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List of Publications (as of March, 2008)

Book

- 70) Kielan-Jaworowska, Z., R. L. Cifelli, and **Z.-X. Luo**. 2004. Mammals from the Age of Dinosaurs: Origins, Evolution, and Structure. Columbia University Press, New York. Pp. i-xv, 1-630; 239 figures.

Edited Symposium Proceedings

- 69) Beard, K. C. and **Z.-X. Luo** (Editors). 2007. Mammalian Paleontology On A Global Stage: Papers In Honor of Mary R. Dawson. Bulletin of Carnegie Museum of Natural History 39: 1-234.
- 68) Polly, P. D., Springer, M. S. and **Z.X. Luo** (Guest Editors). 2005. Journal of Mammalian Evolution – the Clemens Special Volume. Journal of Mammalian Evolution Volume 12 (Issues 1/2 3/4): 1-552.

Publications (full length research papers excluding abstracts)

2008

- 67) Chen, M. and **Z.-X. Luo**. 2008. Morphology of dentition and postcranial skeleton of Akidolestes. Acta Geologica Sinica (Chinese Edition) 82(2): 155-164 (with English Abstract).
- 66) You, H.-L. and **Z.-X. Luo**. 2008. Dinosaurs from the Lower Cretaceous Gonpoquan Basin in Jiuquan Area, Gansu Province, China. Acta Geologica Sinica (Chinese Edition) 82(1): 139-144. (with English Abstract).

2007

- 64) **Luo, Z.-X.** 2007. Transformation and diversification in the early mammalian evolution. NATURE 450: 1011-1019. (Review Article)
- 63) **Luo, Z. X.**, Q. Ji and C.-X. Yuan. 2007. Convergent dental evolution in pseudotribosphenic and tribosphenic mammals. NATURE 450: 93-97.
- 62) **Luo, Z.-X.**, and T. Martin. 2007. Analysis of molar structure and phylogeny of docodontan genera. Bulletin of Carnegie Museum of Natural History 39: 27-47.

- 61) **Luo, Z.-X. 2007.** Successive diversifications in early mammalian evolution. Pp. 337-391. *In: Major Transitions In Vertebrate Evolution* (J. S. Anderson and H.-D. Sues, eds.). Indiana University Press, Bloomington and Indianapolis, Indiana.
- 60) **Luo, Z.-X., P.-J. Chen, G. Li and M. Chen. 2007.** A new eutriconodont mammal and evolutionary development of early mammals. *NATURE* 446: 288-293. (Research Article)

2006

- 59) Ji, Q., **Z.-X. Luo**, C.-X. Yuan, and A. R. Tabrum. **2006.** A swimming mammaliaform from the Middle Jurassic and ecomorphological diversification of early mammals. *SCIENCE* 311: 1123-1127. (Research Article)
- 58) Li, G., and **Z.-X. Luo. 2006.** A Cretaceous symmetrodont therian with some monotreme-like postcranial features. *NATURE* 439:195-200.
- 57) Hurum, J. H., **Z.-X. Luo**, and Z. Kielan-Jaworowska. **2006.** Were mammals originally venomous? *Acta Palaeontologica Polonica* 51(1):1-11.

2005

- 56) **Luo, Z.-X.,** and J. R. Wible. **2005.** A new Late Jurassic digging mammal and early mammalian diversification. *SCIENCE* 308: 103-107.
- 55) Martin, T., and **Luo, Z.-X. 2005.** Paleontology: Homoplasy in the Mammalian Ear. *SCIENCE* 307: 861-862. (Perspective)
- 54) **Luo, Z.-X.,** and Q. Ji. **2005.** New study on dental and skeletal features of the Cretaceous mammal Zhangheotherium. *Journal of Mammalian Evolution* 12:337-357.
- 53) Geisler, J. H., A. E. Sanders, and **Z.-X. Luo. 2005.** A new protocetid whale (Cetacea: Protocetidae) from the Middle Eocene of South Carolina, U.S.A. *The American Museum Novitates* 3480:1-65.
- 52) **Luo, Z.-X. 2005.** Vertebrate Paleontology: Mesozoic mammals. In, R. C. Selley, R. Cocks & I. Pilmer (editors): Encyclopedia of Geology (2004 Edition): Pp. 527-534. Academic Press/Elsevier Science Ltd, Oxford and London.

2004

- 51) **Luo, Z.-X.**, Z. Kielan-Jaworowska, and R. L. Cifelli. **2004**. Evolution of Dental Replacement in Mammals. Pp. 159 - 175, in Fanfare for an Uncommon Paleontologist - Festschrift in Honor of Dr. Malcolm C. McKenna, (M. R. Dawson, and J. A. Lillegraven, eds.). The Carnegie Museum of Natural History Bulletin 36:159-175.
- 50) Dooley, A. C., Jr., N. C. Fraser, and **Z.-X. Luo**. **2004**. The earliest member of the rorqual-gray whale (Mammalia, Cetacea). *Journal of Vertebrate Paleontology* 24: 453-463.
- 49) Datta, P. M., D. P. Das, and **Z.-X. Luo**. **2004**. A Late Triassic dromatheriid (Cynodontia, Synapsida) from Tiki Formation of India. *Annals of Carnegie Museum* 73(2): 72-84.

2003

- 48) **Luo, Z.-X.**, Q. Ji, J. R. Wible, and C.-X. Yuan. **2003**. An Early Cretaceous tribosphenic mammal and metatherian evolution. *SCIENCE* 302: 1934-1940. (Research Article)
- 47) You, H.-L., F. Tang, and **Z.-X. Luo**. **2003**. A new basal titanosaur (Dinosauria: Sauropoda) from the Early Cretaceous of China. *Acta Geologica Sinica (English Edition) (Beijing)* 77: 424-429.
- 46) Shapiro, M. D., H.-L. You, N. H. Shubin, **Z.-X. Luo**, and J. P. Downs. **2003**. A large ornithomimid from the Lower Cretaceous of the Mazongshan area, northern Gansu Province, People's Republic of China. *Journal of Vertebrate Paleontology* 23: 695-698.
- 45) You, H.-L., **Z.-X. Luo**, N. H. Shubin, L. M. Witmer, Z.-L. Tang, and F. Tang. **2003**. The earliest-known duck-billed dinosaur from deposits of late Early Cretaceous age in northwest China and hadrosaur evolution. *Cretaceous Research* 24: 347-355.

2002

- 44) Ji, Q., **Z.-X. Luo**, C-X. Yuan, J. R. Wible, J.-P. Zhang, and J. A. Georgi. **2002**. The earliest known eutherian mammal. *NATURE* 416: 816-822. (Research Article)
- 43) Kielan-Jaworowska, Z., R. L. Cifelli, and **Z.-X. Luo**. **2002**. Dental structure of Shuotherium and its relationships. *Acta Palaeontologica Polonica* 47: 479-486.
- 42) **Luo, Z.-X.**, Z. Kielan-Jaworowska, and R. L. Cifelli. **2002**. In quest for a phylogeny of Mesozoic mammals. *Acta Palaeontologica Polonica* 47: 1-78.

2001

- 41) **Luo, Z.-X.**, A. W. Crompton, and A.-L. Sun. **2001b**. A new mammaliaform from the Early Jurassic of China and evolution of mammalian characteristics. *SCIENCE* 292: 1535-1540.
- 40) **Luo, Z.-X.**, R. C. Cifelli, and Z. Kielan-Jaworowska. **2001a**. Dual evolution of tribosphenic mammals. *NATURE* 409: 53-57. (Research Article)
- 39) Tang, F., **Z.-X. Luo**, Z.-H. Zhou, H.-L. You, J. A. Georgi, Z.-L. Tang, and X.-Z. Wang. **2001**. Biostratigraphy and Paleoenvironment of the Dinosaur-bearing Sediments in Lower Cretaceous of Mazongshan Area, Gansu Province, China. *Cretaceous Research* 22: 115-129.
- 38) **Luo, Z.-X.** **2001**. Inner ear and its bony housing in tritylodonts and implications for evolution of mammalian ear. Pp. 81-97, in Studies in Organismic and Evolutionary Biology in Honor of Alfred W. Crompton (F. A. Jenkins, M. D. Shapiro, and T. Owerkowicz, eds.). *Bulletin of Museum of Comparative Zoology, Harvard University* 156: 81-97.

2000

- 37) **Luo, Z.-X.** **2000**. Evolution: in search of the whales' sisters. *NATURE* 404: 235– 239. (Invited News & Views Commentary on the relationships of cetaceans to ungulate mammals).

1999

- 36) **Luo, Z.-X.** **1999**. A refugium of relicts. *NATURE* 400: 23-25. (Invited News & Views commentary on the age of the feathered dinosaur fauna in China).
- 35) **Luo, Z.-X.**, and P. D. Gingerich. **1999**. Transition from terrestrial ungulates to aquatic whales: transformation of the basicranium and evolution of hearing. *Papers on Paleontology* 31: 1-98. Monograph Series of Museum of Paleontology, University of Michigan, Ann Arbor, Michigan.
- 34) Ji, Q., **Z.-X. Luo**, and S.-A. Ji. **1999**. A Chinese triconodont mammal and mosaic evolution of mammalian skeleton. *NATURE* 398: 326-330.

1998

- 33) Tang, F., **Z.-X. Luo**, Z.-H. Zhou, H.-L. You, and L. Tan. **1998**. Genesis of the stratigraphic sequence in the late Mesozoic terrestrial basin in the Ma-Zong-Shan areas of Gansu Province. *Chinese Geology* 1998(10): 40-44. [in Chinese]

- 32) Kielan-Jaworowska, Z., R. L. Cifelli, and **Z.-X. Luo**. **1998**. Alleged Cretaceous placental mammal from down under. *Lethaia* 31: 267-268.
- 31) Zhang, F.-K., A. W. Crompton, **Z.-X. Luo**, and C. R. Schaff. **1998**. Pattern of dental replacement of Sinoconodon and its implications for evolution of mammals. *Vertebrata Palasiatica* 36: 197-217. (in both Chinese and English).
- 30) Hu, Y.-M., Wang, Y.-Q., C.-K. Li, and **Z.-X. Luo**. **1998**. Morphology of dentition and forelimb of Zhangheotherium. *Vertebrata Palasiatica* 36: 102-125. (in both Chinese and English).
- 29) Geisler, J. H., and **Z.-X. Luo**. **1998**. Cranial vascular evolution in mesonychids and cetaceans and the phylogenetic position of cete. Pp. 161-212, in Evolutionary Emergence of Whales, (J. G. M. Thewissen, ed.). Plenum Press, New York.
- 28) **Luo, Z.-X.** **1998**. Homology and Transformation of the cetacean ectotympanic structures. Pp. 269-301, in Evolutionary Emergence of Whales, (J. G. M. Thewissen, ed.). Plenum Press, New York.

1997

- 27) Hu, Y.-M., Wang, Y.-Q., **Z.-X. Luo**, and C.-K. Li. **1997**. A new symmetrodont mammal from China and its implications for mammalian evolution. *NATURE* 390: 137-142. (Research Article)

1996

- 26) Geisler, J. H., and **Z.-X. Luo**. **1996**. Petrosal and inner ear structures of Herpetocetus, their implications on relationships and hearing function of archaic mysticetes. *Journal of Paleontology* 70: 1045-1066.
- 25) **Luo, Z.-X.**, and K. K. Marsh. **1996**. Petrosal (periotic) and inner ear of a Pliocene kogiine whale (Kogiinae, Odontoceti): implications on relationships and hearing evolution of toothed whales. *Journal of Vertebrate Paleontology* 16: 328-348.

1995

- 24) **Luo, Z.-X.**, S. G. Lucas, J.-J. Li, and S.-N. Zhen. **1995**. A new specimen of Morganucodon oehleri from the Lower Lufeng Formation, Yunnan, China. *Neues Jahrbuch für Geologie und Paläontologie* 11: 671-680.

- 23) **Luo, Z.-X.**, and X.-C. Wu. **1995**. Correlation of vertebrate assemblage of the Lower Lufeng Formation, Yunnan, China. Pp. 83-88, in Sixth Symposium on Mesozoic Terrestrial Ecosystems and Biotas, Short Papers, (A.-L. Sun, and Y.-Q. Wang, eds.). China Ocean Press, Beijing, China.
- 22) **Luo, Z.-X.**, and E. R. Eastman. **1995**. The petrosal and inner ear structures of a squalodontoid whale: implications for evolution of hearing in odontocetes. *Journal of Vertebrate Paleontology* 15: 431-442.
- 21) **Luo, Z.-X.**, A. W. Crompton, and S. G. Lucas. **1995**. Evolutionary origins of the mammalian promontorium and cochlea. *Journal of Vertebrate Paleontology* 15: 113-121.

1994

- 20) **Luo, Z.-X.**, and X.-C. Wu. **1994**. The small vertebrate fauna of the Lower Lufeng Formation, Yunnan. Pp. 251-270, in In the Shadow of Dinosaurs—Early Mesozoic Tetrapods, (N. C. Fraser, and H.-D. Sues, eds.). Cambridge University Press, Cambridge, New York and Melbourne.
- 19) **Luo, Z.-X.** **1994**. Sister taxon relationships of mammals and the transformations of the diagnostic mammalian characters. Pp. 98-128, in In the Shadow of Dinosaurs—Early Mesozoic Tetrapods, (N. C. Fraser, and H.-D. Sues, eds.). Cambridge University Press, Cambridge, New York and Melbourne.
- 18) **Luo, Z.-X.**, and A. W. Crompton. **1994**. Transformations of the quadrate (incus) through the transition from non-mammalian cynodonts to mammals. *Journal of Vertebrate Paleontology* 14: 341-374.

1993

- 17) Crompton, A. W., and **Z.-X. Luo**. **1993**. The relationships of the Liassic mammals Sinoconodon, Morganucodon oehleri and Dinnetherium. Pp. 30-44, in Mammal Phylogeny (F. S. Szalay, M. J. Novacek, and M. C. McKenna, eds.). Springer-Verlag, New York.
- 16) Lucas, S. G., and **Z.-X. Luo**. **1993**. Adelobasileus from the Upper Triassic of West Texas: the oldest mammal. *Journal of Vertebrate Paleontology* 13: 309-334.
- 15) **Luo, Z.-X.**, and A.-L. Sun. **1993**. Oligokyphus (Cynodontia: Tritylodontidae) from the Lower Lufeng Formation (Lower Jurassic) of Yunnan, China. *Journal of Vertebrate Paleontology* 13: 477-482.

1991

- 14) **Luo, Z.-X.**, and D. R. Ketten. **1991**. CT scanning and computerized reconstructions of the inner ear structure of multituberculate mammals. *Journal of Vertebrate Paleontology*, 11: 220-228.
- 13) **Luo, Z.-X.** **1991**. The variability of dental morphology and the relationships of the earliest arctocyonid species. *Journal of Vertebrate Paleontology* 11: 452-471.

1989

- 12) McKenna, M. C., M.-C. Chow, S.-Y. Ting, and **Z.-X. Luo**. **1989**. Radinskya yupingae, a perissodactyl-like mammal from the late Paleocene of Southern China. Pp. 24-37, in The Evolution of Perissodactyls, (D. R. Prothero, and R. M. Schoch, eds.). Oxford University Press, Oxford.

Ph.D. Thesis

- 11) **Luo, Z.-X.** **1989**. The petrosal structures of Multituberculata (Mammalia) and the molar morphology of early Arctocyonidae (Condylarthra, Mammalia). Ph.D. Dissertation, Museum of Paleontology, University of California at Berkeley. Pp. 1-426. (Major adviser: W. A. Clemens, Jr.; Committee Members: M. H. Wake and K. Padian)

Published Reviews & Popular Scientific Articles

- 10) **Luo, Z.-X.** and M. Chen. 2007. The magic story of mammalian ear evolution. *Scientific American* (Chinese Edition, Taiwan). June 2007. No. 64: 96-98. (In Chinese).
- 9) **Luo, Z.-X.** 2007. Book Review: Natural history of human's most distant relatives: Echidna – Extraordinary egg-laying mammal. By Michael L. Augee, Brett A. Gooden, and Anne M. Musser. *Journal of Mammalian Evolution* 14: 283-285.
- 8) P. D. Polly, J. A. Lillegraven, and **Z.-X. Luo**. 2005. Introduction: Paleomammalogy in Honor of Professor Emeritus William Alvin Clemens, Jr. *Journal of Mammalian Evolution* 12:3-9.
- 7) **Luo, Z.-X.** **2005**. Book review: "Doushantuo Fossils: Life on the Eve of Animal Radiation." By Xun-lai Yuan, Shu-hai Xiao, Lei-ming Yin, Andrew H. Knoll, Chuan-ming Zhou and Xi-nan Mu. 2002. *Journal of Paleontology* 75:1040-1042.
- 6) **Luo, Z.-X.** **2004**. A Window on Early Animal Evolution (Book review): for "The Cambrian Fossils of Chengjiang, China – The Flowering of Early Animal Life" by Xian-Guang Hou, Richard J.

- Aldridge, Jan Bergström, David J. Siveter, Derek J. Siveter & Xiang-Hong Feng. Nature 430: 405.
- 5) **Luo, Z.-X. 2002.** Evolutionary story of the Mesozoic tribosphenic mammals. Scientific American (Chinese Edition, Taiwan), April 2002: 62-63. (Popular Scientific Article, in Chinese).
- 4) **Luo, Z.-X. 2002.** Symmetrodonts (an entry to the McGraw-Hill Encyclopedia). The McGraw-Hill Encyclopedia of Science and Technology, Ninth Edition. P. 84. New York, NY. (Published Review).
- 3) **Luo, Z.-X. 2001.** Foreword to Rise of the Dragon. Pp. ix-xiv, in Rise of the Dragon – Recent Advancement in Palaeontology in China, (Henry Gee, ed.). The University of Chicago Press. (Invited contribution by the editor)
- 2) **Luo, Z.-X. 1997.** How do whales hear? Carnegie Magazine, Vol. LXIII: Pp. 23-25. (Popular Scientific Article).
- 1) **Luo, Z.-X., and Z. Zhang. 1995.** Thrinaxodon: Digital Atlas of the Skull (by T. Rowe, W. Carlson, and W. Bortoroff). Journal of Vertebrate Paleontology, 15: 871-874. (Published Review).

Published Abstracts & Presentations at Conferences and Symposia

- 39) **Luo, Z.-X. 2007.** Development heterochrony and transformation of the definitive mammalian middle ear among Mesozoic mammals. Journal of Vertebrate Paleontology 27(3-Supplement): 108A.
- 38) **Ruf, I. Z.-X. Luo, T. Martin, and J. R. Wible. 2007.** CT Scanning investigation of the petrosal bone and the inner ear of Henkelotherium guimarotae (Paurodontia, Dryolesoidea). Journal of Vertebrate Paleontology 27(3-Supplement): 136A.
- 37) **Luo, Z.-X. 2007.** Molecular Time Estimates of Mammalian Divergence Versus Fossil Records of Ecomorphological Diversification of Mesozoic Mammals. Journal of China University Geosciences 18 (Special Issue): 389-391 (Abstract, 2007 Meeting of International Professionals for Advancement of Chinese Earth Sciences –IPACES, hosted by China University of Geosciences- Wuhan)
- 36) **Luo, Z.-X., A. R. Tabrum, Q. Ji, and C.-X. Yuan. 2006.** Phylogenetic and ecological diversities of docodontan mammaliaforms, and their paleobiogeographic patterns. Journal of Vertebrate Paleontology 26(3Supplement): 92A.

- 35) You, H.-L. and **Z.-X. Luo**. 2006. Dinosaurs from the Lower Cretaceous Mazongshan area in northwestern China. P. 453, in, Q. Yang, Y.-D. Wang and E. A. Weldon (editors) *Ancient Life and Modern Approaches – Abstracts of the Second International Palaeontological Congress* (June 17-21, Beijing, CHINA). University of Science and Technology of China Press.
- 34) **Luo, Z.-X.** and, T. Martin. 2006. Phylogeny of mammaliaform docodontan genera and their biogeographic patterns. P. 475-476, in, Q. Yang, Y.-D. Wang and E. A. Weldon (editors) *Ancient Life and Modern Approaches – Abstracts of the Second International Palaeontological Congress* (June 17-21, Beijing, CHINA). University of Science and Technology of China Press.
- 33) **Luo, Z.-X.**, and J. R. Wible. 2005. Convergent evolution of myrmecophagan and fossorial adaptations of Fruitafossor and ecomorphological diversification of mammals of the late jurassic and early cretaceous. *Journal of Vertebrate Paleontology* 25(3)(supplement): 85A.
- 32) **Luo, Z.-X.**, J. R. Wible, Q. Ji, and C.-X. Yuan. **2004**. Morphological divergence and earliest evolution of marsupial and placental mammals. *Journal of Vertebrate Paleontology* 24(3)(supplement): 86A.
- 31) **Luo, Z.-X.** **2004**. Evolution of diphyodont dental replacement and determinate skull growth through cynodont-mammal transition. *Journal of Morphology* 360(3):308. Abstract for the 7th International Congress of Vertebrate Morphology (Boca Raton, FL).
- 30) **Luo, Z.-X.** **2003**. Successive diversification of Mesozoic mammal clades and accumulative evolution of their anatomical apomorphies. *Journal of Vertebrate Paleontology* 23(3)(supplement): 73A-74A. (Invited presentation for "Evolutionary Transition among Vertebrates - A Symposium In Honor of Robert Lynn Carroll" at the 63rd Annual Meeting of Society of Vertebrate Paleontology)
- 29) **Luo, Z.-X.** **2003**. Evolution of endocast and braincase through cynodont-mammal transition. *Festschrift Symposium and Celebration in Honor of Professor William A. Clemens*. Museum of Paleontology & Department of Integrative Biology, University of California at Berkeley, Berkeley, CA. (April, 2003)
- 28) **Luo, Z.-X.**, and G.-H. Cui. **2001**. Internal structures of tritylodontid skulls as revealed by serial sectioning and CT scanning. *Journal of Vertebrate Paleontology* 21(3)(supplement): 75A.
- 27) **Luo, Z.-X.**, A. W. Crompton, and A.-L. Sun. **2001**. Cranial structures of mammaliaform Hadrocodium and origins of mammalian characteristics. *Journal of Vertebrate Paleontology*, 21(3)(supplement): 75A.

- 26) Cifelli, C. L., **Z.-X. Luo**, and Kielan-Jaworowska, Z. **2001**. The relationships of monotremes and the earliest-known southern tribosphenic mammals. *Journal of Vertebrate Paleontology* 21(3)(supplement): 40A-41A.
- 25) McKenna, M. C., M. Chow, and **Z.-X. Luo**. **2001**. New phenacodont-like mammal, Late Paleocene of China. *Journal of Vertebrate Paleontology* 21(3)(supplement): 79A.
- 24) **Luo, Z.-X.**, Kielan-Jaworowska, Z., and R. L. Cifelli. **2001**. Relationships of major Mesozoic mammalian clades. *PaleoBios* 21(2)(supplement): 86. (North American Paleontological Convention 2001, Programs and Abstracts).
- 23) **Luo, Z.-X.**, Q. Ji, and S.-A. Ji. **2001**. Dental replacement in *Zhangheotherium* and its implications on evolution of mammalian dentition. *Journal of Morphology* 248(3): 256-257. (Abstract of the 6th International Congress of Vertebrate Morphology. Jena, Germany).
- 22) Dooley, A. C., Jr., N. C. Fraser, and **Z.-X. Luo**. **2000**. The earliest member of the balaenopteridae-eschrichtidae clade from the Miocene of Virginia. *Journal of Vertebrate Paleontology* 20(3)(supplement): 39A.
- 21) Geisler, J. H., A. E. Sanders, J. A. Georgi, and **Z.-X. Luo**. **2000**. A revised phylogeny of Odontoceti and Mysticeti with a reinterpretation of cetacean cranial evolution. *Journal of Vertebrate Paleontology* 20(3)(supplement): 43A.
- 20) You, H.-L., P. Dodson, **Z.-X. Luo**, Z.-M. Dong, and Y. Azuma. **1999**. *Archaeoceratops* and other dinosaurs from the late early Cretaceous of the Mazongshan area, northwest China. *Journal of Vertebrate Paleontology* 19(3)(supplement): 86A.
- 19) **Luo, Z.-X.** 1999. Evolution of inner ears through the cynodont-mammal transition. Festschrift Symposium and Celebration in Honor of Professor Alfred W. Crompton. Museum of Comparative Zoology & Department of Organismic Biology and Evolution. Harvard University, Cambridge, MA. (May, 1999)
- 18) **Luo, Z.-X.** **1998**. Evolution of underwater hearing in whales. The Biannual Science Fiction Writers Conference (Mars, Pennsylvania, USA). (Invited Scientific Presentation)
- 17) **Luo, Z.-X.** **1997**. Transformation of the mammalian middle ear through the cynodont-mammal transition. *Journal of Morphology* 232(3): 290. (Abstract to the International Congress of Vertebrate Morphology V. Bristol, UK).

- 16) **Luo, Z.-X. 1997.** Sphenoidal sinus in advanced and early mammals, and its implications on mammalian skull evolution. *Journal of Morphology* 232(3): 290. (Abstract to International Congress of Vertebrate Morphology V. Bristol, UK).
- 15) Tipton-Jones, E., B. A. Keith, and **Z.-X. Luo. 1996.** A study of the functional evolution of the inner ear of baleen whales. *Bulletin, South Carolina Academy of Science* Volume LVIII: 147-148.
- 14) Geilser, J., A. E. Sanders, and **Z.-X. Luo. 1996.** A new protocetid cetacean from the Eocene of South Carolina, USA; phylogenetic and biogeographic implications. P. 139, in Sixth North American Paleontological Convention Abstracts of Papers (Smithsonian Institution, Washington, DC), (J. E. Repetski, ed.). The Paleontological Society Special Publications No. 8.
- 13) Tipton-Jones, B. R., and **Z.-X. Luo. 1996.** A study of the functional evolution of the inner ear of mysticetes. P. 394. In Sixth North American Paleontological Convention Abstracts of Papers (Smithsonian Institution, Washington, DC), (J. E. Repetski, ed.). The Paleontological Society Special Publications No. 8.
- 12) **Luo, Z.-X. 1996.** Phylogenetic implications of the petrosal features on relationships of the multituberculate families of the Late Cretaceous. *Journal of Vertebrate Paleontology* 16(3)(supplement): 49A.
- 11) **Luo, Z.-X., P. D. Gingerich, and X.-Y. Zhou. 1995.** Evolution of the isolated petro-tympanic complex in cetaceans--new evidence from archaeocetes. *Journal of Vertebrate Paleontology* 14(3)(supplement): 41A.
- 10) **Luo, Z.-X., J. Geisler, and K. Marsh. 1994.** Evolutionary divergence of hearing specializations in mysticetes and odontocetes (Cetacea, Mammalia). *Journal of Vertebrate Paleontology* 14(3)(supplement): 34A.
- 9) **Luo, Z.-X., and E. R. Eastman. 1993.** Inner ear of a squalodont whale (Odontoceti, Mammalia). *Journal of Vertebrate Paleontology* 13(3)(supplement): 47A.
- 8) Kohler, K., E. R. Eastman, and **Z.-X. Luo. 1993.** Inner ear structures of two fossil odontocetes, and their phylogenetic and functional significance. Abstracts for the Tenth Biannual Conference on the Biology of Marine Mammals (with Programs). Galveston, Texas.
- 7) **Luo, Z.-X. 1991.** The phylogenetic relationships of tritheledontids, tritylodontids and Sinoconodon. Presentation at the Symposium of Triassic-Jurassic Small Vertebrate Faunas, Virginia Museum of Natural History, May, 1991.

- 6) **Luo, Z.-X. 1991.** Evolutionary transformations of the promontorium and the cochlea among major clades of mammals. *Journal of Vertebrate Paleontology* (supplement) 11(3): 27A.
- 5) Lucas, S. G., and **Z.-X. Luo. 1991.** The Oldest Mammal: *Adelobasileus cromptoni* from the Late Triassic of Texas. *Journal of Vertebrate Paleontology* 11(3)(supplement): 26A.
- 4) Crompton, A. W., and **Z.-X. Luo. 1990.** Relationships of *Sinoconodon* and *Morganucodon oehleri* from Yunnan, China. Presented at the Sloan Foundation Symposium on Mammal Phylogeny at America Museum of Natural History in New York. June, 1990.
- 3) **Luo, Z.-X.**, and D. R. Ketten. **1989.** Observation of the acousto-vestibular structures of multituberculate mammals with computerized tomography. *Journal of Vertebrate Paleontology* 9(3)(supplement): 30A.
- 2) **Luo, Z.-X. 1988.** Two distinct patterns of apomorphous petrosal characters among major mammalian groups and their phylogenetic implications. *Journal of Vertebrate Paleontology* 8(3)(suppl): 20A.
- 1) **Luo, Z.-X. 1987.** The ontogeny and phylogeny of the facial nerve features on the petrosal of primates. Presentation at the 47th Annual Meeting of Society of Vertebrate Paleontology.