

Dr. Jessie Atterholt

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College of Osteopathic Medicine of the Pacific
Western University of Health Sciences
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Education

University of California, Berkeley

2009–2015

Doctorate of Philosophy

Department of Integrative Biology, Museum of Vertebrate Zoology, Museum of Paleontology

Advisors: Drs. Marvalee Wake and David Lindberg

University of Pennsylvania

2005–2009

Bachelor of Arts

Department of Earth and Environmental Sciences

Major: Geology (concentration in Paleobiology) Minor: French, Gender Studies

Advisor: Dr. Peter Dodson

Teaching and Work Experience

Associate Professor, Western University of Health Sciences, Pomona, CA

June 2018 - Present

Teaching Faculty, The Webb Schools, Claremont, CA

June 2015–May 2018

Adjunct Faculty—MSMS Intensive Summer Anatomy Course, Western University of Health Sciences, Pomona, CA

Summer 2017

Teaching Fellow, Junior Scholar's Paleontology Program; The Webb Schools, Claremont, CA

July 2015; July 2016; July 2017

Volunteer Instructor for Bay Area Scientists in Schools

Spring 2010–2015

Graduate Student Instructor, IB131—Human Anatomy Lab, Department of Integrative Biology, University of California, Berkeley

Fall 2013; Fall 2014

Head Facilitator, IB198—Anatomy Enrichment Program

Spring 2014

Graduate Student Instructor, IB167—Evolutionary Biology, University of California, Berkeley

Spring 2014

Graduate Student Instructor, Biology 1B, Department of Integrative Biology, University of California, Berkeley

Fall 2009; Spring 2010;
Fall 2011; Spring 2012;
Spring 2013

Instructor for Girls Educational and Mentoring Services After-school Program

Oct. 2011; Mar. 2012

Graduate Student Instructor, IB 183 - Vertebrate Evolution, Department of Integrative Biology, University of California, Berkeley

Spring 2010

Graduate Student Instructor, IB 181- Paleobotany, Department of Integrative Biology, University of California, Berkeley

Fall 2011

Teaching Assistant, GEOL125 - Earth and Life Through Time, Department of Earth and Environmental Sciences, University of Pennsylvania

Spring 2007; Spring 2009

Peer-Reviewed Publications

A.D. Clark, J. Atterholt, S.J. Clark, N.W. Seward. Courtship display behavior strongly influences tail myology in *Centrocercus minimus* (Gunnison sage-grouse). *Journal of Anatomy*.

In Review

- J. Atterholt**, M.G. Burton, M.J. Wedel, J. Benito, E. Fricano, D.J. Field. Osteological correlates of the respiratory and vascular systems in the neural canals of Mesozoic ornithurines *Ichthyornis* and *Janavis*. *The Anatomical Record*, 1–14. <https://doi.org/10.1002/ar.70070> **2025**
- J. Atterholt**, J. K. O'Connor, H. You. Osteohistology of enantiornithine birds from the Lower Cretaceous Xiagou Formation. *Geobios* 90:5–16. **2025**
- J. K. O'Connor, **J. Atterholt**, A. Bailleul, M. Wang, Z. Zhou. Description and osteohistology of two early immature enantiornithines (Aves: Ornithothoraces) from the Early Cretaceous Jehol Biota. *Geobios* 90:103–122. **2025**
- J. K. O'Connor, **J. Atterholt**, A. D. Clark, L. Zhou, C. Peng, X. Zhang, H. You. Enantiornithine (Aves: Ornithothoraces) from the Lower Cretaceous Xiagou Formation with an unusually short pubis. *Geobios* 90:123–131. **2025**
- A. D. Clark, **J. Atterholt**, J. B. Scannella, N. Carroll, J. K. O'Connor. Enantiornithine diversity in the Hell Creek Formation and the functional morphology of the avosaurid tarsometatarsus. *PLoS ONE*, 19.10 (2024): e0310686. <https://doi.org/10.1371/journal.pone.0310686> **2024**
- J. Atterholt**, M. J. Wedel, R. Tykoski, A. R. Fiorillo, F. Holwerda, T. K. Nalley, T. Lepore, J. Yasmer. Neural canal ridges: A novel osteological correlate of postcranial neuroanatomy in dinosaurs. *The Anatomical Record*, 1–20. <https://doi.org/10.1002/ar.25558>. **2024**
- E. R. Schachner, A. J. Moore, A. Martinez, R. E. Diaz Jr., M. S. Echols, **J. Atterholt**, R. Kissane, B. P. Hedrick, K. T. Bates. The respiratory system influences flight mechanics in soaring birds. *Nature* 630: 1–6. DOI: [10.1038/s41586-024-07485-y](https://doi.org/10.1038/s41586-024-07485-y) **2024**
- S. Sidhu & **J. Atterholt**. Survey of cadaveric variations of quadratus plantae, and implications for classifications, surgical procedures, and clinical outcomes. *Extremities* 11:92–99. **2024**
- M. Wedel & **J. Atterholt**. Expanded neurocentral joints in the vertebrae of sauropod dinosaurs. *Proceedings of the Mesozoic Terrestrial Ecosystems Conference*. <https://doi.org/10.1002/ar.25219> **2023**
- J. Atterholt** & M. Wedel. A CT-based survey of paramedullary diverticula in extant Aves. *The Anatomical Record* :1–22. DOI: [10.1002/ar.24923](https://doi.org/10.1002/ar.24923) **2022**
- J. Atterholt** & H. N. Woodward. A histological survey of avian post-natal skeletal ontogeny. *PeerJ*, 9:e12160. DOI: <https://doi.org/10.7717/peerj.12160> **2021**
- M. Wedel, **J. Atterholt**, A.C. Dooley Jr., S. Farooq, J. Macalino, T.K. Nalley, G. Wisser, J. Yasmer. Expanded neural canals in the caudal vertebrae of a specimen of *Haplocanthosaurus*. *Academia Letters*, Article 911. DOI: <https://doi.org/10.20935/AL911> **2021**
- J. Atterholt**, A.W. Poust, G.E. Erickson, J.K. O'Connor. Intraskelatal Osteohistovariability Reveals Complex Growth Strategies in a Late Cretaceous Enantiornithine. *Frontiers in Earth Science* 9:640220. DOI: <https://doi.org/10.3389/feart.2021.640220> **2021**
- J. Atterholt**, J.H. Hutchison, J.K. O'Connor. The most complete enantiornithine from North America and a phylogenetic analysis of the Avisauridae. *PeerJ*, 6:e5910. DOI: <https://doi.org/10.7717/peerj.5910> **2018**
- J.K. O'Connor, D. Li, M.C. Lamanna, M. Wang, J.D. Harris, **J. Atterholt**, H. You. A new Early Cretaceous enantiornithine (Aves, Ornithothoraces) from northwestern China with elaborate tail ornamentation. *Journal of Vertebrate Paleontology* 36(1), e1054035. DOI: <https://doi.org/10.1080/02724634.2015.1054035> **2016**
- R.L. Nudds, **J. Atterholt**, X. Wang, H. You, G.J. Dyke. Locomotory abilities and habitat of the Cretaceous bird *Gansus yumenensis* inferred from limb length proportions. *Journal of Evolutionary Biology* 26 (1), 150–154. DOI: <https://doi.org/10.1111/jeb.12036> **2012**

- S. Ji, **J. Atterholt**, J.K. O'Connor, M.C. Lamanna, J.D. Harris, D. Li, H. You, P. Dodson. A new, three-dimensionally preserved enantiornithine bird (Aves: Ornithothoraces) from Gansu Province, north-western China. *Zoological Journal of the Linnean Society* 162(1), 201–219. DOI: <https://doi.org/10.1111/j.1096-3642.2010.00671.x> **2011**
- H. You, **J. Atterholt**, J.K. O'Connor, J.D. Harris, M.C. Lamanna, D. Li. A second Cretaceous ornithuromorph bird from the Changma Basin, Gansu Province, northwestern China. *Acta Palaeontologica Polonica* 55 (4), 617–625. DOI: <https://doi.org/10.4202/app.2009.0095> **2010**

Select Academic Presentations, Posters, & Published Abstracts

- Raber, K., Wedel, M., **Atterholt, J.**, Foster, J., Gray, D., and Bennis, M.B. 2025. A musculoskeletal lesion in a femur of *Apatosaurus*. 5th Palaeontological Virtual Congress. **2025**
- A. Clark, **J. Atterholt**, N.R. Carroll, T. Carr, J. Scannella, J.K. O'Connor. New enantiornithine diversity in the Hell Creek and the functional morphology of the avisauid tarsometatarsus. *Journal of Vertebrate Paleontology*. **2024**
- J. Atterholt**, M. J. Wedel, J. Benito, D. J. Field. Evidence of paramedullary diverticula in extinct ornithodirans. *Journal of Vertebrate Paleontology*. **2024**
- E.R. Schachner, A.D. Moore, A. Martinez, R.E. Diaz Jr., M.S. Echols, **J. Atterholt**, R. Kissane, B.P. Hedrick, K.T. Bates. The subpectoral diverticulum in hawks and other soaring birds: not just another air sac. Society of Integrative & Comparative Biology Meeting. **2024**
- M. Wedel & **J. Atterholt**. Expanded neurocentral joints in the vertebrae of sauropod dinosaurs. *Proceedings of the Mesozoic Terrestrial Ecosystems Conference*. **2023**
- J. Atterholt**, J.K. O'Connor, H. You. Osteohistology of enantiornithine birds from the Lower Cretaceous Xiagou Formation in Changma, northwestern China. 10th International Meeting of the Society of Avian Paleontology and Evolution. **2023**
- A. Dooley, D. Radford, M. J. Wedel, **J. Atterholt**, T. Nalley. “Broader impacts”, An exhibit program focused on basic research. *Journal of Vertebrate Paleontology* 38:123A. **2020**
- A. Dooley, D. Radford, M. J. Wedel, **J. Atterholt**, T. Nalley. “Broader impacts”, An exhibit program focused on basic research. Geological Society of America: Cordilleran Section. Pasadena, CA. **2020**
- J. Atterholt** & M. Wedel. Neural canal ridges: A novel osteological correlate of post-cranial neurology in dinosaurs. 67th Symposium on Vertebrate Paleontology and Comparative Anatomy, Programs and Abstracts:4 / PeerJ Preprints 7:e27967v1. **2019**
- M.J. Wedel, **J. Atterholt**, J. Macalino, T. Nalley, G. Wisser, J. Yasmer. **2018**
- Reconstructing an unusual specimen of *Haplocanthosaurus* using a blend of physical and digital techniques. 1st Palaeontological Virtual Congress, Programs and Abstracts / PeerJ Preprints. 6:e27431v1. **2018**
- J. Atterholt** & M. Wedel. A CT-based survey of supramedullary diverticula in extant birds. 66th Symposium on Vertebrate Paleontology and Comparative Anatomy, Programs and Abstracts:30 / PeerJ Preprints 6:e27201v2. **2018**
- J. Atterholt**. A study of the influence of post-natal development on avian evolution. *Journal of Vertebrate Paleontology* 33(suppl.3):81A. **2015**
- J. Atterholt**. Dissecting Dinosaurs: the use of research specimens in high school biology classrooms to engage students as citizen scientists and promote scientific literacy. *Journal of Vertebrate Paleontology* 33(suppl.3):80A. **2013**
- J. Atterholt**. Evolution of the avian altricial-precocial spectrum and implications for enantiornithine development. *Journal of Vertebrate Paleontology* 31(suppl.3):64–65A. **2011**

- J. Atterholt**, J. O'Connor, J. Harris, H. You, D. Li. Avian taxonomic diversity and anatomical disparity in the Lower Cretaceous Xiagou Formation of the Changma Basin, Gansu Province, People's Republic of China. *Journal of Vertebrate Paleontology* 30(suppl.3):55A. **2010**
- M. Lamanna, D. Li, J. Harris, **J. Atterholt**, H. You. First non-avian dinosaur from the lower Cretaceous (Aptian) Xiagou Formation of the Changma Basin, northwestern China. *Journal of Vertebrate Paleontology* 30(suppl.3):119A. **2010**

Invited Presentations and Events

- Armour Seminar, Field Museum of Natural History, Chicago, IL **March, 2024**
Invited Speaker
- Anza-Borrego Desert State Park Volunteer Paleontology Society **January, 2024**
Invited Speaker
- Inland Empire Science Festival, Western Science Center, Hemet, CA **April, 2022**
Invited Presenter - The Lady Anatomica's Comparative Anatomy Pop-Up Museum
- Fossil Friday Chats YouTube Channel, Raymond M. Alf Museum of Paleontology **November, 2021**
Invited Guest - "Dinosaur Dissection"
- Inland Empire Science Festival, Western Science Center, Hemet, CA **August, 2021**
Invited Presenter - The Lady Anatomica's Comparative Anatomy Pop-Up Museum
- Science Spooktacular Virtual Program with San Bernardino County Museum, Redlands, CA **October, 2020**
Invited Presenter
- Anza-Borrego Paleontology Symposium: Dinosaurs to Deserts **January, 2020**
Invited Speaker
- Tiny Titan at the Western Science Center, Hemet, CA **November, 2019 - March, 2020**
Research featured in special museum exhibit
- Inland Empire Science Festival, Western Science Center, Hemet, CA **April, 2019**
Invited Presenter - The Lady Anatomica's Comparative Anatomy Pop-Up Museum
- Women in Paleontology, Raymond M. Alf Museum of Paleontology, Claremont, CA **February, 2017 & 2018**
Invited Presenter (hosted a table about my research)
- March Mammoth Madness, Victor Valley Museum, Apple Valley, CA **May, 2015**
Invited Speaker
- Anza-Borrego Desert State Park Volunteer Paleontology Society **May, 2009**
Invited Speaker
- PaleoPalooza, Academy of Natural Sciences, Philadelphia, PA **October, 2008**
Invited Speaker

Professional Development

- Anti-Racism Training Workshop, Western University of Health Sciences **2021**
- Anatomy in Clay© Learning System Professional Development Workshop **2014**
- University of Toledo Plastination Workshop **2014**

Professional Affiliations

- Research Affiliate - The Dinosaur Institute of the Natural History Museum of Los Angeles County
- American Association for Anatomy
- Society of Avian Paleontology and Evolution
- Society of Vertebrate Paleontology

International Society for Plastination

Professional Service

Associate Editor - *All Earth*