

# Curriculum Vitae

## Thomas Richard Holtz, Jr.

Notarization. I have read the following and certify that this Curriculum Vitae is a current and accurate statement of my professional record.

Signature \_\_\_\_\_ Date \_\_\_\_\_

### 1. Personal Information

Thomas R. Holtz, Jr.

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ORCID: 0000-0002-2906-4900

Born: September 13, 1965

**Education:** Ph.D. 1992 Geology & Geophysics, Yale University.  
*Dissertation:* "An unusual structure of the metatarsus of Theropoda (Archosauria: Dinosauria: Saurischia) of the Cretaceous".

M.Phil. 1990 Geology & Geophysics, Yale University

B.A. 1987 Earth & Planetary Sciences, The Johns Hopkins University

**Employment:** 2016-present Principal Lecturer, Department of Geology, University of Maryland

2005-2016 Senior Lecturer, Department of Geology, University of Maryland

2009-present Faculty Director, College Park Scholars Program  
"Science & Global Change", University of Maryland

1994-2005 Lecturer, Department of Geology, University of Maryland

1999-present Faculty Director, College Park Scholars Program  
"Earth, Life & Time", University of Maryland

1997-1999	Undergraduate Director, Department of Geology, University of Maryland
1995-1997	Assistant Research Scientist, Department of Geology, University of Maryland
1991-1995	U.S. Geological Survey Physical Sciences Technician, Branch of Paleontology and Stratigraphy
1992 (Spring)	Lecturer, Charles County Community College, Calvert Campus
1990-1991	Curatorial Assistant, Yale Peabody Museum

**Additional Appointments:**

2013-present	Scientific and Education Advisory Council, Maryland Academy of Science
2007-present	Research Associate, National Museum of Natural History, Smithsonian Institution
2006-present	Adjunct Faculty, Behavior, Ecology, Evolution & Systematics (BEES) program, College of Chemical and Life Sciences, University of Maryland

**2. Research, Scholarly, and Creative Activities**

**a. Books**

*i. Books Edited*

Holtz, T.R., Jr., V. Arbour, and L. Zanno. In preparation. *The Complete Dinosaur. Third Edition.* Indiana University Press.

Brett-Surman, M.K., Holtz, T.R., Jr., and Farlow, J.O. 2012. *The Complete Dinosaur. Second Edition.* Indiana University Press. 1112 pp.

*ii. Chapters in Books*

Naish, D., A. Cau, T.R. Holtz, Jr., M. Fabbri, and J.A. Gauthier. 2020. Theropoda O.C. Marsh 1881 [D. Naish, A. Cau, T.R. Holtz, Jr., M. Fabbri, and J.A. Gauthier], converted clade name. Pp. 1235-1246. In K. de Queiroz, P.D. Cantino, and J.A. Gauthier (eds.), *Phylonyms: A Companion to the PhyloCode.* CRC Press.

- Farlow, J.O., T.R. Holtz, Jr., T.H. Worthy, and R.E. Chapman. 2013. Feet of the fierce (and not so fierce): pedal proportions in large theropods, other non-avian dinosaurs, and large ground birds. Pp. 89-132. In J.M. Parrish, R.E. Molnar, P.J. Currie, and E.B. Koppelhus (eds.), *Tyrannosaurid Paleobiology*. Indiana University Press.
- Holtz, T.R., Jr. 2012. Dinosaur hunters of the Southern Continents. Pp. 107-118, in M.K. Brett-Surman, T.R. Holtz, Jr., and J.O. Farlow (eds.), *The Complete Dinosaur. Second Edition*. Indiana University Press.
- Holtz, T.R., Jr., and M.K. Brett-Surman. 2012. The osteology of dinosaurs. Pp. 134-149. in M.K. Brett-Surman, T.R. Holtz, Jr., and J.O. Farlow (eds.), *The Complete Dinosaur. Second Edition*. Indiana University Press.
- Holtz, T.R., Jr., and M.K. Brett-Surman. 2012. The taxonomy and systematics of the Dinosauria. Pp. 209-223, in M.K. Brett-Surman, T.R. Holtz, Jr., and J.O. Farlow (eds.), *The Complete Dinosaur. Second Edition*. Indiana University Press.
- Holtz, T.R., Jr. 2012. Theropods. Pp. 346-378, in M.K. Brett-Surman, T.R. Holtz, Jr., and J.O. Farlow (eds.), *The Complete Dinosaur. Second Edition*. Indiana University Press.
- Holtz, T.R., Jr. 2008. A critical reappraisal of the obligate scavenging hypothesis for *Tyrannosaurus rex* and other tyrant dinosaurs. Pp. 370-396, in P. Larson and K. Carpenter (eds.), *Tyrannosaurus rex, the Tyrant King*. Indiana University Press.
- Holtz, T.R., Jr., 2004. Tyrannosauroidea. Pp. 111-136, in D.B. Weishampel, P. Dodson, and H. Osmólska (eds.), *The Dinosauria. Second Edition*. University of California Press.
- Holtz, T.R., Jr. and Osmólska, H., 2004. Saurischia. Pp. 21-21, in D.B. Weishampel, P. Dodson, and H. Osmólska (eds.), *The Dinosauria. Second Edition*. University of California Press.
- Holtz, T.R., Jr., Chapman, R.E. and Lamanna, M.C., 2004. Mesozoic biogeography of Dinosauria. Pp. 627-642, in D.B. Weishampel, P. Dodson, and H. Osmólska (eds.), *The Dinosauria. Second Edition*. University of California Press.
- Holtz, T.R., Jr., Molnar, R. and Currie, P.J., 2004. Basal Tetanurae. Pp. 71-110, in D.B. Weishampel, P. Dodson, and H. Osmólska (eds.), *The Dinosauria. Second Edition*. University of California Press.

- Holtz, T.R., Jr. 2003. Dinosaur predation: evidence and ecomorphology. Pp. 325-340, in P.H. Kelley, M. Kowalewski and T.A Hansen (eds.), *Predator-Prey Interactions in the Fossil Record*, Topics in Geobiology Vol. 20. Kluwer Press.
- Farlow, J.O. and Holtz, T.R., Jr., 2002. The fossil record of predation in dinosaurs. Pp. 251-266, in M. Kowalewski & P.H. Kelley (eds.), *The Fossil Record of Predation*. The Paleontological Society Papers 8.
- Holtz, T.R., Jr., 2001. Arctometatarsalia revisited: the problem of homoplasy in reconstructing theropod phylogeny. pp. 99-122. In J.A. Gauthier (ed.), *New Perspectives on the Origin and Evolution of Birds: Proceedings of the International Symposium in Honor of John H. Ostrom*. Yale University Press.
- Holtz, T.R., Jr., 2001. The phylogeny and taxonomy of the Tyrannosauridae. pp. 64-83. In K. Carpenter and D. Tanke (eds.), *Mesozoic Vertebrate Life*. Indiana University Press.
- Holtz, T.R., Jr., 2000. Classification and evolution of the dinosaur groups. pp. 140-168. In G.S. Paul (ed.), *The Scientific American Book of the Dinosaur*. St. Martin's Press.
- Holtz, T.R., Jr., 1997. Dinosaur hunters of the southern continents. pp. 43-51. In J.O. Farlow and Brett-Surman, M.K. (eds.), *The Complete Dinosaur*. Indiana University Press.
- Holtz, T.R., Jr. and Brett-Surman, M.K., 1997. The osteology of the dinosaurs. pp. 78-91. In J.O. Farlow and Brett-Surman, M.K. (eds.), *The Complete Dinosaur*. Indiana University Press.
- Holtz, T.R., Jr., and Brett-Surman, M.K., 1997. The taxonomy and systematics of the dinosaurs. pp. 92-106. In J.O. Farlow and Brett-Surman, M.K. (eds.), *The Complete Dinosaur*. Indiana University Press.
- Barron, J., Cronin, T., Dowsett, H., Fleming, F., Holtz, T., Jr., Ishman, S., Poore, R., Thompson, R. and Willard, D., 1995. Middle Pliocene paleoenvironments of the Northern Hemisphere. pp. 197-212. In E.S. Vrba, G.H. Denton, T.C. Partridge, and L.H. Burckle (eds.), *Paleoclimate and Evolution with Emphasis on Human Origins*. Yale University Press.

## b. Articles in Refereed Journals

- Carr, T.D., J.G. Napoli, S.L. Brusatte, T.R. Holtz, Jr., D.W.E. Holtz, T.E. Williamson, and L.E. Zanno. 2022. Insufficient evidence for multiple species of *Tyrannosaurus* in the latest Cretaceous of North America: a comment on

“The Tyrant Lizard King, Queen and Emperor: multiple lines of morphological and stratigraphic evidence support subtle evolution and probable speciation within the North American genus *Tyrannosaurus*” *Evolutionary Biology* **49**: 327-341. Doi: 10.1007/s11692-022-09573-1

Hone, D.W.E. and T.R. Holtz, Jr. 2022. Comment on: Aquatic adaptation in the skull of carnivorous dinosaurs (Theropoda: Spinosauridae) and the evolution of aquatic habits in spinosaurids. 93: 275-284. *Cretaceous Research* **134**: 104152. Doi: 10.1016/j.cretres.2019.05.010

Holtz, T.R., Jr. 2021. Theropod guild structure and the tyrannosaurid niche assimilation hypothesis: implications for predatory dinosaur macroecology and ontogeny in later Late Cretaceous Asiamerica. *Canadian Journal of Earth Sciences* **58**: 778-795. doi: 10.1139/cjes-2020-0174

Hone, D.W.E. and T.R. Holtz, Jr. 2021. Evaluating the ecology of *Spinosaurus*: shoreline generalist or aquatic pursuit specialist? *Palaeontologia Electronica* **24**(1): a03. doi: 10.268799/1110

Dececchi, T.A., A.M. Mloszewska, T.R. Holtz, Jr., M.B. Habib, and H.C.E. Larsson. 2020. The fast and the frugal: divergent locomotory strategies drive limb lengthening in theropod dinosaurs. *PLoS ONE* **15**(5): e0223698. doi: 10.1371/journal.pone.0223698

Snively, E., H. O’Brien, D.M. Henderson, H. Mallison, L. Surring, M.E. Burns, T.R. Holtz, Jr., A.P. Russell, L.M. Witmer, P.J. Currie, S.A. Hartman and J.R. Cotton. 2019. Lower rotational inertia and larger leg muscles indicate more rapid turns in tyrannosaurids than in other large theropods. *PeerJ* **7**: e6432. Doi: 10.7717/peerj.6432

Hone, D.W.E. and T.R. Holtz, Jr. 2017. A century of spinosaurs – a review and revision of Spinosauridae with comments on their ecology. *Acta Geologica Sinica* **91**: 1120-1132. Doi: 10.1111/1755-6724.13328

Bruasatte, S.L., T.D. Carr, T.E. Williamson, T.R. Holtz, Jr., D.W.E. Hone and S.A. Williams. 2016. Dentary groove morphology does not distinguish ‘*Nanotyrannus*’ as a valid taxon of tyrannosauroid dinosaur. Comment on: “Distribution of the dentary groove of theropod dinosaurs: implications for theropod phylogeny and the validity of the genus *Nanotyrannus* Bakker et al., 1988”. *Cretaceous Research* **65**: 232-237. Doi: 10.1016/j.cretres.2016.02.007

Plotnick, R.E., J.M. Theodor and T.R. Holtz, Jr. 2015. Jurassic Pork: what could a Jewish time traveler eat? *Evolution: Education and Outreach* **8**: 17. doi: 10.1186/s12052-015-0047-2

- France, C.A.M., P.M. Zelanko, A.J. Kaufman and T.R. Holtz, 2007. Carbon and nitrogen isotopic analysis of Pleistocene mammals from the Saltville Quarry (Virginia, USA): Implications for trophic relationships. *Palaeogeography, Palaeoclimatology, Palaeoecology* **249**: 271-282.
- Holtz, T.R., Jr., 2000. A new phylogeny of the carnivorous dinosaurs. *Gaia*, **15**: 5-61.
- Holtz, T.R., Jr., Brinkman, D.J. and Chandler, C.L., 2000. Denticle morphometrics and a possibly omnivorous life habit for the theropod dinosaur *Troodon*. *Gaia*, **15**: 159-166.
- Farlow, J.O., Stephen M. Gatesy, T.R. Holtz, Jr., J.R. Hutchinson and J.M. Robinson, 2000. Theropod locomotion. *American Zoologist*, **40**: 640-663.
- Padian, K., Hutchinson, J.R. and Holtz, T.R., Jr., 1999. Phylogenetic definitions and nomenclature of the major taxonomic categories of the carnivorous Dinosauria (Theropoda). *Journal of Vertebrate Paleontology*, **19**: 69-80.
- Holtz, T.R., Jr., 1996. Phylogenetic taxonomy of the Coelurosauria (Dinosauria: Theropoda). *Journal of Paleontology*, **70**: 536-538.
- Holtz, T.R., Jr., 1995. The arctometatarsalian pes: an unusual structure of the metatarsus of Cretaceous Theropoda (Dinosauria: Saurischia). *Journal of Vertebrate Paleontology*, **14**: 480-519.
- Cronin, T.M., Holtz, T.R., Jr., Stein, R., Spielhagen, R., Fütterer, D. and Wollenburg, J., 1995. Late Quaternary paleoceanography of the Eurasian Basin, Arctic Ocean. *Paleoceanography*, **10**: 259-281.
- Cronin, T.M., Holtz, T.R., Jr., Stein, R., Spielhagen, R., Fütterer, D., Dowsett, H.J., Thompson, R.S., Barron, J.A., Cronin, T.M., Ishman, S.E., Poore, R.Z., Willard, D.A., Holtz, T.R., Jr., 1995. Paleoclimatic reconstruction of a warmer Earth: PRISM middle Pliocene Northern Hemisphere Synthesis. *Global and Planetary Change*, **9**: 169-195.
- Holtz, T.R., Jr., 1994. The phylogenetic position of the Tyrannosauridae: implications for theropod systematics. *Journal of Paleontology*, **68**: 1100-1117.
- Wood, A.M., Whatley, R.C., Cronin, T.M. and Holtz, T., 1994. Pliocene palaeotemperature reconstruction for the southern North Sea based on Ostracoda. *Quaternary Science Reviews*, **12**: 747-767.

Cronin, T.M., Holtz, T.R. and Whatley, R.C., 1994. Quaternary paleoceanography of the deep Arctic Ocean based on quantitative analysis of Ostracoda. *Marine Geology*, **12**: 305-332.

### c. Book Reviews, Other Articles, Notes and Extension Publications

Holtz, T.R., Jr. 2018. Evolution: New branches on the alvarezsaur tree. *Current Biology* **28**: R941-R943. Doi: 10.1016/j.cub.2018.07.014 [invited Dispatch commentary]

Holtz, T.R., Jr. 2017. Nomenclature: Share names for dinosaur divisions. *Nature* **545**: 30. Doi: 10.1038/54503d

Holtz, T.R., Jr., 2014. Palaeontology: Mystery of the horrible hands solved. *Nature* **515**: 203-205. doi:10.1038/nature13930 [invited News & Views commentary]

Holtz, T.R., Jr. 2014. Une histoire de famille enfin démêlée. *La Recherche* Mai 2014.

Holtz, T.R., Jr. 2012. Book review: *Living Dinosaurs: The Evolutionary History of Modern Birds* edited by Gareth Dyke and Gary Kaiser. *Quarterly Review of Biology* **87**: 374.

Holtz, T.R., Jr., 2006. Palaeontology: A Jurassic tyrant is crowned. *Nature* **439**: 665-666. [invited News & Views commentary]

Holtz, T.R., Jr., 2005. All in the Family. *Natural History* **5/05**: 40-41.

Holtz, T.R., Jr., 2005. Reviews: A Dinosaur Lover's Bookshelf. *Natural History* **5/05**: 62-66.

Holtz, T.R., Jr., 2005. [Reconstructing the Tree of Life.] *The Dinosaur Expo 2005: Evolution of Dinosaurs from Their Origin to Birds. Museum Exhibition Guidebook*. National Science Museum, Tokyo. Pp. 14-17. [In Japanese]

Holtz, T.R., Jr., 2002. Chasing *Tyrannosaurus* and *Deinonychus* around the Tree of Life: classifying dinosaurs. Pp. 31-38, in J.G. Scotchmoor, D.A. Springer, B.H. Breithaupt & A.F. Fiorillo (eds.), *Dinosaurs: The Science Behind the Stories*, Society of Vertebrate Paleontology, Paleontological Society & American Geological Institute.

Holtz, T.R., Jr., 2000. Theropod paleobiology: more than just bird origins. *Gaia*, **15**: 1-5.

- Holtz, T.R., Jr., 1998. Spinosaurus as crocodile-mimics. *Science*, **282**: 1276-1277. [invited Perspectives commentary]
- Holtz, T.R., Jr., 1998. Dinosaurs of a feather. (Book review: *The Mistaken Extinction: Dinosaur Evolution and the Origin of Birds* by Lowell Dingus and Timothy Rowe). *Earth*, **August 1998**: 71-73.
- Holtz, T.R., Jr., 1998. Dinosaur science in the 1990s. *Dinosaurs Invade Philadelphia* (Publication of the Academy of Natural Sciences): 4-8.
- Holtz, T.R., Jr., 1995. The origin of the tyrant dinosaurs: “Super Carnosaurs” or “Tyrannoraptors”? *The Dinosaur Report, Spring 1995*: 6-8.
- Holtz, T.R., Jr., 1995. Book review: *Dinosaurs: The Textbook* by Spencer G. Lucas. *Journal of Vertebrate Paleontology*, **15**: 210-212.
- Holtz, T.R., Jr., 1995. Book review: *The Complete T. rex: How stunning new discoveries are changing our understanding of the world's most famous dinosaur* by John R. Horner and Don Lessem. *Quarterly Review of Biology*, **70**: 65-66.
- Barron, J.A., Cronin, T.M., Dowsett, H.J., Fleming, F.R., Holtz, T.R., Jr., Ishman, S.E., Poore, R.K., Thompson, R.S. and Willard, D.A., 1994. PRISM  $8^{\circ} \times 10^{\circ}$  Northern Hemisphere paleoclimate reconstruction: Digital data. *U.S. Geological Survey, Open File Report 94-218*. 23 pp.
- Holtz, T.R., Jr., 1993. Comments on the proposed designation of a neotype for *Coelophysis bauri* (Reptilia, Saurischia). *Bulletin of Zoological Nomenclature*, **50**: 237-238.

**d. Talks, Abstracts, and Other Professional Papers Presented**

*i. Symposia Organized*

“Recent Advances in Dinosaurian Biogeography”, North American Paleontological Convention-96, June 1996, Washington, D.C.

“Preserved Biomolecules in the Fossil Record” (with M. Schweitzer), North American Paleontological Convention-96, June 1996, Washington, D.C.

*ii. Invited Talks*

Holtz, T.R., Jr. 2019. Dinosaurs Red in Tooth and Claw: New Discoveries in the Evolution and Adaptations of Carnivorous Dinosaurs. Goddard Scientific

Colloquium, NASA Goddard Space Flight Center, Greenbelt, MD.  
November 20, 2019.

Holtz, T.R., Jr. 2019. Feathers, fluff, or scales? Dino integument. Paleontological Society of Washington, Smithsonian Institution National Museum of Natural History, Washington, D.C. October 16, 2019.

Holtz, T.R., Jr. 2019. Scales, fuzz, or both? Remaining difficulties in determining the ancestral integumentary state in Dinosauria. Symposium 25: The Evolutionary Transition from Non-Avian Dinosaurs to Birds (C. Chuong & L. Chiappe, Organizers), North American Paleontological Convention, University of California, Riverside, CA. June 25, 2019.

Holtz, T.R., Jr. 2019. Dinosaur Integument: Fuzz, Feathers, or Scales? It's Still Complicated. PaleoFest 2019. Burpee Museum, Rockford, IL. March 2-3, 2019.

Holtz, T.R., Jr. and V. Arbour. 2019. Dinosaur fight club. Madeleine Fritz Annual Lecture in Palaeontology, Royal Ontario Museum, Toronto, ON. January 29, 2019.

Holtz, T.R., Jr. 2018. *T. rex in silico*: The limits of modeling in reconstructing the biology of dinosaurs. Goddard Engineering Colloquium, NASA Goddard, Greenbelt, MD. December 17, 2018

Holtz, T.R., Jr. 2018. The Life & Death of *T. rex*: New discoveries about the most famous dinosaur & the end of its world. Natural History Society of Maryland. Baltimore, MD. October 25, 2018.

Holtz, T.R., Jr. 2018. Why did *T. rex* have such tiny arms? The importance of asking the right questions in Science. Dino Shindig. Carter County Museum, Ekalaka, MT. July 28-29, 2018.

Holtz, T.R., Jr. 2018. Jurassic World (for Real): The science of dinosaurs. Renaissance Weekend. Beaver Creek/Vail, CO. July 1, 2018.

Holtz, T.R., Jr. 2018. Perspectives on Pearl: The roles of oviraptorosaurs in Cretaceous ecosystems. PaleoFest 2018. Burpee Museum, Rockford, IL. March 3-4, 2018.

Holtz, T.R., Jr. 2018. The Life & Death of *T. rex*: New discoveries about the most famous dinosaur & the end of its world. "Science on Tap" Milkboy Arthouse, College Park, MD. February 28, 2018.

Holtz, T.R., Jr. 2018. Galápagos: Evolution and ecology in the Enchanted Islands. Smithsonian Associates, Washington, D.C. February 15, 2018.

- Holtz, T.R., Jr. 2017. Why did *T. rex* have such tiny arms? Some evolutionary, functional & developmental issues. Outstanding Young Scientists/Outstanding Young Engineers Awards Ceremony, Maryland Science Center, Baltimore, MD. November 15, 2017.
- Holtz, T.R., Jr. 2017. So what is a “dinosaur”, anyway? Dino Shindig. Carter County Museum, Ekalaka, Montana. July 28-29, 2017.
- Holtz, T.R., Jr. 2017. Telling Fact from Falsehood: Skills to expose pseudoscience. Smithsonian Associates, Washington, D.C. April 25, 2017.
- Holtz, T.R., Jr. 2017. Carnivorous dinosaurs: Fierce, fast, and... feathered? Delaware Valley Paleontological Society Fossil Fair, Plymouth, PA. March 25, 2017.
- Holtz, T.R., Jr. 2017. The Race is to the Swift: Evolutionary patterns of locomotion in carnivorous dinosaurs. PaleoFest 2017. Burpee Museum, Rockford, IL. March 4-5, 2017.
- Holtz, T.R., Jr. 2016. Dinosaurs: Evolution, extinction & survival. Darwin Day presentation, David M. Brown Planetarium, Arlington, VA. February 12, 2017.
- Holtz, T.R., Jr. 2016. Hollow Earth, sunken continents & a world made of plankton? A look at paranormal geology. National Capital Area Skeptics Society, Alexandria, VA. January 14, 2017.
- Holtz, T.R., Jr. 2016. The Race is to the Swift: Tracking the evolution of cursorial adaptations in the carnivorous dinosaurs. Dino Shindig. Carter County Museum, Ekalaka, Montana. July 28-29, 2016.
- Holtz, T.R., Jr. 2015. “So what is it?” The Very Messy World of Identifying Fossil Species. Dino Shindig. Carter County Museum, Ekalaka, Montana. July 24-25, 2015.
- Holtz, T.R., Jr. 2014. Tyrannosaurs: Kings of the Dinosaurs. Series of presentations at Te Papa Tongarewa, Wellington, New Zealand; Otago Museum, Dunedin, New Zealand; Canterbury Museum, Christchurch, New Zealand.
- Holtz, T.R., Jr. 2014. *Tyrannosaurus rex*: Life and Times of the Tyrant King. National Fossil Day, National Museum of Natural History, Washington, DC. October 15, 2014.

- Holtz, T.R., Jr. 2014. The Latest News on the Dinosaurian Origin of Birds and of Feathers. Dino Shindig, Carter County Museum, Ekalaka, Montana. July 25-26, 2014.
- Holtz, T.R., Jr. 2013. Why the West is the Key to Understanding the End of the Age of Dinosaurs. Dino Shindig, Carter County Museum, Ekalaka, Montana, July 24-25, 2013.
- Holtz, T.R., Jr. 2013. The Life and Times of *Tyrannosaurus rex*. Durham Museum, Omaha, Nebraska, June 25, 2013.
- Holtz, T.R., Jr. 2013. The Life and Times of *Tyrannosaurus rex*. University of Nebraska Medical Center, Omaha, Nebraska, June 25, 2013.
- Holtz, T.R., Jr. 2013. The Life and Times of *Tyrannosaurus rex*. Burke Museum, University of Washington, Seattle, Washington, March 8, 2013.
- Holtz, T.R., Jr. 2013. Liassic Dawn: Phylogenetic divergence analysis supports Early-to-Middle Jurassic establishment of primary dinosaurian diversity. Department of Geology Paleontology Seminar, University of Washington, Seattle, Washington, March 6, 2013.
- Holtz, T.R., Jr. 2013. The Long Childhood of Giant Tyrant Dinosaurs: Combining Data from Life History, Evolution, and Community Paleoecology. PaleoFest 2013, Burpee Museum of Natural History, Rockford, IL, March 2-3, 2013.
- Holtz, T.R., Jr. 2012. Liassic Dawn: Phylogenetic divergence analysis supports Early-to-Middle Jurassic establishment of primary dinosaurian diversity. Department of Earth and Environmental Sciences Seminar, University of Illinois-Chicago, November 29, 2012.
- Holtz, T.R., Jr. 2012. The Life and Times of *Tyrannosaurus rex*. Carter County Museum, Ekalaka, Montana, July 27, 2012.
- Holtz, T.R., Jr. 2012. Jaws and Claws through Time and Space: shifting patterns of predation among carnivorous dinosaurs through the Mesozoic. PaleoFest 2012, Burpee Museum of Natural History, Rockford, IL, March 3-4, 2012.
- Holtz, T.R., Jr. 2010. El Origen de los Tíranos: Origen y Paleobiología de los Tiranosaurios. Museo del Desierto, Saltillo, Coahuila, Mexico, April 26, 2010.
- Holtz, T.R., Jr. 2009. It's Good to Be King: Paleobiology of a Latest Maastrichtian Apex Predator. Plenary Talk, Frenchman Formation Terrestrial Ecosystems Conference. T. Rex Discovery Centre, Eastend, Saskatchewan, May 17-20, 2009.

- Holtz, T.R., Jr., 2005. Rise of the Tyrants: Tyrannosaurid Ecomorphology in Phylogenetic, Paleobiogeographic, and Paleobiological Context. The Origin, Systematics, and Paleobiology of Tyrannosauridae Symposium. Burpee Museum of Natural History, Rockford, IL, September 16-18, 2005.
- Holtz, T.R., Jr., 2005. A Critical Reappraisal of the Obligate Scavenger Hypothesis for *Tyrannosaurus rex* and Other Tyrant Dinosaurs. “100 Years of *Tyrannosaurus rex*”: A Symposium, Black Hills Museum of Natural History, Hill City, SD, June 10-11, 2005.
- Holtz, T.R., Jr., 2005. Theropod Guild History: Paleoecology and Life History of Carnivorous Dinosaurs, with an emphasis on Tyrannosauridae. “100 Years of *Tyrannosaurus rex*”: A Symposium, Black Hills Museum of Natural History, Hill City, SD, June 10-11, 2005.
- Holtz, T.R., Jr., 2005. Theropod Guild History: Paleoecology and Life History of Carnivorous Dinosaurs, with an emphasis on Tyrannosauridae. Symposium and Roundtable Discussion for the Dinosaur Expo 2005, National Science Museum, Tokyo, March 19, 2005.
- Holtz, T.R., Jr., 2004. Eastern U.S. dinosaur assemblages in a quantitative paleobiogeographic context. Dinosaurs of Eastern North America theme session, Geological Society of America Northeastern (39th Annual) and Southeastern (53rd Annual) Joint Meeting, March 26, 2004.
- Holtz, T.R., Jr., 2004. Interpreting theropod predation strategies: physical evidence and ecomorphology. Dept. of Geology & Paleontology Seminar, National Science Museum (Tokyo), January 16, 2004.
- Holtz, T.R., Jr. 2004., Short course on phylogenetic systematics methodology. National Science Museum (Tokyo), January 15, 2004.
- Holtz, T.R., Jr. 2003. *T. rex*: Fierce, Fast, and... Feathered? Keynote speaker, Warrington Science Symposium, Shenandoah University, April 7, 2003.
- Holtz, T.R., Jr., 2001. The evolution of the tyrant dinosaurs. 2001 A. Watson Armour Symposium: The Paleobiology and Phylogenetics of Large Theropods. Field Museum of Natural History, Chicago.
- Holtz, T.R., Jr. 2000. Estimating the theropod phylogeny: fragments, outgroups, and “functional complexes”. Plenary Session talk. (abstract). *Journal of Vertebrate Paleontology*, **20 (Supplement to 3)**: 49A.
- Holtz, T.R., Jr., 1999. Arctometatarsalia Revisited, and the problem of homoplasy in theropod phylogeny. New Perspectives on the Origin and Early Evolution of Birds: an international symposium in honor of Yale Professor and

renowned paleontologist John H. Ostrom. Yale University, February 13-14, 1999.

Farlow, J.O., Holtz, T.R., Jr., Gatsey, S.M. and Hutchinson, J.R., 1999. Dinosaur locomotion. Symposium “Evolutionary origin of feathers” (Organizer: P.F.A. Maderson), Society of Integrative and Comparative Biology, 1999 Annual meeting, January 6-10, 1999, Denver, Colorado.

Holtz, T.R., Jr., 1998. Evidence for the predatory nature of *Tyrannosaurus rex* and other tyrant dinosaurs. *DinoFest 1998*, Philadelphia, Penn.

Holtz, T.R., Jr., 1998. Evolution and adaptations of the predatory dinosaurs (Theropoda). Meeting on Dinosaur Paleobiology/Museology Program for the Portuguese Tracksite, Lisbon, Portugal.

Holtz, T.R., Jr., 1997. Predatory adaptations in theropod dinosaurs and other terrestrial carnivorous archosauriforms of the Mesozoic taxa (abstract). Symposium “Historical patterns: the evolution of morphology” (Organizer: D. Norman), Fifth International Congress of Vertebrate Morphology, Bristol, UK. *Journal of Morphology*, **232**: 266.

Holtz, T.R., Jr., 1996. Late Mesozoic dinosaurian biogeography and diversity: lineage-based approaches (abstract). p. 177. In Repetski, J.E. (ed.), *Sixth North American Paleontological Convention Abstracts of Papers*, The Paleontological Society Special Publication No. 8.

Holtz, T.R., Jr., 1995. A new phylogeny of the Theropoda taxa (abstract). 55th Annual Meeting of the Society of Vertebrate Paleontology. *Journal of Vertebrate Paleontology*, **15 (Supplement to 3)**: 35A.

Holtz, T.R., Jr., 1995. Adaptive trends in major subgroups of theropods and related taxa (abstract). 55th Annual Meeting of the Society of Vertebrate Paleontology. *Journal of Vertebrate Paleontology*, **15 (Supplement to 3)**: 35A.

Holtz, T.R., Jr., and Padian, K. 1995. Definition and diagnosis of Theropoda and related taxa (abstract). 55th Annual Meeting of the Society of Vertebrate Paleontology. *Journal of Vertebrate Paleontology*, **15 (Supplement to 3)**: 35A.

### *iii. Refereed Conference Proceedings*

Holtz, T.R., Jr. 2021. Mesozoic meat-eater marketplace: assessing theropod guild evolution beyond body size. 81<sup>st</sup> Annual Meeting of the Society of Vertebrate Paleontology

- Holtz, T.R., Jr. 2020. Taxonomic diversity, guild structure, and ontogenetic niche shifts in theropod carnivore communities: implications for paleoecology and life history strategies in tyrant dinosaurs. 80<sup>th</sup> Annual Meeting of the Society of Vertebrate Paleontology
- Holtz, T.R., Jr. 2018. “Integumentary Status: It’s Complicated”: Phylogenetic, sedimentary, and biological impediments to resolving the ancestral integument of Mesozoic Dinosauria. 78<sup>th</sup> Annual Meeting of the Society of Vertebrate Paleontology.
- Chen, A., and T.R. Holtz. 2016. Evolution and ecological associations in herbivorous theropods. 76<sup>th</sup> Annual Meeting of the Society of Vertebrate Paleontology.
- Dececchi, A., T.R. Holtz, and M.K. Habib. 2016. Not so fast: a re-evaluation of cursoriality in theropods. 76<sup>th</sup> Annual Meeting of the Society of Vertebrate Paleontology.
- Holtz, T.R., Jr. 2016. Evolution of potential cursorial adaptations in Mesozoic Theropoda: phylogenetic, geochronologic, and biogeographic distributions. . 76<sup>th</sup> Annual Meeting of the Society of Vertebrate Paleontology.
- Holtz, T.R., Jr. 2016. Distribution of purported cursorial adaptations in Mesozoic theropod dinosaurs through phylogeny, time, and space. 11<sup>th</sup> International Congress of Vertebrate Morphology.
- Holtz, T.R., Jr., S. Williams, K. Tremaine, and J. Malone. 2015. A new specimen of *Anzu* (Caenagnathidae, Oviraptorosauria): Implications for the proposed Caenagnathinae/Elmisaurinae division and for cursoriality in caenagnathids. 75<sup>th</sup> Annual Meeting of the Society of Vertebrate Paleontology.
- Nestler, J.H., T.R. Holtz and K.M. Claeson. 2015. Real time outreach between paleontologists and the public, thousands at a time, using the moderated science platform Askscience. 75th Annual Meeting of the Society of Vertebrate Paleontology.
- Williams, S.A., T.R. Holtz, Jr., J.C. Matthews, K.M. Tremaine, B.A. Brown, M. Atteberry and S. Rawlings. 2015. Un-conventional scientific outreach: using science fiction and media conventions to promote paleontology and natural history museums. 75th Annual Meeting of the Society of Vertebrate Paleontology.
- Holtz, T.R., Jr., S. Williams, K. Tremaine, and J. Malone. 2014. New additions to the Hell Creek Formation (upper Maastrichtian) vertebrate fauna of Carter County, Montana. 74<sup>th</sup> Annual Meeting of the Society of Vertebrate Paleontology.

- Holtz, T.R., Jr. 2014. Laramidia: Engine of dinosaurian diversity or perfect storm for collecting? (Or both?). 10<sup>th</sup> North American Paleontological Convention. *Paleontological Society Special Publications* **13**: 169.
- Holtz, T.R., Jr. 2012. Liassic Dawn: Phylogenetic divergence analysis supports Early-to-Middle Jurassic establishment of primary dinosaurian diversity. 72nd Annual Meeting of the Society of Vertebrate Paleontology. *Journal of Vertebrate Paleontology* **32 (Online Supplement)**: 112.
- Testin, J.J., R.T. Tucker, T. Miyashita, and T.R. Holtz, Jr. 2011. Dental morphology of *Allosaurus fragilis* (Dinosauria: Theropoda) from the Upper Jurassic Morrison Formation of western North America: Is Dentition More Indicative of Taxonomy or Feeding Niche? 71st Annual Meeting of the Society of Vertebrate Paleontology. *Journal of Vertebrate Paleontology* **31 (Online Supplement)**: 203.
- Holtz, T.R., Jr. 2009. Heterochrony in Tyrant Dinosaur Evolution: Implications for Tyrannosaurid Paleoecology. 9th North American Paleontological Convention June 21-26, 2009. *Cincinnati Museum Center Scientific Contributions*, **3**: 109.
- Holtz, T.R., Jr., 2007. Dinosaurs out of thin air: phylogenetic perspectives on Ward's atmosphere/evolution hypotheses. 67th Annual Meeting of the Society of Vertebrate Paleontology. *Journal of Vertebrate Paleontology* **27 (Supplement to 3)**: 91A.
- France, C., P. Zelanko, A. Kaufman and T. Holtz. 2006. Carbon and nitrogen isotopic reconstruction of trophic relationships between herbivorous mammals from Saltville, Virginia. 66th Annual Meeting of the Society of Vertebrate Paleontology. *Journal of Vertebrate Paleontology* **26 (Supplement to 3)**: 63A.
- Holtz, T.R., Jr., 2005. In the shadow of catastrophe: phylogeny, paleoecology, and faunal turnover of Campano-Maastrichtian dinosaurs of western North America. 65th Annual Meeting of the Society of Vertebrate Paleontology. *Journal of Vertebrate Paleontology* **25 (Supplement to 3)**: 71A.
- Holtz, T.R., Jr., 2004. Taxonomic diversity, morphological disparity, and guild structure in theropod carnivore communities: implications for paleoecology and life history strategies in tyrant dinosaurs. 64th Annual Meeting of the Society of Vertebrate Paleontology. *Journal of Vertebrate Paleontology*, **24 (Supplement to 3)**: 72A.
- Denton, R., Nesbitt, S., Wolfe, D. and Holtz, T., 2004. A new small theropod dinosaur from the Moreno Hills Formation (Turonian, Upper Cretaceous) of

- New Mexico. 64th Annual Meeting of the Society of Vertebrate Paleontology. *Journal of Vertebrate Paleontology*, **24** (Supplement to 3): 52A.
- Holtz, T.R., Jr., 2003. Evidence for the evolution of Wing-Assisted Incline Running in non-avian theropods. 63rd Annual Meeting of the Society of Vertebrate Paleontology. *Journal of Vertebrate Paleontology*, **23** (Supplement to 3): 62A.
- Holtz, T.R., Jr., 2001. Pedigree of the tyrant kings: new information on the origin and evolution of the Tyrannosauridae. 61st Annual Meeting of the Society of Vertebrate Paleontology. *Journal of Vertebrate Paleontology*, **21** (Supplement to 3): 62A-63A.
- Foster, J.R., Holtz, T.R., Jr. and Chure, D.J., 2001. Contrasting patterns of diversity and community structure in the theropod faunas of the Late Jurassic and Late Cretaceous of western North America. 61st Annual Meeting of the Society of Vertebrate Paleontology. *Journal of Vertebrate Paleontology*, **21** (Supplement to 3): 51A.
- Britt, B.B., Chure, D.J., Holtz, T.R., Jr., Miles, C.A. and Stadtman, K.L., 2000. A reanalysis of the phylogenetic affinities of *Ceratosaurus* (Theropoda, Dinosauria) based on new specimens from Utah, Colorado, and Wyoming. 60th Annual Meeting of the Society of Vertebrate Paleontology. *Journal of Vertebrate Paleontology*, **20** (Supplement to 3): 32A.
- Holtz, T.R., Jr., 1999. Consensus and conflict in current coelurosaur cladograms (abstract). 59th Annual Meeting of the Society of Vertebrate Paleontology. *Journal of Vertebrate Paleontology*, **19** (Supplement to 3): 52A.
- Holtz, T.R., Jr., 1998. Large theropod comparative cranial function: a new “twist” for tyrannosaurs (abstract). 58th Annual Meeting of the Society of Vertebrate Paleontology. *Journal of Vertebrate Paleontology*, **18** (Supplement to 3): 51A.
- Lamanna, M.C., Smith, J.B., Holtz, T.R., Jr., You H.-L. and Dodson, P., 1998. Reassessing the Chinese theropod *Dilophosaurus sinensis* (abstract). 57th Annual Meeting of the Society of Vertebrate Paleontology. *Journal of Vertebrate Paleontology*, **18** (Supplement to 3): 57A.
- Holtz, T.R., Jr., 1997. A preliminary phylogenetic analysis of the Tyrannosauridae (Theropoda: Coelurosauria) (abstract). 57th Annual Meeting of the Society of Vertebrate Paleontology. *Journal of Vertebrate Paleontology*, **17** (Supplement to 3): 53A.
- Padian, K., Hutchinson, J.R. and Holtz, T.R., Jr., 1997. Phylogenetic definitions and nomenclature of the major taxonomic categories of the theropod dinosaurs

(abstract). 57th Annual Meeting of the Society of Vertebrate Paleontology. *Journal of Vertebrate Paleontology*, **17** (Supplement to 3): 68A.

Holtz, T.R., Jr., 1996. Phylogenetic analysis of the nonavian tetanurine dinosaurs (Saurischia: Theropoda) (abstract). 56th Annual Meeting of the Society of Vertebrate Paleontology. *Journal of Vertebrate Paleontology*, **16** (Supplement to 3): 42A.

Holtz, T.R., Jr., 1994. Predatory adaptations of the skull and unguals of modern and extinct carnivorous amniotes (abstract). 54th Annual Meeting of the Society of Vertebrate Paleontology. *Journal of Vertebrate Paleontology*, **14** (Supplement to 3): 29A-30A.

Holtz, T.R., Jr., Brinkman, D.L. and Chandler, C.L., 1994. Denticle morphometrics and a possibly different life habit for the theropod dinosaur *Troodon* (abstract). 54th Annual Meeting of the Society of Vertebrate Paleontology. *Journal of Vertebrate Paleontology*, **14** (Supplement to 3): 30A.

Holtz, T.R., Jr., 1993. Paleobiogeography of late Mesozoic dinosaurs: Implications for Paleoecology (abstract). 53rd Annual Meeting of the Society of Vertebrate Paleontology. *Journal of Vertebrate Paleontology*, **13** (Supplement to 3): 42A.

Holtz, T.R., Jr., 1992. Endemicity analysis of global Cretaceous dinosaurian faunas (abstract). *Fifth North American Paleontological Convention - Abstracts and Program*, The Paleontological Society Special Publication No. 6, p. 132.

Holtz, T.R., Jr., 1992. Cursoriality in the Theropoda: Morphometrics and biomechanics (abstract). 52nd Annual Meeting of the Society of Vertebrate Paleontology. *Journal of Vertebrate Paleontology*, **12** (Supplement to 3): 33A.

Holtz, T.R., Jr., 1991. An unusual structure of the metatarsus of Theropoda of the Cretaceous (abstract). 51st Annual Meeting of the Society of Vertebrate Paleontology. *Journal of Vertebrate Paleontology*, **11** (Supplement to 3): 35A.

Holtz, T.R., Jr., 1991. Limb proportions and mass estimations in the Theropoda (Archosauria, Saurischia) (abstract). 51st Annual Meeting of the Society of Vertebrate Paleontology. *Journal of Vertebrate Paleontology*, **11** (Supplement to 3): 35A-36A.

#### v. Field Activities

Vertebrate paleontological field work in the Hell Creek Formation, Carter County, Montana, Summers 2012-2019

Organized the recovery of partial cetacean skeleton, Chesapeake Group, Holiday Beach, Maryland, May 5-6, 2001

Vertebrate paleontological field work in Lance Formation, Wyoming (University of Pennsylvania), Summer 1996

Vertebrate paleontological field work in Morrison, Cloverly, and Sundance Formations, Wyoming (Smithsonian Institution), Summer 1994

Vertebrate paleontological field work in Meeteetse Formation, Wyoming and Montana (Yale Peabody Museum), Summer 1989, 1990

#### **vi. Popular Audience and Juvenile Literature**

Holtz, T.R., Jr. 2015. *T. rex- Hunter or Scavenger? Updated and Revised.* Random House Press. 48 pp. ISBN 978-0375812972

Holtz, T.R., Jr. and M.K. Brett-Surman, 2015. *Jurassic World Dinosaur Field Guide.* Random House Press. 160 pp. ISBN 978-0553536850

Holtz, T.R., Jr. 2015. *Digging for Brachiosaurus: A Discovery Timeline.* Capstone Press. 32 pp. ISBN 978-1491423646

Holtz, T.R., Jr. 2015. *Digging for Stegosaurus: A Discovery Timeline.* Capstone Press. 32 pp. ISBN 978-1491423653

Holtz, T.R., Jr. 2015. *Digging for Triceratops: A Discovery Timeline.* Capstone Press. 32 pp. ISBN 978-1491423677

Holtz, T.R., Jr. 2015. *Digging for Tyrannosaurus rex: A Discovery Timeline.* Capstone Press. 32 pp. ISBN 978-1491423660

Holtz, T.R., Jr., 2007. *Dinosaurs: The Most Complete Up-To-Date Encyclopedia for Dinosaur Lovers of All Ages.* Random House. 428 pp. [National Science Teachers Association/Children's Book Council Outstanding Trade Book for Students K-12 2008; AAAS/Subaru Science Books & Film award for Young Adult Science Book nominee, 2008]

Holtz, T.R., Jr., 2003. *T. rex- Hunter or Scavenger?* Random House Press. 48 pp.

Holtz, T.R., Jr. and M.K. Brett-Surman, 2001. *Jurassic Park Institute Dinosaur Field Guide.* Random House Press. 160 pp.

Contributor and consultant on Marshall, C. (editor), 1999. *Dinosaurs of the World. Volumes 1-11*. Marshall-Cavendish Press.

Holtz, T.R., Jr., 2001. *The Little Giant Book of Dinosaurs*. Sterling Press. 360 pp.

Brett-Surman, M.K. and Holtz, T.R., Jr., 1998. *James Gurney – The World of Dinosaurs: A North American Selection*. Greenwich Workshop Press. 48 pp.

**e. Films, CDs, Tapes, Photographs, etc.**

BBC, *Walking with Dinosaurs 3D*, consultant

Discovery Channel, *Dinosaur Revolution*, consultant and on-air talent.

BBC, *Planet Dinosaur*, consultant.

Discovery Channel, *Prehistoric Assassins*, consultant and on-air talent

Discovery Channel, *Monsters Resurrected*, consultant and on-air talent

BBC & History Channel, *Clash of the Dinosaurs*, consultant and on-air talent

Discovery Channel, *Prehistoric: Washington D.C.*, consultant and on-air talent

The History Channel, *Jurassic Fight Club*, consultant and on-air talent

BBC (London), *Chased by Dinosaurs*, consultant.

The Discovery Channel, *When Dinosaurs Roamed America*, consultant.

BBC (London), *Walking with Dinosaurs*, consultant and on-air talent (U.S. version).

BBC (London), “Extreme dinosaurs”, *Horizon*, consultant and on-air talent.

Robin-Tani Media (Tokyo), *Kamigami no Itazura*, consultant and on-air talent.

Wall-to-Wall Television (Bristol), *PaleoWorld 4* and *When Dinosaurs Ruled Central Asia*, consultant and on-air talent.

Cine-Nova Productions (Toronto), *The Ultimate Guide to T. rex*, consultant.

The Learning Channel, *PaleoWorld 2*, preproduction consultant.

**f. Exhibits, Performances, Demonstrations, & Other Creative Activities**

“Dinosaurs Alive!” Workshop, Maryland Science Center and National Science Foundation, February & November, 2008

Exhibit Hall Talk, “Biology of *Tyrannosaurus rex*”, National Science Museum (Tokyo), March 25, 2005.

Consultant for The Dinosaur Expo 2005: Evolution of Dinosaurs from Their Origin to Birds for the National Science Museum (Tokyo). Sponsored by Asahi Shimbun, opening in March 2005.

Consultant for permanent Hall of Dinosaurs exhibit at Baltimore Science Center

Consultant for permanent Hall of Dinosaurs exhibit at the National Science Museum of Japan in Tokyo. Opened in April 1999.

October 17, 1998, Workshop for Maryland teachers on using dinosaurs to teach science, Maryland Science Center, Baltimore

April 28-29, 1995, Exhibit "Dinosaurs: Fact and Fiction", U.S. Geological Survey Open House and Earth Science Day. (Designed, constructed, and staffed exhibit)

**g. Contracts and Grants**

Yale Fellowship Grant, 1987-1991

**h. Editorships, Editorial Boards, & Reviewing Activities for Journals and Other Learned Publications**

*i. Co-editor:*

“Aspects of Theropod Paleobiology”, Special Issue of GAIA.

*ii. Reviewing Activity for Papers*

*Science, Nature, Journal of Vertebrate Paleontology, Proceedings of the National Academy of Sciences, Zoological Journal of the Linnean Society, Proceedings: Biological Sciences (Royal Society), American Museum Novitates, Bulletin of the American Museum of Natural History, Palaeontology, Bulletin of the Society of Vertebrate Paleontology, Canadian Journal of Earth Sciences, Geodiversitas, Oryctos, Modern Geology, Palaeontology, USGS Bulletin, University of Michigan Papers in Paleontology, Special Papers in Palaeontology, Acta Palaeontologica Polonica, Contributions in Science of the Natural History Museum of Los*

*Angeles, Mitteilungen aus dem Museum für Naturkunde Geowissenschaftliche Reihe, Biology Letters, Journal of Morphology, Journal of Zoology*

Ranked as one of the “Top Referees of 2008” for *Proceedings of the Royal Society B* (<http://rspb.royalsocietypublishing.org/site/misc/rewardposter.xhtml>)

*iii. Reviewing Activity for Chapters*

Farlow, J.O. and Brett-Surman, M.K. (eds.), 1997, *The Complete Dinosaur*, Indiana University Press; Chiappe, L. M. & Witmer, L. M. (eds.), in press, *Mesozoic Birds: Above the Heads of Dinosaurs*, University of California Press; Benton, M., Kurochkin, E., Shiskin, M. & Unwin, D. (eds.), 2001, *The Age of Dinosaurs in Russia and Mongolia*. Cambridge University Press; Weishampel, D.B., Dodson, P., and Osmólska, H., 2004, *The Dinosauria* 2nd Edition, University of California Press.

**3. Teaching, Mentoring and, and Advising**

**a. Courses Taught in the Last Five Years**

*i. General (UMD)*

GEOL 102	Historical Geology Spring Semesters 1998-2022
GEOL 104	Dinosaurs: A Natural History Spring 1994, 1995 Fall Semesters 1995-2019, 2021
GEOL 123	Causes and Implications of Global Change Spring Semesters 2008, 2009, 2010
GEOL 204	Dinosaurs, Early Humans, Ancestors & Evolution: The Fossil Record of Vanished Worlds of the Prehistoric Past Spring Semesters 2012-2022
GEOL 331	Invertebrate Paleontology/Principles of Paleontology Fall Semesters 1996-1997, 2000, 2002, 2004, 2006, 2008, 2010, 2012, 2014, 2016, 2018, 2020
GEOL 431	Vertebrate Paleobiology Spring Semester 2015, 2017, 2019, 2021

*ii. University Honors Program (UMD)*

HONR 259C      Fearfully Great Lizards: Topics in Dinosaur Research,  
 Spring Semesters 1996-1998, 1999, 2003, 2005, 2007; Fall  
 Semester 2017, 2019, 2021

*iii. College Park Scholars*

- |                               |   |
|-------------------------------|---|
| CPSG100                       | Science & Global Change First Year Colloquium I, Fall Semester 2014-2021  |
| CPSG101                       | Science & Global Change First Year Colloquium II, Spring Semester 2015-2022   |
| CPSG200                       | Science & Global Change Sophomore Colloquium, Fall 2015-2022  |
| CPSP 118G                     | Earth, Life & Time Freshman Colloquium, Semesters I & II, Fall and Spring Semesters 1999-2009<br>Science & Global Change Colloquium, Semesters I & II, Fall and Spring Semesters 2009-2011, Fall Semesters 2012-3 |
| CPSP 119G                     | Science & Global Change Semester II<br>Spring Semester 2011-2014  |
| CPSP 218G                     | Earth, Life & Time Sophomore Colloquium, Semester III, Fall Semesters 2000- 2009<br>Science & Global Change Colloquium, Semester III Fall Semesters 2010-2014   |
| CPSG 230, 240, 250, CPSP 359G | Science & Global Change Sophomore Practicum, Spring Semester 2016-2022  |
| CPSP 239G, 249G, 259G         | - Earth, Life & Time Sophomore Practicum, Spring Semesters 2001-2010<br>Science & Global Change Sophomore Practicum, Spring Semester 2011-2015  |

*iv. Field Courses (UMD)*

- |           |   |
|-----------|---|
| GEOL 288A | Field Natural History of Arizona<br>Spring Break 2000, 2002, 2003, 2007, 2009, 2011, 2014, 2016, 2018 |
| GEOL 388G | Field Natural History of the Galapagos Archipelago<br>Summer 2000, 2002, 2004, 2006, 2008, 2011       |

**v. Study Abroad Course (non-Field Natural History)**

CPSP379K            The Victorian Connection: Science and Social Change in Victorian Britain”, Winter Term 2005

**vi. Graduate Courses**

GEOL 789Q            Paleobiology of the Archosauria  
Fall 2007

GEOL 789W            Phanerozoic History, Macroevolution, and Earth System Science  
Spring 2008

**b. Course or Curriculum Development**

“Dinosaurs: A Natural History” (introductory level science course)

“‘Fearfully Great Lizard’: Topics in Dinosaur Research” (Honors Seminar science course)

“Dinosaurs, Early Humans, Ancestors & Evolution: The Fossil Record of Vanished Worlds of the Prehistoric Past” (I-Series course)

“Vertebrate Paleobiology” (upper level course)

“College Park Scholars – Earth, Life & Time” (two-year residential honors Interdisciplinary Program and Colloquium)

“College Park Scholars – Science & Global Change” (two-year residential honors Interdisciplinary Program and Colloquium)

“Field Natural History of Arizona” (10-day field natural history course)

“Field Natural History of the Galápagos Archipelago” (2-week course plus 11-day field natural history course)

“Paleobiology of the Archosauria” (graduate course)

“Phanerozoic History, Macroevolution, and Earth System Science” (graduate course)

“Dinosaurs and their World” (3-day short course for the Maryland Teachers as Scholars Program, Fall 2001 and Spring 2003)

**c. Manuals, Notes, Software, Web Pages, and Other Contributions to Teaching**

Designed and maintains academic website (<http://www.geol.umd.edu/~tholtz>)

Designed and maintain course websites for:

GEOL102 (<http://www.geol.umd.edu/~tholtz/G102/>); GEOL104 (<http://www.geol.umd.edu/~tholtz/G104/>), GEOL204 (<http://www.geol.umd.edu/~tholtz/G204>), GEOL331 (<http://www.geol.umd.edu/~tholtz/G331/>), GEOL431 (<http://www.geol.umd.edu/~jmerck/geol431/>) GEOL789W (<http://www.geol.umd.edu/~tholtz/G789W/>), HONR259C (<http://www.geol.umd.edu/~tholtz/H259C/>).

Co-designed and co-maintain course websites for:

College Park Scholars -- Earth, Life & Time program (<http://www.geol.umd.edu/~jmerck/eltsite>), GEOL388 Field Natural History of the Galapagos <http://www.geol.umd.edu/~jmerck/gal06/>), College Park Scholars – Science & Global Change program (<http://www.geol.umd.edu/sgc>)

**d. Teaching Awards and Other Special Recognition (UMD)**

- 2019 Provost's Excellence Award for Professional Track Faculty 2018-2019
- 2005 Outstanding Instructor Award, College of Computer, Mathematics, and Physical Sciences
- 2004 Certificate of Appreciation for Recognition of Outstanding Performance for Ten Years or More as a Lecturer/Instructor in the College of Computer, Mathematics, and Physical Sciences
- 2003 Celebrating Teachers Award recipient, Center for Teaching Excellence
- 1997 Honors Outstanding Faculty Award, University Honors Program

**e. Advising: Research Direction**

*i. Undergraduate Senior Theses (UMD)*

- 2022 Smith, Nicole. Exploring the environmental tolerance of pteridosperms.
- 2022 Shimizu, Brendan. Systematics of fine detail fossil preservation: an elemental analysis.

- 2020 Jenkins-Houk, Orion. Environmental and ecological factors controlling the presence of giant land turtles in the Cenozoic.
- 2016 Bowen, Melody. A phylogenetic comparative analysis of Coelacanthiform environmental distributions through the fossil record.
- 2016 Chen, Albert. Ecological drivers of evolutionary trophic shifts in theropods.
- 2011 Bender, Amanda L.D. The angiosperm advantage: evidence from carbon isotopes and the fossil record.
- 2010 Breeden, Benjamin T., III. A stable isotopic investigation of resource partitioning among neosauropod dinosaurs of the Upper Jurassic Morrison Formation.
- 2009 Drymala, Susan. Floral indicators of late Paleocene-Eocene Thermal Maximum climate change in the Bighorn Basin, Wyoming
- 2008 Skold, Peter. Investigation of Keyser Limestone paleoenvironments at Cumberland Bone Cave
- 2008 Leone, M. Eugenia. Stratigraphy and correlation of the Fulton Site, a fossiliferous locality of the Upper Triassic Newark Supergroup in the Gettysburg Basin, western Maryland.
- 2005 Zelanko, Paula. Stable isotopic analysis of southeastern U.S. Pleistocene mammals.
- 2003 Kearsley, Sarah. Phylogenetic analysis of antiarch placoderms.
- 2001 Missell, Christine A. An oxygen isotope comparison of hadrosaurid metabolism.
- 2000 Kenworthy, Jason. A study of class morphometrics and functional morphology in modern amniotes and theropod dinosaurs.
- 2000 Tarvin, Timothy P. A comparison of the serrations on the teeth of three genera of white sharks.

*ii. Doctoral*

- 2008 France, Christine. A carbon and nitrogen isotopic analysis of Pleistocene food webs in North America: implications for paleoecology and

- extinction. Department of Geology, University of Maryland (co-advisor with A.J. Kaufman)
- 2004 Lamanna, Matthew C. Late Cretaceous dinosaurs and crocodyliforms from Egypt and Argentina. Department of Earth and Environmental Science, University of Pennsylvania (primary advisor P. Dodson)
- 2002 Smith, Joshua B. An examination of dental morphology and variation in theropod dinosaurs: implications for the identification of shed teeth. Department of Earth and Environmental Science, University of Pennsylvania (primary advisor P. Dodson)
- iii. Masters*
- 2005 Segal, Ariel J. “Scientific truth, rightly understood, is religious truth”: the life and works of Reverend Edward Hitchcock, 1793-1864. Department of History, University of Maryland (primary advisor, James B. Gilbert)
- 3. Service**
- a. Professional**
- i. Non-University committees, commissions, panels, etc.*
- 2008 NSF Antarctic Earth Sciences Panel
- 1992-1993 The Maryland Governor's Advisory Committee on Promoting Paleontology
- ii. Societies*
- Society of Vertebrate Paleontology
- International Congress of Vertebrate Morphologists
- The Paleontological Society
- The Palaeontological Association
- Paleontological Society of Washington (Secretary 2001-2002; President 2006-2009)
- National Center for Science Education
- Dinosaur Society (defunct) (Advisory Board member, Chair Book Committee)

**b. Campus**

*i. College*

2019-2020 CMNS Professional Track Advancement, Promotions & Awards Committee

2000 Member, Panel to Evaluate Dr. Michael Brown as Chair of Department of Geology.

*ii. University*

2016-2018 Professional Track Representative, Advancement, Promotions & Awards Committee

2012-2013 Co-Chair, University Senate/Provost Office Task Force on Non-Tenure Track Faculty

2002 Member, UMCP Team (under Dean Hampton of Undergraduate Studies), at the American Association of Higher Education Summer Academy (July 2002).