

CURRICULUM VITAE

VIRGINIA L. NAPLES

DATE: January 3, 2015

EDUCATION:

B. S. Zoology, with honors, University of Massachusetts 1972
M. S. Animal Science, University of Massachusetts 1975
Miami University, Geological Field Course, Wyoming, July-August 1974
Ph.D. Zoology, University of Massachusetts 1980
Post-doctoral training: Department of Oral Anatomy, University of Illinois Health Sciences Center, September 1980-July 1983

PROFESSIONAL EXPERIENCE:

Professional Employment and other appointments:

Research Associate, Division of Mammals, National Museum of Natural History, Smithsonian Institution, Washington, D. C. 2001-Present
Board of Directors, World Wildlife Kingdom, member 2001 – 2005. Cherry Valley, Illinois
Professor, Department of Biological Sciences, Northern Illinois University, August 2001- Present
Associate Professor, Department of Biological Sciences, Northern Illinois University, August 1990-2001
Cook County Disaster Response Team, member. 1994 – present.
Assistant Professor, Department of Biological sciences, Northern Illinois University, August 1983-July 1990
Instructor, Department of Oral Anatomy, University of Illinois Health Sciences Center, September 1980-July 1983
Instructor, Rhetoric Program, University of Massachusetts, January 1979-June 1980
Instructor, Department of Biological Sciences, Mount Holyoke College, South Hadley, Massachusetts, April 1978-May, 1979
Teaching Assistant/Associate, Department of Zoology, University of Massachusetts, September, 1975-May, 1978
Research Assistant, Department of Animal Science, University of Massachusetts, June, 1974-June 1975
Curatorial Intern, Department of Mammalogy, American Museum of Natural History, January 1979

Teaching Experience:

Comparative Vertebrate Anatomy, Mammalogy, Ornithology, Introductory Zoology, Introductory Biology, Writing for science Students (undergraduate), Writing for Biological Sciences (graduate level), Human Gross Anatomy, Advanced Craniofacial Anatomy, Surgical Gross Anatomy, Functional Human Anatomy, Anatomy and Physiology, Biological Basis of Forensic Sciences, Advanced Forensic Sciences, Comparative Vertebrate Anatomy, Vertebrate Paleontology

Current Research Interests:

Systematics, comparative and functional morphology, evolution and paleontology of living and fossil xenarthrans, carnivorans, artiodactyls and cetaceans. Experimental modeling of masticatory mechanisms. Reconstruction of structure and function from fossil materials and fragmentary materials. Generation of new anatomical characters for systematic analyses. Anatomical basis of forensic analysis of human materials. Educational pedagogy for forensic sciences and evolutionary biology.

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

American Society of Mammalogists (Life Member), Committee on Anatomy and Physiology, 1983-1985; Program Committee, 1984-1985; Education and Graduate Students Committee, 1992-1995; Conservation Committee, 1999-2003; Education Committee 2010 – present
 Society for the Study of Evolution
 Society of Vertebrate Paleontologists, Development Committee, 1991-1997; 2005- present
 Sigma Xi
 The American Society of Zoologists
 The Great Lakes Emergency Response Team
 American Association of Anatomists
 Cook County Emergency Response Team, 1995 - present

PUBLICATIONS:

All publications listed were peer-reviewed prior to acceptance.

- Naples, V. L.** 1975. Neural control of the oviductal musculature in the rabbit. University of Massachusetts. M. S. Thesis.
- Naples, V. L.** 1980. Cranial morphology and evolution of sloths. University of Massachusetts. Ph. D. Dissertation.
- Naples, V. L.** 1982. Cranial osteology and function in the tree sloths, *Bradypus* and *Choloepus*. *Amer. Mus. Novitates*, No. 2739, Pp. 1-41, Figs. 1-21, Tables 1-2.
- Naples, V. L.** 1985. Form and function of the masticatory musculature in the tree sloths, *Bradypus* and *Choloepus*. *Journal of Morphology* 183(1): 25-50.
- Naples, V. L.** 1985. The superficial facial musculature of the sloths and anteaters. In: *The Evolution and Ecology of the Xenarthra*. G. Gene Montgomery, ed.). Smithsonian Institution Press, Washington D. C. Pp. 173-189.
- Naples, V. L.** 1986. The morphology and function of the hyoid region in the tree sloths, *Bradypus* and *Choloepus*. *Journal of Mammalogy* 67(4): 712-724.
- Naples, V. L.** 1987. Reconstruction of cranial morphology and analysis of function in the Pleistocene ground sloth *Nothrotheriops shastense* (Mammalia, Megatheriidae). *Contributions in Science*. Los Angeles County Museum, No. 389, Pp. 1-21.

- Naples, V. L.** 1989. The feeding mechanism in the Pleistocene ground sloth, *Glossotherium*. *Contributions in Science*. Los Angeles County Museum, No. 415, Pp. 1-23.
- Naples, V. L.** 1990. Morphological changes in the facial region and a model of dental growth and wear pattern development in *Nothrotheriops shastensis*. *Journal of Vertebrate Paleontology* 10(3): 372-389.
- Naples, V. L.** 1995. The artificial generation of wear patterns on tooth models as a means to infer mandibular movement during feeding in mammals. Ch. *In: Functional Morphology in Vertebrate Paleontology* (J. Thomason, ed). Cambridge University Press, Pp. 136-150.
- Naples, V. L.** and L. D. Martin. 1996. The power of ecomorphy. Sixth North American Paleontological Convention, Special Publication – *The Paleontological Society*. 8.
- Naples, V. L.** *. 1999. Morphology, evolution and function of feeding in the giant anteater, *Myrmecophaga tridactyla*. *Journal of Zoology (London)*. 249: 19-41.
- *This publication was reviewed in *Nature*, 410:757, 1999. E. Brainerd, Lickety split.
- Naples, V. L.** and L. D. Martin. 1999. A saber-toothed cat and the first record of a tapir from the Pleistocene of Kansas. *Current Research in the Pleistocene*. 16: 126-127.
- L. D. Martin, J. P. Babiarez, **V. L. Naples** and J. Hearst. 2000. Three ways to be a saber-toothed cat. *Naturwissenschaften* 87(1): 41-44. Cover article.
- Naples, V. L.** and L. D. Martin. 2000. Evolution of hystricomorphy in the Nimravidae (Carnivora; Barbourfelinae): Evidence for complex character convergence with rodents. *Historical Biology* 14: 169-188.
- Naples, V. L.** and L. D. Martin. 2000. Restoration of the superficial facial musculature in Nimravids. *Zoological Journal of the Linnean Society* 130: 55-81.
- L. D. Martin, **V. L. Naples** and H. T. Wheeler. 2001. “Did mammoths have non-human predators?” University of Kansas Publications in Anthropology 22. *Proceedings of the International Conference on Mammoth Site Studies*.
- Miller, J. S. and **V. L. Naples**. 2002. Forensic entomology for the laboratory-based Biology classroom. *American Biology Teacher* 64(2): 136-142.
- Naples, V. L.**, J. S. Babiarez and L. D. Martin. 2002. Redesigning the saber-tooth paradigm. *In: Ter-Qua Symposium Series 3: 1-4*. Wakefield Dort, (ed.). *Institute for Tertiary-Quaternary Studies*. Kansas City, Kansas.
- Martin, L. D. and **V. L. Naples**. 2002. Environmental controls for multiple evolutionary events. *In: Ter-Qua Symposium Series 3: 37-52*. Wakefield Dort, (ed.). *Institute for Tertiary-Quaternary Studies*. Kansas City, Kansas.

- Naples, V. L.** and L. D. Martin. 2002. The pelvis in early birds and dinosaurs. *In: Proceedings of the 5th Symposium of the Society of Avian Paleontology and Evolution*, Zhonghe Zhou and Fucheng Zeng (eds.) Pp. 203-210. Science Press, Beijing, China.
- McCall, S., **V. L. Naples** and L. D. Martin. 2003. Assessing behavior in extinct animals: was *Smilodon* social? *Brain, Behavior and Evolution* 61(3): 159-164.
- Naples, V. L.** and J. S. Miller. 2004. Making tracks: The forensic analysis of footprints and footwear impressions. *The Anatomical Record. Part B: The New Anatomist* 279B(1): 9-15.
- Rothschild, B. M., F. J. Ruhli, J. Sebes, **V. L. Naples** and M. Billard. 2004-2005. Relationship between porotic hyperostosis and cribraorbitalia? *Paleobios* 13: 4-7.
- Rothschild, B. M., F. J. Ruhli, C. Rothschild, **V. L. Naples**, I. Hershkovitz, J. Sebes and M. Billard. 2004-2005. Virgin Europe: Periosteal reaction prior to the 15th century and the potential influence of slavery. *Palaeobios* 13: 26-31.
- Rothschild, B. M. and **V. L. Naples**. 2005. Whale of a tale. *Annals of the Rheumatic Diseases* 64: 1385-1386.
- Naples, V. L.** 2005. Xenarthra (Sloths, anteaters and armadillos). *In: Grzimeck's Animal Life Encyclopedia*, Vol. 13, Pp. 147-154.
- Naples, V. L.** 2005. West Indian sloths and two-toed tree sloths (Megalonychidae). *In: Grzimeck's Animal Life Encyclopedia*, Vol. 13, pp. 155-158.
- Naples, V. L.** 2005. Species accounts. Lesser Haitian ground sloth, *Synocnus comes*. *In: Grzimeck's Animal Life Encyclopedia*, Vol. 13, pp. 159.
- Naples, V. L.** 2005. Three-toed sloths (Braypodidae). *In: Grzimeck's Animal Life Encyclopedia*, Vol. 13, pp. 161-165.
- L. D. Martin and **V. L. Naples**. 2006. Mandibular kinesis in hesperornithiform birds.
- Rothschild, B. M., C. Rothschild and **V. L. Naples**, M. Billard and B. Pandero. 2006. Bejel: Acquirable only in childhood? *Acta Tropica*. October 16, 2006.
- Rothschild, B. M., **V. L. Naples** and L. Barbian. 2006. Bone manifestations of *Actinomycosis*. *Annals of Diagnostic Pathology*. February. 10(1): 24-27.
- Fisher, R. E., K. M. Scott and **V. L. Naples**. 2007. The forelimb myology of the pygmy hippo (*Choeropsis liberiensis*). *Anatomical Record* 290: 673-693.
- Gardner, A. L. and **V. L. Naples**. 2007. Family Megalonychidae, P. Gervais, 1855. *In: Mammals of South America, Vol. 1. Marsupials, Xenarthrans, Shrews and Bats*. University of Chicago Press.

- McDonald, H. G. and **V. L. Naples**. 2008. Xenarthrans. In: C. Janis, G. Gunnell and M. Uhen (eds.) *In: Evolution of Tertiary Mammals of North America, Vol. 2: Marine Mammals and Smaller Terrestrial Mammals*. Cambridge University Press. Pp.147-160.
- Naples, V. L.** and J. S. Miller. 2009. Evolving the concept of homology. *Bioscience* 43:, pp. 43-47.
- Hubbard, C., **V. L. Naples**, and BurcuHaliloglu. 2009. Comparative analysis of hind paw structure in the clouded leopard (*Neofelisnebulosa*) and domestic cat (*Felis catus*). *Anatomical Record. Part B. The New Anatomist*. 292(8): 1213-1228.
- Naples, V. L.** and J. S. Miller. 2010. A skeleton tells its own story: Forensic analyses of skeletal elements for the science classroom laboratory. *American Biology Teacher* 64(2): 136-142.
- Naples V. L.**, Rothschild BM. 2011. Do ribs actually have a bare area? A new analysis. *Homo: Journal of Comparative Human Biology* 62(5): 368-373.
- Naples, V. L.** and B. M. Rothschild. 2012. Sex determination in lions (*Panthera leo*, Felidae): A novel method of distinguishing male and female skulls. *Mammalia* 76(1): 99-103.
- Naples, V. L.** and R. K. McAfee. 2012. Reconstruction of the cranial musculature and masticatory function of the Pleistocene panamerican ground sloth *Eremotherium laurillardii* (Mammalia: Xenarthra, Megatheriidae). *Historical Biology* 24(2): 187-206.
- McAfee, R. K. and **V. L. Naples**. 2012. Notice on the occurrence of supernumerary teeth in the two-toed sloths *Choloepus didactylus* and *C. hoffmanni*. *Mastozoologica Neotropical* 19(2): 339-344.
- Anson C., Rothschild B. M., **Naples V.** 2012. Soft tissue contributions to pseudopathology of ribs. *Advances in anthropology* 2(2): 57-63.
- B. M. Rothschild, W. Bryant, C. Hubbard, K. Tuxhorn, G. P. Kilgore, L. D. Martin and **V. L. Naples**. The power of the claw. 2013. *PLoS One* 8(9): doi:1371/journal.pone.0073811e73811.
- V. L. Naples**, B. Rothschild and R. M. Timm. 2013. The question of sex identification in specimens housed in research collections. Letter to the Editor. *Journal of Primatology*.
- Rothschild, B. M. and **V. L. Naples**. 2013. Decompression syndrome and diving behavior in *Odontochelys*, the first turtle. *Acta Paleontologica Polonica*.
- Invited Published Reviews:**
- V. L. Naples**. Review of Skeletal Function and Form, by D. R. Carter and G. S. Beaupre, Cambridge University Press, 2001. *Journal of Mammalogy*.
- V. L. Naples**. 2002. Review of Evolution of Tertiary Mammals of North America, by C. Janis, K. Scott and L. Jacobs (eds.), *Journal of Mammalogy*.

V. L. Naples. Review of Grey's Anatomy for Students. *Anatomical Record: Part B: The New Anatomist*.

Publications in press:

Naples, V. L. and R. K. McAfee. Chewing through the Miocene: An examination of the feeding musculature in the ground sloth *Hapalops* from South America (Mammalia: Pilosa).

Publications in preparation:

Naples, V. L. Morphology of the hindlimb of the black-footed ferret, *Mustelanigripes*: Locomotor adaptations for a unique subterranean lifestyle.

Naples, V. L. Muscular morphology of the forelimb in the black-footed ferret. *Mustela nigripes*: Adaptations for capturing prey larger than the predator.

Gramarye, J. and **V. L. Naples.** Looking the river horse in the mouth. A reexamination of the dentitions of the living species of hippopotami.

Naples, V. L. and J. Gramarye. Myology of the forelimb of the common hippopotamus, *Hippopotamus amphibius*.

Naples, V. L. and J. Gramarye. Comparative cranial osteology of the living hippopotamidae.

Naples, V. L. Comparative functional morphology of the shoulder region of *Smilodon fatalis*, *Panthera atrox*, *Xenosmilus hodsonae*, *Panthera leo* and *Felis catus*.

Naples, V. L. Who bit *Smilodon*? Analysis of a bite mark in a saber-tooth cranium.

Naples, V. L. Was *Smilodon* a slinky cat? BioScience.

Naples, V. L. Does phylogeny or function have a greater effect on phylogeny? An examination of the cranial morphology of megatheriids in comparison to tree sloths.

Spearing, K. and **V. L. Naples.** The Clouded Leopard (*Neofelis nebulosa*). *Mammalian Species*.

BOOKS PUBLISHED:

Naples, V. L., L. D. Martin and J. P. Babiarez (eds.). *The Other Saber-tooths: The Scimitar Cats of the New World*. Johns Hopkins University Press. In press. Publication date: May or June 2011.

Book in preparation, Contract Awarded:

Martin, L. D., **V. L. Naples,** T. J. Meehan. *Ecomorphs: Extinction May Not Be Forever*. Johns Hopkins University Press. September, 2014.

Publications by graduate students working in my laboratory and under my supervision:

- Sorkin, B. 2006. Ecomorphy of the short-faced bears *Agriotherium* and *Arctodus*. *Historical Biology*. 18(1): 1-20.
- Sorkin, B. 2006. Ecomorphy of the giant bear-dogs *Amphicyon* and *Ischyrocyon*. *Historical Biology*. 18(4): 375-388.
- Sorkin, B. 2008. A biomechanical constraint on body mass in terrestrial mammalian predators. *Lethaia*. 41: 333-347.
- R. K. McAfee. Generic reassessment of the cranial characters of *Glossotherium* and *Paramylodon* (Mammalia, Xenarthra, Mylodontidae). *Journal of Vertebrate Paleontology*. Submitted, December 2006.

Student Abstracts Published and Presentations at professional meetings:

- Sorkin, B. 2004. Ecomorphy of the giant bear-dogs *Amphicyon* and *Ischyrocyon*. *Journal of Vertebrate Paleontology* 24(3): 116A.
- *Spearing, K. D. 2004. Phylogenetic analysis of extant and fossil cheetahs: A preliminary study. Midwest Paleoabstracts. *First Midwest Annual Symposium of Student Paleontologic Research*.
- *Spearing, K. D. and A. Behlke. 2004. Phylogeny of the Mosasaurinae and the monophyly of the genus *Clidastes*. *Journal of Vertebrate Paleontology* 24(3): supplement.
- Behlke, A., C. Ott and K. D. Spearing. 2002. Exceptionally large specimen of *Clidastes* (Mosasauridae) from the Late Cretaceous Niobrara Formation of western Kansas. *Journal of Vertebrate Paleontology* 22(3). Supplement.
- *I am Kurt Spearing's Doctoral dissertation adviser. He is planning on completing his degree in the summer of 2011.

Other Educational Contributions:

- Naples, V. L.** 1994. End of Chapter and Clinical Scenarios, questions written for text *Human Anatomy* by F. Martini, Prentice-Hall Publishers.
- Naples, V. L.** 1995. Test Bank, questions and answers for each chapter for text *Human Anatomy* by F. Martini, Prentice-Hall Publishers.
- Naples, V. L.** 1996. End of Chapter and Clinical Scenarios, answers written for text *Human Anatomy* by F. Martini, Prentice-Hall Publishers.
- Naples, V. L.** 1997-2000. Author, WYSE (Worldwide Youth in Science and Engineering) Standardized Examinations in Biological Sciences.

Naples, V. L. 2004-2005. Interactive Anatomy Quizzes for *Human Anatomy* by Martini, Timmons and Tallisch, 4th ed. Prentice Hall.

Naples, V. L. 2008. Who bit *Smilodon*? Department of Biological Sciences 2008 Newsletter.

PROFESSIONAL RESEARCH PRESENTATIONS:

Published Abstracts:

V. L. Naples. 1981. "Cusp" development in sloth cusplless teeth. *International Association for Dental Research*, Chicago, Illinois.

V. L. Naples. 1987. Development of dental wear patterns in *Nothrotheriops shastense*. *Journal of Vertebrate Paleontology* 7(3): 21.

V. L. Naples. 1993. Interpretation of masticatory function, based upon study of cranial structure and experimental production of wear surfaces of model teeth of *Eremotherium*. *Journal of Vertebrate Paleontology* 13(3): 51A.

V. L. Naples 1994. Food manipulation and feeding strategy in living tree sloths; implications for feeding behavioral analyses in fossil sloths. *Journal of Vertebrate Paleontology*, 14(3): 40A.

V. L. Naples and L. D. Martin. 1995. Occipital morphology of saber-toothed carnivores. Society of Vertebrate Paleontology, 1995. *Journal of Vertebrate Paleontology* 15(3): 8A.

V. L. Naples and L. D. Martin. 1996. The Morphology of the Infraorbital Foramen in the Carnivora . Society of Vertebrate Paleontology, *Journal of Vertebrate Paleontology*, 16(3): 11A.

Naples, V. L. and L. D. Martin. 1997. Restoration of the superficial facial musculature in barbourfelins. *Journal of Vertebrate Paleontology* 17(3): 66.

McCall, S. A. **V. L. Naples** and L. D. Martin. 1997. Social constraints on saber-toothed carnivores. *Journal of Vertebrate Paleontology* 17(3): 63.

L. D. Martin, **V. L. Naples** and Z. Zhou. 1998. "The furcula in early birds." Society of Vertebrate Paleontology, *Journal of vertebrate Paleontology* 18(3) Supplement.

V. L. Naples, J. Babiarez and L. D. Martin. 1998. "A new type of saber-toothed cat." Society of Vertebrate Paleontology annual meeting, *Journal of vertebrate Paleontology* 18(3) Supplement.

V. L. Naples and L. D. Martin. 1999. An amphibian ichthyosaur ecomorph. *Journal of Vertebrate Paleontology* 19(3) Supplement: 66A.

Martin, L. D., **V. L. Naples.** 2000. The pelvis in early birds and dinosaurs. Invited presentation for the 5th *International Meeting of the Society of Avian Paleontology and Evolution and the*

Symposium on the Jehol Biota. Institute for Vertebrate paleontology and Paleoanthropology and the Chinese Academy of Sciences, Beijing, China.

- Martin, L. D., **V. L. Naples** and H. T. Wheeler. 2000. A non-human predator of mammoths, or mammoths as cat food. *Journal of Vertebrate Paleontology* 20: 60A.
- Wheeler, H. T., and **Naples, V. L.** 2000. Confirmation of saber-tooth killing bite theories by re-enactment. *Journal of Vertebrate Paleontology* 20: 79A
- Naples, V. L.** 2001. Does phylogeny or function have a greater effect on morphology? An examination of the cranial morphology of megatheriids as compared to tree sloths. *Journal of Vertebrate Paleontology* 21(3): 83A.
- Naples, V. L.** 2002. Were all extinct sloths ground sloths? *Journal of Vertebrate Paleontology* 22(3): 91-92A.
- Naples, V. L.**, Babiarez, J. 2003. Why does *Xenosmilus* look like a panda? *Journal of Vertebrate Paleontology* 23(3): 82A
- Naples, V. L.** 2004. Character complex significance in eremothere masticatory function. *Journal of Vertebrate Paleontology* 24(3): 97A.
- Naples, V. L.** and R. McAfee. 2005. Functional correlates between zygomatic arch structures and masticatory stroke orientation in sloths. *Journal of Vertebrate Paleontology* 25(3): 93A.
- Naples, V. L.** and B. M. Rothschild. 2006. Calcification in the fossil record: What can we learn from ribs? Society of Vertebrate Paleontology annual meetings, Ottawa, Ontario, Canada. Abstract published in the *Journal of Vertebrate Paleontology* 26(3 supplement): 93A.
- Martin, L. D., **V. L. Naples** and J. P. Babiarez. 2008. Cookie-cutter cats: Another saber-toothed morphotype. *Journal of Vertebrate Paleontology* 28(3): 120A.
- Naples, V. L.** and K. Spearing. 2008. Reconstruction of the forelimb musculature of *Xenosmilushodsonae*: An atypical saber-toothed cat. *Journal of Vertebrate Paleontology* 28(3): 112A.
- Naples, V. L.** and L. D. Martin. 2010. How a saber-tooth cat got its small brain. *Journal of Vertebrate Paleontology* 30(3): 115A.

Invited professional seminars and workshops:

- Naples, V. L.** 2000. Burpee Museum Paleofest 2000, "Ice Age Mammals," Public lecture, March 4, 2000,
- Naples, V. L.** 2002. Burpee Museum Paleofest 2002. Feb. 23, 2002. "Sabertoothed cats." Public lecture.

- Naples, V. L.** 2002. Burpee Museum Paleofest 2002. "What did a saber-toothed cat look like?" Children's workshop, Feb. 23, 2002.
- Naples, V. L.** 2002. Northern Illinois University's Science Camp. "Forensic Science: Footprints and what they can reveal." June 25, 2002.
- Naples, V. L.** 2003. Forensic Sciences for the High School Classroom. Naperville Central High School, Naperville. March 1, 2003. Psychological profiling: where to begin and what does it all mean? DeKalb Community Mental Health center, March 26, 2003.
- Naples, V. L.** 2004. Northern Illinois University's Science Camp. Fingerprinting and forensic methods of analysis of fingerprint patterns. July 17, 2004.
- Naples, V. L.** 2004. Adventures of a functional morphologist. October, 20, 2004. Invited seminar presentation for the Women's Studies Career Day, NIU.
- Naples, V. L.** 2004. Forensic geology. Invited seminar presentation. ESCONI. November 17, 2004.
- Naples, V. L.** 2005. Locomotor specializations in the hindlimb of the black-footed ferret, *Mustelanigripes*: Adapation to a subterranean habitat. American Association of Anatomists annual meeting, San Diego, California, April 5, 2005.
- Fisher, R. E., K. M. Scott and **V. L. Naples.** 2005. The comparative anatomy of the pygmy hippopotamus (*Choeropsis liberiensis*): appendicular morphology. American Association of Anatomists annual meeting, San Diego, California, April 5, 2005.
- Naples, V. L.,** C. Hubbard and J. S. Miller. 2005. Forensic Sciences workshop for High School students, Jefferson High School, Rockford Illinois at Northern Illinois University, DeKalb, Illinois June 22, 2005.
- Naples, V. L.** Invited speaker for Burpee Museum's Paleofest for 2006. Public lecture on felids entitled "Lions, saber-tooths and cheetahs -- oh my!" to an audience of approximately 300 adults and children. Rest of the Paleofest weekend spent interacting with the public visiting the museum.
- Naples, V. L.** 2006. Invited seminar presentation. Hippo habits and relationships: Changing views in an aquatic dimension. Howard University. August, 2006.
- Naples, V. L.** 2007. Biology and functional morphology of the Hippopotami. Invited seminar presentation. ESCONI. December 2, 2007.
- Naples, V. L.** 2008. Looking the river horse in the mouth and other adventures with the hippopotami. Northern Illinois University Department of Biological Sciences Seminar series, Feb. 7, 2008.
- Naples, V. L.** 2008. Building a sabercat. ESCONI (Earth Sciences Club of Northern Illinois). June 13, 2008.

Naples V. L., L. D. Martin, and J. P. Babiarez. 2009. Muscle maps as a Guide to saber-tooth cat behavior. Geological Society of America annual meeting, Rockford, Illinois.

L. Koper and **V. L. Naples**. 2009. Facing *Smilodon*: A new reconstruction of the appearance of *Smilodon fatalis*. Geological Society of America annual meeting, Rockford, Illinois.

Naples V. L., and J. C. Gramarye. 2009. Looking the river horse in the mouth: A reexamination of the dentition of the living hippopotami. American Society of Anatomists annual meeting, New Orleans.

Naples, V. L. 2010. The biology of the Xenarthra. University of Kansas, Invited seminar presentation. November 20, 2010.

Abstracts

Naples, V. L. Facial musculature of the sloths, American Society of Mammalogists, Athens, Georgia, June, 1978.

Naples, V. L. Cranial morphology of the sloths, with particular reference to the genus *Nothrotheriops*. Society of Vertebrate Paleontology, Toronto, Ontario, Canada, October, 1979.

Naples, V. L. The superficial facial musculature in the sloths and anteaters. Edentate Symposium, Corvallis, Oregon, June 1979.

Naples, V. L. Cranial morphology of sloths, with comments on masticatory function, American Society of Mammalogists, Corvallis, Oregon, June 1979.

Naples, V. L. Masticatory function and the cranial morphology of the tree sloths, Society of Vertebrate Paleontology, Pittsburgh, Pennsylvania, November, 1979.

Naples, V. L. Comparative cranial osteology and function in the sloths, American Society of Mammalogists, Providence, Rhode Island, June 1980.

Naples, V. L. Dental occlusion and mandibular movement patterns in the tree sloths, *Choloepus* and *Bradypus*, Society of Vertebrate Paleontology, Gainesville, Florida, November, 1980.

Naples, V. L. Canine teeth and constraints on the jaw apparatus, Society of Vertebrate Paleontology, Ann Arbor, Michigan, November, 1981.

Naples, V. L. Canine tooth shape and the effects upon carnivoran jaws, American Society of Mammalogists, Snowbird, Utah, June 1982.

Naples, V. L. Formation of "cusps" on the teeth of the tree sloths *Bradypus* and *Choloepus*, American Society of Mammalogists, Gainesville, Florida, June 1983.

Naples, V. L. Structure and function of the feeding apparatus in xenarthran anteaters, American Society of Mammalogists, Arcata, California, June 1984.

- Naples, V. L.** The feeding apparatus in xenarthran anteaters, Australian Mammal Society, Sydney, Australia, July 1984.
- Naples, V. L.** Craniofacial morphology and function in xenarthran anteaters, Society of Vertebrate Paleontology, Berkeley, California, November, 1984.
- Naples, V. L.** Cranial structure and functional implications in the ground sloth, *Nothrotheriops shastense*, American Society of Mammalogists, Orono, Maine, June 1985.
- Naples, V. L.** Reconstruction of the cranial morphology of *Nothrotheriops shastense*, Society of Vertebrate Paleontology, Rapid City, South Dakota, October, 1985.
- Naples, V. L.** Cranial function in *Nothrotheriops shastense*, American Society of Zoologists, Chicago, Illinois, April 1986.
- Naples, V. L.** The implications of masticatory structure in *Glossotherium*, American Society of Mammalogists, Madison, Wisconsin, June 1986.
- Naples, V. L.** Cranial morphology and function in *Glossotherium*, Society of Vertebrate Paleontology, Philadelphia, Pennsylvania, October, 1986.
- Naples, V. L.** Dental growth form in *Nothrotheriops shastense*, American Society of Mammalogists, Albuquerque, New Mexico, June 1987.
- Naples, V. L.** Development of dental wear patterns in *Nothrotheriops shastense*, Asociacion Mexicana de Mastozoologica, A. C., Cancun, Quintana Roo, Mexico, June 1987.
- Naples, V. L.** The hyoid in the anteater: a long story, American Society of Mammalogists, Clemson, Georgia, June 1988.
- Naples, V. L.** Evidence of bipedalism in pterosaurs, Society of Vertebrate Paleontology, October, 1988 (with Rowan Lockwood).
- Naples, V. L.** Experimental formation of sloth dental wear patterns. American Society of Mammalogists, 1990.
- Naples, V. L.** Dental growth patterns in *Nothrotheriops shastensis*, Society of Vertebrate Paleontology, 1990.
- Naples, V. L.** Experimental formation of dental wear patterns in sloths, American Society of Mammalogists, 1991.
- Naples, V. L.** The generation of tooth wear features on model teeth as a means to infer mandibular movement during feeding in mammals. Society of Vertebrate Paleontology, 1992.

- Naples, V. L.** Artificial generation of wear patterns on tooth models as a means to infer mandibular movement during feeding in mammals. American Society of Mammalogists, 1993.
- Naples, V. L.** Interpretation of masticatory function, based upon study of cranial structure and experimental production of wear surfaces of model teeth in *Eremotherium*. *Society of Vertebrate Paleontology*, 1993.
- Naples, V. L.** The effect of food handling behavior on masticatory function in sloths. American Society of Mammalogists, 1994.
- Naples, V. L.** Interpretation of masticatory function based upon study of cranial structure and experimental production of wear surfaces on model teeth of *Eremotherium*. American Society of Mammalogists, June 1995.
- Naples, V. L.** Environmental Controls for Multiple Evolutionary Events (with L. D. Martin). V. L. Naples presenter, Tertiary-Quaternary Society meetings, 1996.
- Naples, V. L.** 1996. The Power of Ecomorphy. (with L. D. Martin). V. L. Naples, presenter. North American Paleontological Conference.
- Naples, V. L.** 1996. How Important is convergence? (with L. D. Martin). V. L. Naples, presenter. American Society of Mammalogists.
- V. L. Naples** and L. D. Martin. 1997. "Cenozoic brain evolution as a result of global cooling." Annual meeting of the Institute for Tertiary-Quaternary Studies.
- L. D. Martin, J. Babiarez and **V. L. Naples**. 1997. "Scimitar-toothed cats in the North American Pleistocene." Annual meeting of the Institute for Tertiary-Quaternary Studies.
- L. D. Martin and **V. L. Naples**. 1997. "Did mammoths have non-human predators?" Invited presentation for the International Symposium on Mammoth Biology.
- K. Stanford, J. M. Rogers and **V. L. Naples**. "A detailed investigation of facial and masticatory muscles in *Feliscatus* as a basis for muscle reconstruction in extinct feloids." American Society of Mammalogists, 1998.
- Naples, V. L.** 1998. "Morphology and function of the feeding mechanism of the giant anteater *Myrmecophagatrictyla*." American Society of Mammalogists.
- Naples, V. L.** 2000. Robo-Cat: A model saber-tooth. 2nd Midwest Regional Meeting Society for Integrative and Comparative Biology, Division of Vertebrate Morphology, Augustana College, Rock Island, Illinois.
- Naples, V. L.,** D. Lopez and S. Wisely. 2001. Morphology of the hind limb of the black-footed ferret (*Mustelanigripes*). 81st Annual meeting of the American Society of Mammalogists.

- Naples, V. L.** 2004. Forelimb morphology and function in the black-footed ferret, *Mustelanigripes*. American Society of Mammalogists 84th annual meeting, Humboldt State University, Arcata, California. June, 2004. Oral presentation.
- Martin, L. D. and **V. L. Naples**. 2004. Mandibular kinesis in *Hesperornis*. Sixth meeting of the Society of Avian Paleontology and Evolution, September, France.
- R. Fisher, K. M. Scott and **V. L. Naples**. 2005. The myology of the pygmy hippopotamus (*Choeropsisliberiensis*): Muscles of the fore and hind limb. Evolution of Aquatic Tetrapod meetings, Akron, Ohio, May 16-20, 2005.
- Naples, V. L.** 2005. Shoulder morphology of the spectacled bear (*Tremarctosornatus*): Does this bear have a rotator cuff? American Society of Mammalogists annual meeting, Springfield, Missouri, June 16, 2005.
- Naples, V. L.**, C. Hubbard and E. Ross. 2006. Run faster, jump higher: Anatomic variations in the Clouded Leopard paw. American Society of Mammalogists Annual meeting, Amherst, Massachusetts, June, 2006.
- Naples, V. L.** 2007. The myology of the forelimb of the common hippopotamus, *Hippopotamus amphibius*. American Association of Anatomists, Washington, D. C. May, 2007.
- Naples, V. L.** 2007. Forelimb myology and function in the common hippo. American Society of Mammalogists, June, 2007
- Naples, V. L.** and L. D. Martin. 2008. Iterative evolution of feliform carnivores. Geological Society of America. Edwardsville, Indiana, April, 2008.
- Naples, V. L.** Building a saber-tooth, or is there more than one way to reconstruct a fossil cat? Invited presentation. Symposium on Saber-toothed carnivores, University of Idaho Museum of Natural History, Pocatello, Idaho, May, 2008.
- Naples, V. L.**, K. Spearing and H. T. Wheeler. Who bit *Smilodon*? A tale of attempted murder at Rancho La Brea. Invited presentation. Symposium on Saber-toothed carnivores, University of Idaho Museum of Natural History, Pocatello, Idaho, May, 2008.
- Naples, V. L.**, L. D. Martin a. Babiarcz. 2009. Muscle maps as a guide to saber-tooth behavior. Geological Society of America.
- Naples, V. L.** and L. Koper. 2009. Facing *Smilodon*: A new cranial reconstruction of a saber-tooth cat. Geological Society of America.
- Naples, V. L.** and L. D. Martin. 2009. Did the Ice age contribute to the evolution of human intelligence? Geological Society of America.
- Naples, V. L.** and L. Koper. 2009. The gaping truth: A new rationale for the reconstruction of the face of *Smilodon fatalis*. American Association of Anatomists.

Naples, V. L. 2010. American Society of Mammalogists, Laramie, Wyoming, June 2010.

CURRICULUM VITAE

VIRGINIA L. NAPLES

DATE: January 3, 2014

EDUCATION:

B. S. Zoology, with honors, University of Massachusetts	1972
M. S. Animal Science, University of Massachusetts	1975
Miami University, Geological Field Course, Wyoming, July-August	1974
Ph.D. Zoology, University of Massachusetts	1980
Post-doctoral training: Department of Oral Anatomy, University of Illinois Health Sciences Center, September 1980-July 1983	

PROFESSIONAL EXPERIENCE:

Professional Employment and other appointments:

Research Associate, Division of Mammals, National Museum of Natural History, Smithsonian Institution, Washington, D. C. 2001-Present

Board of Directors, World Wildlife Kingdom, member 2001 – 2005. Cherry Valley, Illinois

Professor, Department of Biological Sciences, Northern Illinois University, August 2001- Present

Associate Professor, Department of Biological Sciences, Northern Illinois University, August 1990-2001

Cook County Disaster Response Team, member. 1994 – present.

Assistant Professor, Department of Biological sciences, Northern Illinois University, August 1983-July 1990

Instructor, Department of Oral Anatomy, University of Illinois Health Sciences Center, September 1980-July 1983

Instructor, Rhetoric Program, University of Massachusetts, January 1979-June 1980

Instructor, Department of Biological Sciences, Mount Holyoke College, South Hadley, Massachusetts, April 1978-May, 1979

Teaching Assistant/Associate, Department of Zoology, University of Massachusetts, September, 1975-May, 1978

Research Assistant, Department of Animal Science, University of Massachusetts, June, 1974-June 1975

Curatorial Intern, Department of Mammalogy, American Museum of Natural History, January 1979

Teaching Experience:

Comparative Vertebrate Anatomy, Mammalogy, Ornithology, Introductory Zoology, Introductory Biology, Writing for science Students (undergraduate), Writing for Biological Sciences (graduate level), Human Gross Anatomy, Advanced Craniofacial Anatomy, Surgical Gross Anatomy, Functional Human Anatomy, Anatomy and Physiology, Biological Basis of Forensic Sciences, Advanced Forensic Sciences, Comparative Vertebrate Anatomy, Vertebrate Paleontology

Current Research Interests:

Systematics, comparative and functional morphology, evolution and paleontology of living and fossil xenarthrans, carnivorans, artiodactyls and cetaceans. Experimental modeling of masticatory mechanisms. Reconstruction of structure and function from fossil materials and fragmentary materials. Generation of new anatomical characters for systematic analyses. Anatomical basis of forensic analysis of human materials. Educational pedagogy for forensic sciences and evolutionary biology.

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

American Society of Mammalogists (Life Member), Committee on Anatomy and Physiology, 1983-1985; Program Committee, 1984-1985; Education and Graduate Students Committee, 1992-1995; Conservation Committee, 1999-2003; Education Committee 2010 – present
 Society for the Study of Evolution
 Society of Vertebrate Paleontologists, Development Committee, 1991-1997; 2005- present
 Sigma Xi
 The American Society of Zoologists
 The Great Lakes Emergency Response Team
 American Association of Anatomists
 Cook County Emergency Response Team, 1995 - present

PUBLICATIONS:

All publications listed were peer-reviewed prior to acceptance.

Naples, V. L. 1975. Neural control of the oviductal musculature in the rabbit. University of Massachusetts. M. S. Thesis.

Naples, V. L. 1980. Cranial morphology and evolution of sloths. University of Massachusetts. Ph. D. Dissertation.

Naples, V. L. 1982. Cranial osteology and function in the tree sloths, *Bradypus* and *Choloepus*. *Amer. Mus. Novitates*, No. 2739, Pp. 1-41, Figs. 1-21, Tables 1-2.

Naples, V. L. 1985. Form and function of the masticatory musculature in the tree sloths, *Bradypus* and *Choloepus*. *Journal of Morphology* 183(1): 25-50.

- Naples, V. L.** 1985. The superficial facial musculature of the sloths and anteaters. *In: The Evolution and Ecology of the Xenarthra*. G. Gene Montgomery, ed.). Smithsonian Institution Press, Washington D. C. Pp. 173-189.
- Naples, V. L.** 1986. The morphology and function of the hyoid region in the tree sloths, *Bradypus* and *Choloepus*. *Journal of Mammalogy* 67(4): 712-724.
- Naples, V. L.** 1987. Reconstruction of cranial morphology and analysis of function in the Pleistocene ground sloth *Nothrotheriops shastense* (Mammalia, Megatheriidae). *Contributions in Science*. Los Angeles County Museum, No. 389, Pp. 1-21.
- Naples, V. L.** 1989. The feeding mechanism in the Pleistocene ground sloth, *Glossotherium*. *Contributions in Science*. Los Angeles County Museum, No. 415, Pp. 1-23.
- Naples, V. L.** 1990. Morphological changes in the facial region and a model of dental growth and wear pattern development in *Nothrotheriops shastensis*. *Journal of Vertebrate Paleontology* 10(3): 372-389.
- Naples, V. L.** 1995. The artificial generation of wear patterns on tooth models as a means to infer mandibular movement during feeding in mammals. Ch. *In: Functional Morphology in Vertebrate Paleontology* (J. Thomason, ed). Cambridge University Press, Pp. 136-150.
- Naples, V. L.** and L. D. Martin. 1996. The power of ecomorphy. Sixth North American Paleontological Convention, Special Publication – *The Paleontological Society*. 8.
- Naples, V. L.** *. 1999. Morphology, evolution and function of feeding in the giant anteater, *Myrmecophaga tridactyla*. *Journal of Zoology (London)*. 249: 19-41.
- *This publication was reviewed in *Nature*, 410:757, 1999. E. Brainerd, Lickety split.
- Naples, V. L.** and L. D. Martin. 1999. A saber-toothed cat and the first record of a tapir from the Pleistocene of Kansas. *Current Research in the Pleistocene*. 16: 126-127.
- L. D. Martin, J. P. Babiarez, **V. L. Naples** and J. Hearst. 2000. Three ways to be a saber-toothed cat. *Naturwissenschaften* 87(1): 41-44. Cover article.
- Naples, V. L.** and L. D. Martin. 2000. Evolution of hystricomorphy in the Nimravidae (Carnivora; Barbourfelinae): Evidence for complex character convergence with rodents. *Historical Biology* 14: 169-188.
- Naples, V. L.** and L. D. Martin. 2000. Restoration of the superficial facial musculature in Nimravids. *Zoological Journal of the Linnean Society* 130: 55-81.
- L. D. Martin, **V. L. Naples** and H. T. Wheeler. 2001. "Did mammoths have non-human predators?" University of Kansas Publications in Anthropology 22. *Proceedings of the International Conference on Mammoth Site Studies*.

- Miller, J. S. and **V. L. Naples**. 2002. Forensic entomology for the laboratory-based Biology classroom. *American Biology Teacher* 64(2): 136-142.
- Naples, V. L.**, J. S. Babiarz and L. D. Martin. 2002. Redesigning the saber-tooth paradigm. *In: Ter-Qua Symposium Series 3: 1-4*. Wakefield Dort, (ed.). *Institute for Tertiary-Quaternary Studies*. Kansas City, Kansas.
- Martin, L. D. and **V. L. Naples**. 2002. Environmental controls for multiple evolutionary events. *In: Ter-Qua Symposium Series 3: 37-52*. Wakefield Dort, (ed.). *Institute for Tertiary-Quaternary Studies*. Kansas City, Kansas.
- Naples, V. L.** and L. D. Martin. 2002. The pelvis in early birds and dinosaurs. *In: Proceedings of the 5th Symposium of the Society of Avian Paleontology and Evolution*, Zhonghe Zhou and Fucheng Zeng (eds.) Pp. 203-210. Science Press, Beijing, China.
- McCall, S., **V. L. Naples** and L. D. Martin. 2003. Assessing behavior in extinct animals: was *Smilodonsocial*? *Brain, Behavior and Evolution* 61(3): 159-164.
- Naples, V. L.** and J. S. Miller. 2004. Making tracks: The forensic analysis of footprints and footwear impressions. *The Anatomical Record. Part B: The New Anatomist* 279B(1): 9-15.
- Rothschild, B. M., F. J. Ruhli, J. Sebes, **V. L. Naples** and M. Billard. 2004-2005. Relationship between porotic hyperostosis and cribraorbitalia? *Paleobios* 13: 4-7.
- Rothschild, B. M., F. J. Ruhli, C. Rothschild, **V. L. Naples**, I. Hershkovitz, J. Sebes and M. Billard. 2004-2005. Virgin Europe: Periosteal reaction prior to the 15th century and the potential influence of slavery. *Palaeobios* 13: 26-31.
- Rothschild, B. M. and **V. L. Naples**. 2005. Whale of a tale. *Annals of the Rheumatic Diseases* 64: 1385-1386.
- Naples, V. L.** 2005. Xenarthra (Sloths, anteaters and armadillos). *In: Grizmeck's Animal Life Encyclopedia*, Vol. 13, Pp. 147-154.
- Naples, V. L.** 2005. West Indian sloths and two-toed tree sloths (Megalonychidae). *In: Grizmeck's Animal Life Encyclopedia*, Vol. 13, pp. 155-158.
- Naples, V. L.** 2005. Species accounts. Lesser Haitian ground sloth, *Synocnus comes*. *In: Grizmeck's Animal Life Encyclopedia*, Vol. 13, pp. 159.
- Naples, V. L.** 2005. Three-toed sloths (Braypodidae). *In: Grizmeck's Animal Life Encyclopedia*, Vol. 13, pp. 161-165.
- L. D. Martin and **V. L. Naples**. 2006. Mandibular kinesis in hesperornithiform birds.
- Rothschild, B. M., C. Rothschild and **V. L. Naples**, M. Billard and B. Pandero. 2006. Bejel: Acquirable only in childhood? *Acta Tropica*. October 16, 2006.

- Rothschild, B. M., **V. L. Naples** and L. Barbian. 2006. Bone manifestations of *Actinomycosis*. *Annals of Diagnostic Pathology*. February. 10(1): 24-27.
- Fisher, R. E., K. M. Scott and **V. L. Naples**. 2007. The forelimb myology of the pygmy hippo (*Choeropsis liberiensis*). *Anatomical Record* 290: 673-693.
- Gardner, A. L. and **V. L. Naples**. 2007. Family Megalonychidae, P. Gervais, 1855. In: *Mammals of South America, Vol. 1. Marsupials, Xenarthrans, Shrews and Bats*. University of Chicago Press.
- McDonald, H. G. and **V. L. Naples**. 2008. Xenarthrans. In: C. Janis, G. Gunnell and M. Uhen (eds.) *In: Evolution of Tertiary Mammals of North America, Vol. 2: Marine Mammals and Smaller Terrestrial Mammals*. Cambridge University Press. Pp.147-160.
- Naples, V. L.** and J. S. Miller. 2009. Evolving the concept of homology. *Bioscene* 43:, pp. 43-47.
- Hubbard, C., **V. L. Naples**, and BurcuHaliloglu. 2009. Comparative analysis of hind paw structure in the clouded leopard (*Neofelis nebulosa*) and domestic cat (*Felis catus*). *Anatomical Record. Part B. The New Anatomist*. 292(8): 1213-1228.
- Naples, V. L.** and J. S. Miller. 2010. A skeleton tells its own story: Forensic analyses of skeletal elements for the science classroom laboratory. *American Biology Teacher* 64(2): 136-142.
- Naples V. L.**, Rothschild BM. 2011. Do ribs actually have a bare area? A new analysis. *Homo: Journal of Comparative Human Biology* 62(5): 368-373.
- Naples, V. L.** and B. M. Rothschild. 2012. Sex determination in lions (*Panthera leo*, Felidae): A novel method of distinguishing male and female skulls. *Mammalia* 76(1): 99-103.
- Naples, V. L.** and R. K. McAfee. 2012. Reconstruction of the cranial musculature and masticatory function of the Pleistocene panamerican ground sloth *Ereomotherium laurillardii* (Mammalia: Xenarthra, Megatheriidae). *Historical Biology* 24(2): 187-206.
- McAfee, R. K. and **V. L. Naples**. 2012. Notice on the occurrence of supernumerary teeth in the two-toed sloths *Choloepus didactylus* and *C. hoffmanni*. *Mastozoologica Neotropical* 19(2): 339-344.
- Anson C., Rothschild B. M., **Naples V.** 2012. Soft tissue contributions to pseudopathology of ribs. *Advances in anthropology* 2(2): 57-63.
- B. M. Rothschild, W. Bryant, C. Hubbard, K. Tuxhorn, G. P. Kilgore, L. D. Martin and **V. L. Naples**. The power of the claw. 2013. *PLoS One* 8(9): doi:1371/journal.pone.0073811e73811.
- V. L. Naples**, B. Rothschild and R. M. Timm. 2013. The question of sex identification in specimens housed in research collections. Letter to the Editor. *Journal of Primatology*.

Rothschild, B. M. and **V. L. Naples**. 2013. Decompression syndrome and diving behavior in *Odontochelys*, the first turtle. *ActaPaleontologicaPolonica*.

Invited Published Reviews:

V. L. Naples. Review of Skeletal Function and Form, by D. R. Carter and G. S. Beaupre, Cambridge University Press, 2001. *Journal of Mammalogy*.

V. L. Naples. 2002. Review of Evolution of Tertiary Mammals of North America, by C. Janis, K. Scott and L. Jacobs (eds.), *Journal of Mammalogy*.

V. L. Naples. Review of Grey's Anatomy for Students. *Anatomical Record: Part B: The New Anatomist*.

Publications in press:

Naples, V. L. and R. K. McAfee. Chewing through the Miocene: An examination of the feeding musculature in the ground sloth *Hapalops* from South America (Mammalia: Pilosa).

Publications in preparation:

Naples, V. L. Morphology of the hindlimb of the black-footed ferret, *Mustelanigripes*: Locomotor adaptations for a unique subterranean lifestyle.

Naples, V. L. Muscular morphology of the forelimb in the black-footed ferret. *Mustela nigripes*: Adaptations for capturing prey larger than the predator.

Gramarye, J. and **V. L. Naples**. Looking the river horse in the mouth. A reexamination of the dentitions of the living species of hippopotami.

Naples, V. L. and J. Gramarye. Myology of the forelimb of the common hippopotamus, *Hippopotamus amphibius*.

Naples, V. L. and J. Gramarye. Comparative cranial osteology of the living hippopotamidae.

Naples, V. L. Comparative functional morphology of the shoulder region of *Smilodon fatalis*, *Panthera atrox*, *Xenosmilus hodsonae*, *Panthera leo* and *Felis catus*.

Naples, V. L. Who bit *Smilodon*? Analysis of a bite mark in a saber-tooth cranium.

Naples, V. L. Was *Smilodon* a slinky cat? *BioScience*.

Naples, V. L. Does phylogeny or function have a greater effect on phylogeny? An examination of the cranial morphology of megatheriids in comparison to tree sloths.

Spearing, K. and **V. L. Naples**. The Clouded Leopard (*Neofelis nebulosa*). *Mammalian Species*.

BOOKS PUBLISHED:

Naples, V. L., L. D. Martin and J. P. Babiarcz (eds.). *The Other Saber-tooths: The Scimitar Cats of the New World*. Johns Hopkins University Press. In press. Publication date: May or June 2011.

Book in preparation, Contract Awarded:

Martin, L. D., **V. L. Naples**, T. J. Meehan. *Ecomorphs: Extinction May Not Be Forever*. Johns Hopkins University Press. September, 2014.

Publications by graduate students working in my laboratory and under my supervision:

Sorkin, B. 2006. Ecomorphy of the short-faced bears *Agriotherium* and *Arctodus*. *Historical Biology*. 18(1): 1-20.

Sorkin, B. 2006. Ecomorphy of the giant bear-dogs *Amphicyon* and *Ischyrocyon*. *Historical Biology*. 18(4): 375-388.

Sorkin, B. 2008. A biomechanical constraint on body mass in terrestrial mammalian predators. *Lethaia*. 41: 333-347.

R. K. McAfee. Generic reassessment of the cranial characters of *Glossotherium* and *Paramylodon* (Mammalia, Xenarthra, Mylodontidae). *Journal of Vertebrate Paleontology*. Submitted, December 2006.

Student Abstracts Published and Presentations at professional meetings:

Sorkin, B. 2004. Ecomorphy of the giant bear-dogs *Amphicyon* and *Ischyrocyon*. *Journal of Vertebrate Paleontology* 24(3): 116A.

*Spearing, K. D. 2004. Phylogenetic analysis of extant and fossil cheetahs: A preliminary study. Midwest Paleoabstracts. *First Midwest Annual Symposium of Student Paleontologic Research*.

*Spearing, K. D. and A. Behlke. 2004. Phylogeny of the Mosasaurinae and the monophyly of the genus *Clidastes*. *Journal of Vertebrate Paleontology* 24(3): supplement.

Behlke, A., C. Ott and K. D. Spearing. 2002. Exceptionally large specimen of *Clidastes* (Mosasauridae) from the Late Cretaceous Niobrara Formation of western Kansas. *Journal of Vertebrate Paleontology* 22(3). Supplement.

*I am Kurt Spearing's Doctoral dissertation adviser. He is planning on completing his degree in the summer of 2011.

Other Educational Contributions:

- Naples, V. L.** 1994. End of Chapter and Clinical Scenarios, questions written for text *Human Anatomy* by F. Martini, Prentice-Hall Publishers.
- Naples, V. L.** 1995. Test Bank, questions and answers for each chapter for text *Human Anatomy* by F. Martini, Prentice-Hall Publishers.
- Naples, V. L.** 1996. End of Chapter and Clinical Scenarios, answers written for text *Human Anatomy* by F. Martini, Prentice-Hall Publishers.
- Naples, V. L.** 1997-2000. Author, WYSE (Worldwide Youth in Science and Engineering) Standardized Examinations in Biological Sciences.
- Naples, V. L.** 2004-2005. Interactive Anatomy Quizzes for *Human Anatomy* by Martini, Timmons and Tallisch, 4th ed. Prentice Hall.
- Naples, V. L.** 2008. Who bit *Smilodon*? Department of Biological Sciences 2008 Newsletter.

PROFESSIONAL RESEARCH PRESENTATIONS:

Published Abstracts:

- V. L. Naples.** 1981. "Cusp" development in sloth cuspless teeth. *International Association for Dental Research*, Chicago, Illinois.
- V. L. Naples.** 1987. Development of dental wear patterns in *Nothrotheriops shastense*. *Journal of Vertebrate Paleontology* 7(3): 21.
- V. L. Naples.** 1993. Interpretation of masticatory function, based upon study of cranial structure and experimental production of wear surfaces of model teeth of *Eremotherium*. *Journal of Vertebrate Paleontology* 13(3): 51A.
- V. L. Naples** 1994. Food manipulation and feeding strategy in living tree sloths; implications for feeding behavioral analyses in fossil sloths. *Journal of Vertebrate Paleontology*, 14(3): 40A.
- V. L. Naples** and L. D. Martin. 1995. Occipital morphology of saber-toothed carnivores. Society of Vertebrate Paleontology, 1995. *Journal of Vertebrate Paleontology* 15(3): 8A.
- V. L. Naples** and L. D. Martin. 1996. The Morphology of the Infraorbital Foramen in the Carnivora. Society of Vertebrate Paleontology, *Journal of Vertebrate Paleontology*, 16(3): 11A.
- Naples, V. L.** and L. D. Martin. 1997. Restoration of the superficial facial musculature in barbourfelins. *Journal of Vertebrate Paleontology* 17(3): 66.
- McCall, S. A. **V. L. Naples** and L. D. Martin. 1997. Social constraints on saber-toothed carnivores. *Journal of Vertebrate Paleontology* 17(3): 63.

- L. D. Martin, **V. L. Naples** and Z. Zhou. 1998. "The furcula in early birds." Society of Vertebrate Paleontology, *Journal of vertebrate Paleontology* 18(3) Supplement.
- V. L. Naples**, J. Babiarez and L. D. Martin. 1998. "A new type of saber-toothed cat." Society of Vertebrate Paleontology annual meeting, *Journal of vertebrate Paleontology* 18(3) Supplement.
- V. L. Naples** and L. D. Martin. 1999. An amphibian ichthyosaur ecomorph. *Journal of Vertebrate Paleontology* 19(3) Supplement: 66A.
- Martin, L. D., **V. L. Naples**. 2000. The pelvis in early birds and dinosaurs. Invited presentation for the 5th *International Meeting of the Society of Avian Paleontology and Evolution and the Symposium on the Jehol Biota*. Institute for Vertebrate paleontology and Paleoanthropology and the Chinese Academy of Sciences, Beijing, China.
- Martin, L. D., **V. L. Naples** and H. T. Wheeler. 2000. A non-human predator of mammoths, or mammoths as cat food. *Journal of Vertebrate Paleontology* 20: 60A.
- Wheeler, H. T., and **Naples, V. L.** 2000. Confirmation of saber-tooth killing bite theories by re-enactment. *Journal of Vertebrate Paleontology* 20: 79A
- Naples, V. L.** 2001. Does phylogeny or function have a greater effect on morphology? An examination of the cranial morphology of megatheriids as compared to tree sloths. *Journal of Vertebrate Paleontology* 21(3): 83A.
- Naples, V. L.** 2002. Were all extinct sloths ground sloths? *Journal of Vertebrate Paleontology* 22(3): 91-92A.
- Naples, V. L.**, Babiarez, J. 2003. Why does *Xenosmilus* look like a panda? *Journal of Vertebrate Paleontology* 23(3): 82A
- Naples, V. L.** 2004. Character complex significance in eremothere masticatory function. *Journal of Vertebrate Paleontology* 24(3): 97A.
- Naples, V. L.** and R. McAfee. 2005. Functional correlates between zygomatic arch structures and masticatory stroke orientation in sloths. *Journal of Vertebrate Paleontology* 25(3): 93A.
- Naples, V. L.** and B. M. Rothschild. 2006. Calcification in the fossil record: What can we learn from ribs? Society of Vertebrate Paleontology annual meetings, Ottawa, Ontario, Canada. Abstract published in the *Journal of Vertebrate Paleontology* 26(3 supplement): 93A.
- Martin, L. D., **V. L. Naples** and J. P. Babiarez. 2008. Cookie-cutter cats: Another saber-toothed morphotype. *Journal of Vertebrate Paleontology* 28(3): 120A.
- Naples, V. L.** and K. Spearing. 2008. Reconstruction of the forelimb musculature of *Xenosmilushodsonae*: An atypical saber-toothed cat. *Journal of Vertebrate Paleontology* 28(3): 112A.

Naples, V. L. and L. D. Martin. 2010. How a saber-tooth cat got its small brain. *Journal of Vertebrate Paleontology* 30(3): 115A.

Invited professional seminars and workshops:

Naples, V. L. 2000. Burpee Museum Paleofest 2000, "Ice Age Mammals," Public lecture, March 4, 2000,

Naples, V. L. 2002. Burpee Museum Paleofest 2002. Feb. 23, 2002. "Sabertoothed cats." Public lecture.

Naples, V. L. 2002. Burpee Museum Paleofest 2002. "What did a saber-toothed cat look like?" Children's workshop, Feb. 23, 2002.

Naples, V. L. 2002. Northern Illinois University's Science Camp. "Forensic Science: Footprints and what they can reveal." June 25, 2002.

Naples, V. L. 2003. Forensic Sciences for the High School Classroom. Naperville Central High School, Naperville. March 1, 2003. Psychological profiling: where to begin and what does it all mean? DeKalb Community Mental Health center, March 26, 2003.

Naples, V. L. 2004. Northern Illinois University's Science Camp. Fingerprinting and forensic methods of analysis of fingerprint patterns. July 17, 2004.

Naples, V. L. 2004. Adventures of a functional morphologist. October, 20, 2004. Invited seminar presentation for the Women's Studies Career Day, NIU.

Naples, V. L. 2004. Forensic geology. Invited seminar presentation. ESCONI. November 17, 2004.

Naples, V. L. 2005. Locomotor specializations in the hindlimb of the black-footed ferret, *Mustelana nigripes*: Adaption to a subterranean habitat. American Association of Anatomists annual meeting, San Diego, California, April 5, 2005.

Fisher, R. E., K. M. Scott and **V. L. Naples**. 2005. The comparative anatomy of the pygmy hippopotamus (*Choeropsis liberiensis*): appendicular morphology. American Association of Anatomists annual meeting, San Diego, California, April 5, 2005.

Naples, V. L., C. Hubbard and J. S. Miller. 2005. Forensic Sciences workshop for High School students, Jefferson High School, Rockford Illinois at Northern Illinois University, DeKalb, Illinois June 22, 2005.

Naples, V. L. Invited speaker for Burpee Museum's Paleofest for 2006. Public lecture on felids entitled "Lions, saber-tooths and cheetahs -- oh my!" to an audience of approximately 300 adults and children. Rest of the Paleofest weekend spent interacting with the public visiting the museum.

- Naples, V. L.** 2006. Invited seminar presentation. Hippo habits and relationships: Changing views in an aquatic dimension. Howard University. August, 2006.
- Naples, V. L.** 2007. Biology and functional morphology of the Hippopotami. Invited seminar presentation. ESCONI. December 2, 2007.
- Naples, V. L.** 2008. Looking the river horse in the mouth and other adventures with the hippopotami. Northern Illinois University Department of Biological Sciences Seminar series, Feb. 7, 2008.
- Naples, V. L.** 2008. Building a sabercat. ESCONI (Earth Sciences Club of Northern Illinois). June 13, 2008.
- Naples V. L., L. D. Martin, and J. P. Babiarez.** 2009. Muscle maps as a Guide to saber-tooth cat behavior. Geological Society of America annual meeting, Rockford, Illinois.
- L. Koper and **V. L. Naples.** 2009. Facing *Smilodon*: A new reconstruction of the appearance of *Smilodon fatalis*. Geological Society of America annual meeting, Rockford, Illinois.
- Naples V. L., and J. C. Gramarye.** 2009. Looking the river horse in the mouth: A reexamination of the dentition of the living hippopotami. American Society of Anatomists annual meeting, New Orleans.
- Naples, V. L.** 2010. The biology of the Xenarthra. University of Kansas, Invited seminar presentation. November 20, 2010.

Abstracts

- Naples, V. L.** Facial musculature of the sloths, American Society of Mammalogists, Athens, Georgia, June, 1978.
- Naples, V. L.** Cranial morphology of the sloths, with particular reference to the genus *Nothrotheriops*. Society of Vertebrate Paleontology, Toronto, Ontario, Canada, October, 1979.
- Naples, V. L.** The superficial facial musculature in the sloths and anteaters. Edentate Symposium, Corvallis, Oregon, June 1979.
- Naples, V. L.** Cranial morphology of sloths, with comments on masticatory function, American Society of Mammalogists, Corvallis, Oregon, June 1979.
- Naples, V. L.** Masticatory function and the cranial morphology of the tree sloths, Society of Vertebrate Paleontology, Pittsburgh, Pennsylvania, November, 1979.
- Naples, V. L.** Comparative cranial osteology and function in the sloths, American Society of Mammalogists, Providence, Rhode Island, June 1980.
- Naples, V. L.** Dental occlusion and mandibular movement patterns in the tree sloths, *Choloepus* and *Bradypus*, Society of Vertebrate Paleontology, Gainesville, Florida, November, 1980.

- Naples, V. L.** Canine teeth and constraints on the jaw apparatus, Society of Vertebrate Paleontology, Ann Arbor, Michigan, November, 1981.
- Naples, V. L.** Canine tooth shape and the effects upon carnivoran jaws, American Society of Mammalogists, Snowbird, Utah, June 1982.
- Naples, V. L.** Formation of "cusps" on the teeth of the tree sloths *Bradypus* and *Choloepus*, American Society of Mammalogists, Gainesville, Florida, June 1983.
- Naples, V. L.** Structure and function of the feeding apparatus in xenarthran anteaters, American Society of Mammalogists, Arcata, California, June 1984.
- Naples, V. L.** The feeding apparatus in xenarthran anteaters, Australian Mammal Society, Sydney, Australia, July 1984.
- Naples, V. L.** Craniofacial morphology and function in xenarthran anteaters, Society of Vertebrate Paleontology, Berkeley, California, November, 1984.
- Naples, V. L.** Cranial structure and functional implications in the ground sloth, *Nothrotheriops shastense*, American Society of Mammalogists, Orono, Maine, June 1985.
- Naples, V. L.** Reconstruction of the cranial morphology of *Nothrotheriops shastense*, Society of Vertebrate Paleontology, Rapid City, South Dakota, October, 1985.
- Naples, V. L.** Cranial function in *Nothrotheriops shastense*, American Society of Zoologists, Chicago, Illinois, April 1986.
- Naples, V. L.** The implications of masticatory structure in *Glossotherium*, American Society of Mammalogists, Madison, Wisconsin, June 1986.
- Naples, V. L.** Cranial morphology and function in *Glossotherium*, Society of Vertebrate Paleontology, Philadelphia, Pennsylvania, October, 1986.
- Naples, V. L.** Dental growth form in *Nothrotheriops shastense*, American Society of Mammalogists, Albuquerque, New Mexico, June 1987.
- Naples, V. L.** Development of dental wear patterns in *Nothrotheriops shastense*, Asociacion Mexicana de Mastozoologica, A. C., Cancun, Quintana Roo, Mexico, June 1987.
- Naples, V. L.** The hyoid in the anteater: a long story, American Society of Mammalogists, Clemson, Georgia, June 1988.
- Naples, V. L.** Evidence of bipedalism in pterosaurs, Society of Vertebrate Paleontology, October, 1988 (with Rowan Lockwood).

- Naples, V. L.** Experimental formation of sloth dental wear patterns. American Society of Mammalogists, 1990.
- Naples, V. L.** Dental growth patterns in *Nothotheriopsshastensis*, Society of Vertebrate Paleontology, 1990.
- Naples, V. L.** Experimental formation of dental wear patterns in sloths, American Society of Mammalogists, 1991.
- Naples, V. L.** The generation of tooth wear features on model teeth as a means to infer mandibular movement during feeding in mammals. Society of Vertebrate Paleontology, 1992.
- Naples, V. L.** Artificial generation of wear patterns on tooth models as a means to infer mandibular movement during feeding in mammals. American Society of Mammalogists, 1993.
- Naples, V. L.** Interpretation of masticatory function, based upon study of cranial structure and experimental production of wear surfaces of model teeth in *Eremotherium*. Society of Vertebrate Paleontology, 1993.
- Naples, V. L.** The effect of food handling behavior on masticatory function in sloths. American Society of Mammalogists, 1994.
- Naples, V. L.** Interpretation of masticatory function based upon study of cranial structure and experimental production of wear surfaces on model teeth of *Eremotherium*. American Society of Mammalogists, June 1995.
- Naples, V. L.** Environmental Controls for Multiple Evolutionary Events (with L. D. Martin). V. L. Naples presenter, Tertiary-Quaternary Society meetings, 1996.
- Naples, V. L.** 1996. The Power of Ecomorphy. (with L. D. Martin). V. L. Naples, presenter. North American Paleontological Conference.
- Naples, V. L.** 1996. How Important is convergence? (with L. D. Martin). V. L. Naples, presenter. American Society of Mammalogists.
- V. L. Naples** and L. D. Martin. 1997. "Cenozoic brain evolution as a result of global cooling." Annual meeting of the Institute for Tertiary-Quaternary Studies.
- L. D. Martin, J. Babiarez and **V. L. Naples**. 1997. "Scimitar-toothed cats in the North American Pleistocene." Annual meeting of the Institute for Tertiary-Quaternary Studies.
- L. D. Martin and **V. L. Naples**. 1997. "Did mammoths have non-human predators?" Invited presentation for the International Symposium on Mammoth Biology.
- K. Stanford, J. M. Rogers and **V. L. Naples**. "A detailed investigation of facial and masticatory muscles in *Felis catus* as a basis for muscle reconstruction in extinct feloids." American Society of Mammalogists, 1998.

- Naples, V. L.** 1998. "Morphology and function of the feeding mechanism of the giant anteater *Myrmecophagatrictyla*." American Society of Mammalogists.
- Naples, V. L.** 2000. Robo-Cat: A model saber-tooth. 2nd Midwest Regional Meeting Society for Integrative and Comparative Biology, Division of Vertebrate Morphology, Augustana College, Rock Island, Illinois.
- Naples, V. L., D. Lopez and S. Wisely.** 2001. Morphology of the hind limb of the black-footed ferret (*Mustelanigripes*). 81st Annual meeting of the American Society of Mammalogists.
- Naples, V. L.** 2004. Forelimb morphology and function in the black-footed ferret, *Mustelanigripes*. American Society of Mammalogists 84th annual meeting, Humboldt State University, Arcata, California. June, 2004. Oral presentation.
- Martin, L. D. and **V. L. Naples.** 2004. Mandibular kinesis in *Hesperornis*. Sixth meeting of the Society of Avian Paleontology and Evolution, September, France.
- R. Fisher, K. M. Scott and **V. L. Naples.** 2005. The myology of the pygmy hippopotamus (*Choeropsis liberiensis*): Muscles of the fore and hind limb. Evolution of Aquatic Tetrapod meetings, Akron, Ohio, May 16-20, 2005.
- Naples, V. L.** 2005. Shoulder morphology of the spectacled bear (*Tremarctos ornatus*): Does this bear have a rotator cuff? American Society of Mammalogists annual meeting, Springfield, Missouri, June 16, 2005.
- Naples, V. L., C. Hubbard and E. Ross.** 2006. Run faster, jump higher: Anatomic variations in the Clouded Leopard paw. American Society of Mammalogists Annual meeting, Amherst, Massachusetts, June, 2006.
- Naples, V. L.** 2007. The myology of the forelimb of the common hippopotamus, *Hippopotamus amphibius*. American Association of Anatomists, Washington, D. C. May, 2007.
- Naples, V. L.** 2007. Forelimb myology and function in the common hippo. American Society of Mammalogists, June, 2007
- Naples, V. L.** and L. D. Martin. 2008. Iterative evolution of feliform carnivores. Geological Society of America. Edwardsville, Indiana, April, 2008.
- Naples, V. L.** Building a saber-tooth, or is there more than one way to reconstruct a fossil cat? Invited presentation. Symposium on Saber-toothed carnivores, University of Idaho Museum of Natural History, Pocatello, Idaho, May, 2008.
- Naples, V. L., K. Spearing and H. T. Wheeler.** Who bit *Smilodon*? A tale of attempted murder at Rancho La Brea. Invited presentation. Symposium on Saber-toothed carnivores, University of Idaho Museum of Natural History, Pocatello, Idaho, May, 2008.

- Naples, V. L.,** L. D. Martin a. Babiarcz. 2009. Muscle maps as a guide to saber-tooth behavior. Geological Society of America.
- Naples, V. L.** and L. Koper. 2009. Facing *Smilodon*: A new cranial reconstruction of a saber-tooth cat. Geological Society of America.
- Naples, V. L.** and L. D. Martin. 2009. Did the Ice age contribute to the evolution of human intelligence? Geological Society of America.
- Naples, V. L.** and L. Koper. 2009. The gaping truth: A new rationale for the reconstruction of the face of *Smilodon fatalis*. American Association of Anatomists.
- Naples, V. L.** 2010. American Society of Mammalogists, Laramie, Wyoming, June 2010.
- Naples, V. L.** 2011. American Society of Mammalogists, June 2011.
- Naples, V. L.** 2011. *Xenosmilus hodsonae*: A cookie-cutter cat. American Association of Anatomists.
- Naples, V. L.** 2012. Atlatl saltation: A new model for explaining movement patterns in animals engaging in ricochetral locomotion regardless of taxonomic affinity, geographic range or time of appearance in the fossil record. American Society of Mammalogists. June, 2012.
- Naples, V. L.** 2012. Atlatl saltation: Ricochetral locomotion in rodents. Tertiary-Quaternary Society, Lawrence, Kansas, May 2, 2012.
- Naples, V. L.** 2013. American Society of Mammalogists, Reno, Nevada. June 2013.
- Naples, V. L.** and R. K. McAfee. 2013. Delimiting the forelimb morphology among Pleistocene (Enseanadan-Lujanian) mylodontid sloths (Mammalia: Pilosa): Implications for functionality. Society of Vertebrate Paleontology. Los Angeles, California. October 21, 2013.
- Naples, V. L.** 2014. What put the “slink” in the saber-cat? Scapular and pelvic adaptations enhance stealthy stalking behavior in *Smilodon fatalis*. American Association of Anatomists. San Diego, California. April 26, 2014.
- Naples, V. L.** 2014. How did the mandible in *Hippopotamus amphibius* get its hook? American Society of Mammalogists, Oklahoma City, Oklahoma. June 8, 2014.