Systematics), 2001 and 2002  
Romer-Simpson Medal Committee, Society of Vertebrate Paleontology, 2000-02  
Student Poster Prize Committee, Society of Vertebrate Paleontology, 1999-2001  
Information Management Committee, Society of Vertebrate Paleontology, 1998-2000  
Grant proposals reviewed annually for: National Science Foundation, National Geographic Society, 1999-present

#### **PUBLICATIONS**

##### **PEER-REVIEWED RESEARCH ARTICLES AND MONOGRAPHS, IN REVIEW (2)**

2. Novacek, M.J., E. Hoffman, and M. A. O'Leary. In Review. First occurrence of the eutherian mammal *Asioryctes nemegtensis* from the Upper Cretaceous Djadokhta Formation, Gobi Desert, Mongolia, and a revised alpha taxonomy based on the skull and dentition. *Journal of Vertebrate Paleontology*. In Press.
1. Sarr, R., R. V. Hill, X. A. Jenkins, L. Tapanila, and M. A. O'Leary. A composite section of fossiliferous Cretaceous-Paleogene (K/Pg) Boundary localities in Senegal and preliminary description of a new Upper Maastrichtian vertebrate fossil assemblage. American Museum Novitates.

**PEER-REVIEWED RESEARCH ARTICLES AND MONOGRAPHS, PUBLISHED OR IN PRESS (58)****MONOGRAPHS (3)**

3. O'Leary, M. A., M. L. Bouaré, K. M. Claeson, K. Heilbronn, R. V. Hill, J. McCartney, J. A. Sessa, F. Sissoko, L. Tapanila, E. Wheeler, and E. M. Roberts. 2019. Stratigraphy and paleobiology of the Upper Cretaceous – lower Paleogene sediments from the Tran-Saharan Seaway in Mali. 2019. *Bulletin of the American Museum of Natural History*. 436:1-177.
2. O'Leary, M. A. 2016. Comparative basicranial anatomy of extant terrestrial and semi-aquatic Artiodactyla. *Bulletin of the American Museum of Natural History*. 409:1-55.
1. O'Leary, M. A. 2010. An anatomical and phylogenetic study of the osteology of the petrosal of extant and extinct Artiodactylans (Mammalia) and relatives. *Bulletin of the American Museum of Natural History*. 335:1-206.

**ARTICLES (55)**

55. Yo, K., E. A. Hoffman, M. A. O'Leary, and M. J. Novacek. 2022. A new Early Paleogene fossil mammal locality in the central-eastern Nemegt Basin, Gobi Desert, Mongolia and notes on mammalian biostratigraphy. *Journal of Paleontology*. 1-24
54. Velazco, P. M., A. J. Buczek, D. K. Hoffman, M. A. O'Leary, and M. J. Novacek. 2022. Combined data analysis of fossil and living mammals: a Paleogene sister taxon of Placentalia and the antiquity of Marsupalia. *Cladistics*. 38:359-373.
53. O'Leary, M. A., 2021. A dense sample of fossil primates (Adapiformes, Notharctidae, Notharctinae) from the Early Eocene Willwood formation, Wyoming: documentation of gradual change in tooth area and shape through time. *American Journal of Physical Anthropology*. 1-16.
52. Gatesy, J., M. Orliac, M. Spaulding, and M. A. O'Leary. 2020. Artiodactylamorpha, in *Phylonyms: A Companion to the PhyloCode*. CRC Press, Boca Raton, FL.
51. O'Leary, M. A., M. Orliac, M. Spaulding, and J. Gatesy. 2020. Artiodactyla, in *Phylonyms: A Companion to the PhyloCode*. CRC Press, Boca Raton, FL.
50. McCartney, J. A., E. M. Roberts, L. Tapanila, and M. A. O'Leary. 2018. Large palaeophiid and nigerophiid snakes from Paleogene Trans-Saharan Seaway deposits of Mali. *Acta Palaeontologica Polonica*. 63:207-220.
49. O'Leary, M. A., K. Alphonse, M. Arce-H., D. Cavaliere, A. Cirranello, T. Dietterich, M. Julius, S. Kaufman, E. Law, M. Passarotti, A. Reft, J. Robalino, N. B. Simmons, S. Smith, D. Stevenson, E. Theriot, P. Velazco, R. Walls, M. Yu, and M. Daly. 2018. Crowds replicate performance of scientific experts scoring phylogenetic matrices of phenotypes. *Systematic Biology*. 67:49-60.
48. Laing, A., S. Doyle, M. E. L. Gold, S. J. Nesbitt, M. A. O'Leary, A. H. Turner, E. W. Wilburg, and K. E. Poole. 2017. Giant taxon-character matrices: the future of morphological systematics. *Cladistics*. 1-3.
47. Arce-H., M., J. G. Lundberg, and M. A. O'Leary. 2017. Phylogeny of the North American catfish family Ictaluridae (Teleostei: Siluriformes) combining morphology, genes and fossils. *Cladistics*. 33:406-428.
46. Robalino, J., B. Wilkins, H. Bracken-Grissom, T.-Y. Chan, and M. A. O'Leary. 2016. The origin of large-bodied shrimp that dominate modern global aquaculture. *PLoS One*. 1-24.

45. Orliac, M. and **M. A. O'Leary**. 2016. The inner ear of *Protungulatum* (Pan-Euungulata, Mammalia). *Journal of Mammalian Evolution*. 1-16.
44. Hill, R. V., R. M. Roberts, L. Tapanila, M. L. Bouare, F. Sissoko, M. A. **O'Leary**. 2015. Multi-species scavenging in the Trans-Saharan Seaway: Evidence from Late Cretaceous dyrosaurid (Crocodyliformes) fossils from Northeastern Mali. *Palaeos*. 30:589-596.
43. Claeson, K. M., R. Sarr, R. V. Hill, E. H. Sow, R. Malou, and M. A. **O'Leary**. 2015. New fossil scombrid (Pelagia:Scombridae) fishes preserved as predator and prey from the Eocene of Senegal. *Proceedings of the Academy of Natural Sciences, Philadelphia*. 164:133-147.
42. Miller, M., T. Schwartz, B. E. Pickett, S. He, E. B. Klem, R. H. Scheuermann, M. Passarotti, S. Kaufman, M. A. **O'Leary**. 2015. A RESTful API for access to phylogenetic tools via the CIPRES Science Gateway. *Evolutionary Bioinformatics*. 11: 1-6.
41. Cranston, K., L. J. Harmon, M. A. **O'Leary**, and C. Lisle. Best practices for data sharing in phylogenetic research. 2014. *PLoS Currents Tree of Life*. 1-8.
40. Orliac, M. J., and **M. A. O'Leary**. 2014. Comparative anatomy of the petrosal bone of dichobunid artiodactyls (Mammalia). *Journal of Mammalian Evolution*. 221:417-426
39. Hu, X., M. Lam, S. Todorovic, T. G. Dietterich, M. A. **O'Leary**, A. L. Cirranello, N. B. Simmons, and P. M. Velazco. 2013. Zero-shot learning and detection of teeth in images of bat skulls. *2013 IEEE International Conference on Computer Vision Workshops*. 1-7.
38. **O'Leary**, M. A., J. I. Bloch, J. J. Flynn, T. J. Gaudin, A. Giallombardo, N. P. Giannini, S. L. Goldberg, B. P. Kraatz, Z.-X. Luo, J. Meng, X. Ni, M. J. Novacek, F. A. Perini, Z. Randall, G. W. Rougier, E. J. Sargis, M. T. Silcox, N. B. Simmons, M. Spaulding, P. M. Velazco, M. Weksler, J. R. Wible, and A. L. Cirranello. 2013. Response to comment on "The placental mammal ancestor and the post-K-Pg radiation of placentals." *Science*. 341:613.
37. Burleigh, G., K. Alphonse, A. A. Alverson, H. M. Bik, C. Blank, A. L. Cirranello, H. Cui, M. Daly, T. G. Dietterich, G. Gasparich, J. Irvine, M. Julius, S. Kaufman, E. Law, J. Liu, L. Moore, M. A. **O'Leary**, M. Passarotti, S. Ranade, N. B. Simmons, D. W. Stevenson, R. W. Thacker, E. C. Theriot, S. Todorovic, P. M. Velazco, R. L. Walls, J. M. Wolfe, and M. Yu. 2013. Next Generation phenomics for the Tree of Life. *PLoS Currents: Tree of Life*. Edition 1.  
doi: 10.1371/currents.tol.085c713acafc8711b2ff7010a4b03733.
36. **O'Leary**, M. A., J. I. Bloch, J. J. Flynn, T. J. Gaudin, A. Giallombardo, N. P. Giannini, S. L. Goldberg, B. P. Kraatz, Z.-X. Luo, J. Meng, X. Ni, M. J. Novacek, F. A. Perini, Z. Randall, G. W. Rougier, E. J. Sargis, M. T. Silcox, N. B. Simmons, M. Spaulding, P. M. Velazco, M. Weksler, J. R. Wible, and A. L. Cirranello. 2013. The placental mammal ancestor and the post-K-Pg radiation of placentals. *Science*. 332:662-667.
35. Uhen, M. D., A. D. Barnosky, B. Bills, J. Blois, M. A. Carasco, M. T. Carrano, G. M. Erickson, M. Fortelius, R. W. Graham, E. C. Grimm, M. **O'Leary**, A. Mast, W. Piel, and P. D. Polly. 2013. From card catalogues to computers: databases in vertebrate paleontology. *Journal of Vertebrate Paleontology*. 33:13-28.
34. **O'Leary**, M. A., R. Sarr, R., Malou, E. H. Sow, R. V. Hill, and C. Lepre. 2012. A new fossil amiid from the Eocene of Senegal and the persistence of extinct marine amiids after the Cretaceous-Tertiary boundary. *Copeia*. 4:603-608.
33. Orliac, M. J., J. Benoit, and M. A. **O'Leary**. 2012. The inner ear of *Diacodexis*, oldest artiodactyl mammal. *Journal of Anatomy*. 221:417-426.

32. O'Leary, M. A., B. A. Patel, and M. N. Coleman. 2012. Endocranial petrosal anatomy of *Bothriogenys* (Mammalia, Artiodactyla, Anthracotheriidae), and petrosal volume and density comparisons among aquatic and terrestrial artiodactyls and outgroups. *Journal of Paleontology*. 86:44-50.
31. O'Leary, M. A. and A. L. Wetterer. 2011. Basicranium of *Harpagolestes uintensis* (Mammalia, Mesonychia). *Journal of Vertebrate Paleontology*. 31:913-918.
30. O'Leary, M. A., and S. Kaufman. 2011. MorphoBank: phylogenomics in the "cloud". *Cladistics*. 27:1-9.
29. Claeson, K. M., M. A. O'Leary, E. M. Roberts, F. Sissoko, M. Bouare, L. Tapanila, D. Goodwin, and M. D. Gottfried. 2010. First Mesozoic record of the stingray *Myliobatis wurnoensis* from Mali and a phylogenetic analysis of Myliobatidae incorporating dental characters. *Acta Paleontologica Polonica*. 55: 655-674.
28. Spaulding, M., M. A. O'Leary, J. Gatesy. 2009. Relationships of Cetacea (Mammalia, Artiodactyla) among mammals: increased taxon sampling alters positions of key fossils and interpretations of character evolution. *PLOS One*. 4:1-14. <http://www.plosone.org/article/info:doi/10.1371/journal.pone.0007062>
27. Hill, R. V., J. A. McCartney, E. Roberts, M. Bouare, F. Sissoko, and M. A. O'Leary. 2008. Dyrosaurid (Crocodyliformes: Mesoeucrocodylia) fossils from the Upper Cretaceous and Paleogene of Mali: implications for phylogeny and survivorship across the K-T boundary. *American Museum Novitates*. 3631:1-19.
26. O'Leary, M. A., and J. Gatesy. 2008. Impact of increased character sampling on the phylogeny of Artiodactyla (Mammalia): combined analysis including fossils. *Cladistics*. 24:397-442.
25. Tapanila, L., E. M. Roberts, M. L. Bouare, F. Sissoko, and M. A. O'Leary. 2008. Phosphate taphonomy of bone and coprolite conglomerates: A case study from the Eocene of Mali, NW Africa. *Palaios*. 23:139-152. (**Cover article**).
24. Gaffney, E. S., E. Roberts, F. Sissoko, M. L. Bouare, L. Tapanila, and M. A. O'Leary. 2007. *Acleistocheles*, a new side-necked turtle (Pelomedusoides: Bothremydidae) from the Paleocene of Mali. *American Museum Novitates*. 3549:1-24.
23. O'Leary, M. A., E. M. Roberts, M. L. Bouare, F. Sissoko, and L. Tapanila. 2006. Malian Paenungulata (Mammalia: Placentalia): new candidates for the oldest African afrotheres. *Journal of Vertebrate Paleontology*. 26:981-988.
22. Meisner, A. D., A. V. Klaus, and M. A. O'Leary. 2005. Sperm head morphology of 36 species of artiodactylans, perissodactylans and cetaceans (Mammalia). *Journal of Morphology*. 263:179-202.
21. Tapanila, L., E. M. Roberts, M. L. Bouaré, and F. Sissoko, and M. A. O'Leary. 2004. Bivalve borings in phosphatic coprolites and bone, Cretaceous-Paleogene of Mali. *Palaios*. 19:565-573.
20. O'Leary, M. A., E. Roberts, J. J. Head, M. Bouaré, and F. Sissoko. 2004. A saltasaurid Titanosaurian (Dinosauria: Sauropoda) from the "Continental Intercalaire" of Mali. *Journal of Vertebrate Paleontology*. 24:923-930.
19. O'Leary, M. A., M. Allard, M. J. Novacek, J. Meng, and J. Gatesy. 2004. Building the mammalian sector of the tree of life. Pp. 490-516. In (J. Cracraft and M. J. Donoghue, eds.) *Assembling the Tree of Life*. Oxford University Press, New York.
18. O'Leary, M. A. 2004. A fragmentary odontocete cranium from the Lower Miocene of Venezuela. *Special Papers in Palaeontology*. 71:99-104.

17. O'Leary, M. A., J. Gatesy, and M. J. Novacek. 2003. Are the dental data really at odds with the molecular data? Morphological evidence for paraxonian phylogeny (re)reexamined. *Systematic Biology*. 52:853-864.
16. Bamford, M. K., E. M. Roberts, F. Sissoko, M. L. Bouaré, and M. A. O'Leary. 2002. An extensive deposit of fossil conifer wood from the Mesozoic of Mali, southern Sahara. *Palaeogeography, Palaeoclimatology, Palaeoecology*. 186:115-126.
15. Brochu, C. A., M. L. Bouaré, F. Sissoko, E. M. Roberts, and M. A. O'Leary. 2002. A dyrosaurid crocodyliform braincase from Mali. *Journal of Paleontology*. 76:1060-1071.
14. Gatesy, J. and M. A. O'Leary. 2001. Deciphering Whale Origins with Molecules and Fossils. *Trends in Ecology and Evolution*. 16:562-570. (Cover article).
13. O'Leary, M. A. 2001. The phylogenetic position of cetaceans: further combined data analyses, comparisons with the stratigraphic record and a discussion of character optimization. *American Zoologist*. 41:487-506.
12. Brochu, C. A., H. N. Bryant, J. M. Theodor, M. A. O'Leary, J. Adrian, and C. D. Sumrall. 2001. Modern phylogenetics in paleontology: Comments on Vermeij. *Paleobiology*. 27:174-176.
11. O'Leary, M. A., S. G. Lucas, and T. E. Williamson. 2000. A new specimen of *Ankalagon* (Mammalia, Mesonychia) and evidence of sexual dimorphism in mesonychians. *Journal of Vertebrate Paleontology*. 20:387-393.
10. O'Leary, M. A. and M. D. Uhen. 1999. The time of origin of whales and the role of behavioral changes in the terrestrial-aquatic transition. *Paleobiology*. 25:534-556.
9. O'Leary, M. A. 1999. Parsimony analysis of total evidence from extinct and extant taxa, and the cetacean-artiodactyl question. *Cladistics*. 15:315-330.
8. O'Leary, M. A. and J. H. Geisler. 1999. The position of Cetacea within Mammalia: Phylogenetic analysis of morphological data from extinct and extant taxa. *Systematic Biology*. 48:455-490.
7. O'Leary, M. A. 1999. Whale origins. *Science*. 283:1641-1642.
6. O'Leary, M. A. 1998. Phylogenetic and morphometric reassessment of the dental evidence for a mesonychian and cetacean clade. Pp. 133-161. In (J. G. M. Thewissen, ed.) *The Emergence of Whales*. Plenum Press, New York.
5. O'Leary, M. A. 1998. Morphology of the humerus of *Hapalodectes* (Mammalia, Mesonychia). *American Museum Novitates*. 3242:1-6.
4. Maas, M. C. and M. A. O'Leary. 1996. Evolution of enamel microstructure in North American Notharctidae (Primates). *Journal of Human Evolution*. 31:293-310.
3. Rose, K. D. and M. A. O'Leary. 1995. The manus of *Pachyaena gigantea* (Mammalia: Mesonychia). *Journal of Vertebrate Paleontology*. 15:855-859.
2. O'Leary, M. A. and K. D. Rose. 1995. New mesonychian dentitions from the Paleocene and Eocene of the Bighorn Basin, Wyoming. *Annals of the Carnegie Museum*. 64:147-172.
1. O'Leary, M. A. and K. D. Rose. 1995. Postcranial skeleton of the early Eocene mesonychid *Pachyaena* (Mammalia:Mesonychia). *Journal of Vertebrate Paleontology*. 15:401-430.

#### BOOK REVIEWS, POPULAR ARTICLES, LETTERS TO THE EDITOR (11)

11. Arce-H., M. and M. A. O'Leary. 2017. Citizen scientists can document the natural world. *OUPBlog*. November 28, 2017.

- <https://blog.oup.com/2017/11/citizen-scientists-can-document-natural-world/>
10. O'Leary, M. A. 2014. On the trail of the first placental mammals. *American Scientist*. 102:190-197.
  9. O'Leary, M. A. 2009. Artiodactylans: Phylogeny and the Fossil Record. *Journal of Mammalian Evolution*. 16:65-67.
  8. O'Leary, M. A. 2003. Morphology in the Contemporary Landscape of Systematics: Learning from the Trilobite. *Paleobiology*. 29:298-302.
  7. O'Leary, M. A. 2002. Evolutionary Relationships. *McGraw-Hill 2002 Yearbook of Science & Technology*. 98-100.
  6. O'Leary, M. A. Mesonychia. 2002. (W. F. Perrin, B. Würsig, and J.G.M. Thewissen, eds.). *Encyclopedia of Marine Mammals*. Academic Press, San Diego. 735-737.
  5. O'Leary, M. A. 2001. Paleontology and Politics. *Geotimes*. September, p. 4.
  4. O'Leary, M. A. 2001. Vertebrate Paleontology. *Geotimes*. July pp. 32-33.
  3. O'Leary, M. A. 2000. Vertebrate Paleontology. *Geotimes*. July. Pp.32-34.
  2. O'Leary, M. A. 2000. "The Hippos" by S. K. Eltringham. *American Zoologist*. 40:309-310.
  1. O'Leary, M. A. 1997. "Interactive Museum." Letter to the Editor. *The New York Times*. Dec. 7:A28.

#### **DISSERTATION**

O'Leary, M. A. 1996. Dental evolution in the early Eocene Notharctinae (Primates, Adapiformes) from the Bighorn Basin, Wyoming: documentation of gradual evolution in the oldest true primates. Ph.D thesis, Johns Hopkins University.

#### **SOFTWARE PACKAGES DEVELOPED AND AVAILABLE TO THE SCIENTIFIC COMMUNITY (1)**

O'Leary, M. A., and S. G. Kaufman. 2012. MorphoBank 3.0: Web application for morphological phylogenetics and taxonomy. <http://www.morphobank.org>.

#### **ABSTRACTS (36)**

37. Long-Fox, B. L., K. Alphonse, A. Andruhchow-Colombo, M. A. O'Leary, and T. Z. Berardini. 2023. MorphoBank: A paleontological research tool and repository for morphological matrices and media. *4th Palaeontological Virtual Congress*.
36. S. Zack, K. Rose, and M. O'Leary. 2022. New information on the enigmatic *Wyolestes* and the affinities of the genus. *Society of Vertebrate Paleontology Annual Meeting 376A*.
35. Huala, E. and M. O'Leary. 2020. Sustainability approaches for biological databases and tools. *Plant and Animal Genome Conference XXVIII*.
34. Hill, R. V., J. McCartney, E. M. Roberts, L. Tapanila, K. M. Claeson, K. Heilbronn, M. Bouaré, and M. A. O'Leary. 2018. The tetrapod fauna of the Trans-Saharan Seaway in the Late Cretaceous and Early Paleogene of Mali. *Society of Vertebrate Paleontology*.
33. McCartney, J. A., K. Heilbronn, R. V. Hill, M. A. O'Leary, J. A. Sessa, L. Tapanila, and E. M. Roberts. 2017. The Trans-Saharan Seaway recorded in the rocks of Mali: a key Paleogene locality for the study of global eustasy and paleotemperature in the ancient Tropics. *CBEP-2017*.
32. Winchester, J. M., D. M. Boyer, M. A. O'Leary, and J. A. Sessa. 2017. The importance and challenges of database integration: MorphoBank, MorphoSource and the Paleobiology Database. *iDigBio conference*, Ann Arbor, Michigan.
31. Arce-H., M. and M. A. O'Leary. 2015. Reinvestigating the phylogeny of Ictaluridae (Pisces, Siluriformes). *Willi Hennig Society* meeting.
30. Lundberg, J. G., K. Luckenbill, M. Arce-H., D. Hendrickson, P. Mabee, M. A.

- O'Leary, and J. P. Sullivan. 2015. Ictaluridae 2015: Systematic Challenges, Opportunities and New Approaches. **Joint meeting of Ichthyologists and Herpetologists (JMIH)** hosted by University of Nevada, Reno. July 15-19.
29. Arce-H., M. and M. O'Leary. 2015. Reinvestigating the Phylogeny of Ictaluridae, a Study Done Using MorphoBank. **Joint meeting of Ichthyologists and Herpetologists (JMIH)** hosted by University of Nevada, Reno. July 15-19.
28. Daly, M., A. Reft, E. Law, and M. O'Leary. 2014. The wisdom of the crowd: a crowd-sourcing task for character discovery from nematocyst ultrastructure. **Society for Integrative and Comparative Biology**, Austin, Texas.
27. Spaulding, M. A. and M. A. O'Leary. 2011. MorphoBank: Homology of phenotypes over the web – a transformation in collaborative morphology-based research. **Conference on Secondary Adaptation of Tetrapods to Life in Water**.
26. O'Leary, M. A. 2011. MorphoBank: collecting and storing phenomic data for phylogenetic research in the “cloud”. **American Association of Physical Anthropologists**.
25. O'Leary, M. A., M. Spaulding, S. Parent, and J. Gatesy. 2008. Instability of pivotal fossil clades in cetartiodactylan phylogeny and evolution of the ear region and ankle. **Journal of Vertebrate Paleontology**. 28.
24. McCartney, J. A., N. J. Kley, and M. A. O'Leary. 2008. Body size of the giant Eocene snake *Palaeophis colossaeus* (Serpentes: Palaeophiidae) estimated from recently collected material from Mali. **Journal of Vertebrate Paleontology** 28:114A.
23. Novacek, M. J. and the Mammal ATOL Team. 2008. A team-based approach yields a new matrix of 4,500 morphological characters for mammalian phylogeny. **Journal of Vertebrate Paleontology**. 28, Supplement to Number 3:121A.
22. Rees, A., J. Alroy, C. Scotese, A. Memon, D. B. Rowley, J. T. Parrish, D. B. Weishampel, E. Platon, M. A. O'Leary, and M. A. Chandler. 2007. Phanerozoic Earth and Life: The Paleointegration Project. **The Geological Society of America, Geoinformatics 2007 conference**.
21. Tapanila, L., E. M. Roberts, and M. A. O'Leary. 2004. Cretaceous-Tertiary faunas of the trans-Saharan seaway in NW Africa: Trends in preservation and Paleoecology. **Journal of Vertebrate Paleontology**. 24 (Supplement to No. 3):120A.
20. Tapanila, L., E. M. Roberts, M. A. O'Leary, and M. J. Novacek. 2003. Vertebrate-rich phosphate conglomerates from the shallow Trans-Saharan Seaway, Northeastern Mali. Geological Society of America, Annual Meeting.
19. O'Leary, M.A. 2003. The position of whales among mammals: incorporating new discoveries into continued combined analysis. **Journal of Vertebrate Paleontology**. 23 (Supplement to No. 3):84A.
18. Tapanila, L., E. M. Roberts, and M. A. O'Leary. 2003. Phosphate-mediated taphonomy: a concentrated bone and bioeroded coprolite bed from the Maastrichtian of Mali. **Journal of Vertebrate Paleontology**. 23 (Supplement to No. 3):103A.
17. Claeson, K. C., M. Godinot, and M. A. O'Leary. 2003. New specimens of *Dissacus* (Mammalia, Mesonychia) from Palette, Southern France, and a cladistic analysis of *Dissacus* species. **Journal of Vertebrate Paleontology**. 23 (Supplement to No. 3):41A .
16. O'Leary, M. A. 2001. A record of *Aetobatus* survivorship across the K/T boundary: New data from the Maastrichtian of West Africa (Mali). **Journal of Vertebrate Paleontology**. 21 (Supplement to No. 3): 85A.
15. O'Leary, M. A. 2000. Operational obstacles to total evidence analyses

- considering that 99% of life is extinct. *Journal of Vertebrate Paleontology*. 20 (Supplement to No. 3): 61A.
14. O'Leary, M. A. 2000. Morphological and molecular data and the sequence of character transformation in the origin of whales from terrestrial mammals. *American Zoologist*. 39:47A.
  13. Roberts, E. M., and M. A. O'Leary, 1999, Stratigraphy and sedimentology of vertebrate fossil localities from the Cretaceous and Tertiary of Mali: *Geologic Society of America, Abstracts with Programs*. 31: 472.
  12. O'Leary, M. A. and M. E. Siddall. 1999. Resampling techniques to test the effects of missing neontological data for fossil taxa. 18th meeting of the International *Willi Hennig Society*.
  11. O'Leary, M. A. 1999. Dinosaurs and other fossil vertebrates from Mali: New discoveries from the Cretaceous and Tertiary of sub-Saharan Africa. *Journal of Vertebrate Paleontology*. 19 (Supplement to No. 3):67A.
  10. O'Leary, M. A. and M. D. Uhen. 1998. The most primitive cetacean and the role of feeding in the terrestrial-aquatic transition. *Journal of Vertebrate Paleontology*. 18 (Supplement to No. 3):68A.
  9. Cole, T. M., M. A. O'Leary, S. Lele, and J. A. Richtsmeier. 1998. Morphometric modeling of evolutionary change in complex anatomical structures. *American Journal of Physical Anthropology*.
  8. O'Leary, M. A. and J. H. Geisler. 1997. A phylogeny of Cetacea, Artiodactyla, Perissodactyla, and archaic ungulates based on morphological evidence. *16th meeting of the International Willi Hennig Society*.
  7. Geisler, J. H. and M. A. O'Leary. 1997. A phylogeny of Cetacea, Artiodactyla, Perissodactyla and archaic ungulates: the morphological evidence. *Journal of Vertebrate Paleontology*. 17 (Supplement to No. 3):48A.
  6. O'Leary, M. A. 1996. Gradual cladogenesis in the Notharctinae (Primates, Adapiformes). *Journal of Vertebrate Paleontology*. 16 (Supplement to No. 3):56A-57A.
  5. O'Leary, M. A. 1996. Anagenetic evolution in the densest record of fossil primates and the taxonomy of the Notharctidae. *American Journal of Physical Anthropology*. Supplement to 22:179.
  4. Rose, K. D. and M. A. O'Leary. 1994. Manus of the early Eocene mesonychid *Pachyaena gigantea*. *Journal of Vertebrate Paleontology*. 14 (Supplement to No. 3):43A.
  3. Maas, M. C. and M. A. O'Leary. 1994. Evolution of enamel microstructure in Notharctinae (Mammalia, Primates). *Journal of Vertebrate Paleontology*. 14 (Supplement to No. 3):34A.
  2. O'Leary, M. A. and M. F. Teaford. 1992. Dental microwear and diet of mesonychids. *Journal of Vertebrate Paleontology*. 12 (Supplement to no. 3):45A.
  1. O'Leary, M. A. and K. D. Rose. 1991. Skeleton of the giant mesonychid, *Pachyaena*. *Journal of Vertebrate Paleontology*. 11 (Supplement to no. 3):48A-49A.

#### **SELECTED COVERAGE OF RESEARCH IN SCIENTIFIC/POPULAR PRESS AND MUSEUM EXHIBITS**

22. Dunaeif, D. 2020 (March 12). Power of 3: SBU's Maureen O'Leary makes MorphoBank funding plans. *TBR Newsmedia*. <https://tbrnewsmedia.com/power-of-3-sbus-maureen-oleary-makes-morphobank-funding-plans/>
21. Maclean, R. 2019 (July 12). Sahara was home to some of largest sea creatures, study finds. *The Guardian*. <https://www.theguardian.com/science/2019/jul/12/sahara-was-home-to-some-of-largest-sea-creatures-study-finds>

20. Wilford, J. 2013 (February 7). Rat-sized ancestor said to link man and beast. **New York Times**.  
[http://www.nytimes.com/2013/02/08/science/common-ancestor-of-mammals-plucked-from-obscurity.html?pagewanted=all&\\_r=0](http://www.nytimes.com/2013/02/08/science/common-ancestor-of-mammals-plucked-from-obscurity.html?pagewanted=all&_r=0)
19. Wong, K. 2013 (February 7). Meet the last common ancestor of bats, whales, sloths and humans. **Scientific American**. <http://blogs.scientificamerican.com/observations/2013/02/07/meet-the-last-common-ancestor-of-bats-whales-sloths-and-humans/>
18. Palmer, J. 2013 (February 7). Earliest placental mammal ancestor pinpointed. **BBC** <http://www.bbc.co.uk/news/science-environment-21350900>.
17. Man's oldest ancestor identified by scientists (written by LiveScience), **CBS News** February 7, 2013  
[http://www.cbsnews.com/8301-205\\_162-57568272/meet-your-mama-ancestor-of-all-placental-mammals-revealed/](http://www.cbsnews.com/8301-205_162-57568272/meet-your-mama-ancestor-of-all-placental-mammals-revealed/)
16. National Academy of Sciences, **Beckman Frontiers of Science**, O'Leary seminar archived at  
<http://63.251.167.36/beckmanfrontiers/progressive/maureenoleary/index.htm>)
15. Vertebrate paleontology exhibit kiosk at the **American Museum of Natural History. Wallach Orientation Center**. 2003-2015
14. Pennisi, E. 2003. Modernizing the Tree of Life: A new generation of systematists seeks to transform its field with the tactics of big science. **Science**. 300:1692-1697.
13. Interview for a television special on whale evolution. 2002. **Dateline NBC**.
12. Walking with Prehistoric Beasts. 2002-present (continues to air), interview. **The Discovery Channel**.
11. Wong, K. 2002. The mammals that conquered the Seas. **Scientific American**. May. 71-79.
10. Hayden, T. 2002. All in the family. **U.S. News and World Report**. June: 58-60.
9. Kim, A. L. 2001. Frogs take 2 students far. **Newsday**. April 21:A4, A29.
8. O'Hara, V. "Focus Anthropoid Origins; Research Site: Sahara Desert, Mali." 2000. **Anthroquest**. 10:4.
7. Gura, T. 2000. Bones, molecules...or both? **Nature**. 406:230-233.
6. Monastersky, R. 1999. The Whale's Tale. **Science News**. 156:296-298.
5. Kaba, M. 1999. Des ossements de dinosaures dans le desert Malien. **L'Essor**. May 6:4.
4. Wong, K. 1999. Cetacean creation. **Scientific American**. January: 26, 30.
3. Normile, D. 1998. Whale-ungulate link strengthens. **Science**. 281:775.
2. Luo, Z. 2000. In search of the whales' sisters. **Nature**. 404:235-237.
1. Carroll, R. 1997. "The origin of whales," **Patterns and Processes of Vertebrate Evolution**. 320-331.

#### TRAINING FOR RESEARCH

##### **POSTDOCTORAL FELLOWS – EACH SPONSORED WITH NSF SUPPORT TO THE O'LEARY LAB**

Dr. Mariangeles Arce Hernandez, phylogenetics of fossil fish and advances in phenomic data collection 2014-2015

Dr. Javier Robalino, phylogenetics of shrimp and advances in phenomic data collection for tree-building, 2014-2015.

Dr. Andrea Wetterer (comparative morphology of ungulates and cetaceans for phylogenetics), 2011-2012

Dr. Amy Downing Meisner (sperm morphology diversity in whales and relatives examined with scanning electron microscopy), 2003-04.

**PH.D. STUDENTS ADVISED (\* = O'LEARY, MAJOR ADVISOR)**

- ❖ advisees who currently occupy academic positions
- ❖ Matthew Borths (Ph.D. 2015), Department of Anatomical Sciences (phylogenetics of mammalian carnivorans)
- ❖ Simone Hoffman (Ph.D. 2016), Department of Anatomical Sciences (phylogenetics of Mesozoic mammals)
- \*❖ Gina Sorrentino (Ph.D. 2012), Department of Anatomical Sciences (development and evolution of mammalian female reproductive anatomy)
- ❖ Michelle Spaulding (Ph.D. 2011), Department of Paleontology, American Museum of Natural History
- ❖ Doug Boyer (Ph.D. 2009), Department of Anatomical Sciences (phylogenetics of euprimates)
- ❖ Karen Samonds (Ph.D. 2006), Department of Anatomical Sciences (Bat phylogenetics)
- \*❖ Robert V. Hill (Ph.D. 2004), Department of Anatomical Sciences (Amniote phylogeny with particular focus on dermal armor)

**MASTERS STUDENTS ADVISED (\* = O'LEARY, MAJOR ADVISOR)**

- Heather Smith (MS 2001), Interdepartmental Doctoral Program in Anthropological Sciences (Hominid phylogenetics)
- \*Felicia Brenoe (MS, 1999), Interdepartmental Doctoral Program in Anthropological Sciences (New World monkey phylogenetics based on osteology)

**UNDERGRADUATE STUDENTS ADVISED WITH NSF SUPPORT**

- Alvaro Quintanilla, 2019, web applications for evolutionary biology
- Ryan Webber, 2016, web applications for evolutionary biology
- Fabio Flores, 2016, web applications for evolutionary biology
- Jason Fontaine, 2015, web applications for evolutionary biology
- Kenzley Alphonse, 2009, web applications for morphology
- Andre Hamilton, 2006, informatics infrastructure for morphology
- Steven Villaverde, 2005-2006, informatics infrastructure for morphology
- Jessica Tupper, Stony Brook University (patterns of evolution of ear ossicles in whales and relatives), 2004-2005
- Kerin Claeson, Stony Brook University (phylogenetics of the mammal genus *Dissacus*), 1999-2002

**HIGH SCHOOL STUDENTS MENTORED**

- Simeon McMillan, Uniondale High School, New York, 2000-2004. McMillan conducted research in systematics for which he won first place and best-in-category in Zoology at the Intel International Science and Engineering Fair (2003). He was the first African American to win this prize.