

Jacob Gardner

jacobdgardner.com

School of Biological Sciences
University of Reading, RG6 6AH, UK
jacob.gardner@reading.ac.uk

Curriculum Vitae

April 2024

Education & Training

- 2023 Ph.D. in Ecology and Evolutionary Biology, University of Reading
Transferred from Montana State University
Thesis: Sampling the past to understand evolution
- 2021 Graduate Certificate in Applied Statistics, Department of Mathematical Sciences
- 2015 B.Sc. in Earth Sciences: Paleontology Emphasis, Montana State University
Geology field school: Indiana University Judson Mead Geologic Field Station

Appointments

- 2023– Postdoctoral research associate
Reading Evolutionary Biology Group (PI: Chris Venditti)
School of Biological Sciences, UoR
Leverhulme: The evolutionary and biogeographical routes to hominin diversity
- 2023 Postdoctoral research associate
Reading Evolutionary Biology Group (PI: Mark Pagel)
School of Biological Sciences, UoR
NERC: The capacity for sustained adaptation in a rapidly changing environment
- 2016–23 Graduate research assistant
Deep Time Biology Lab (PI: Chris Organ), MSU & UoR
- 2020–21 Graduate teaching assistant
Department of Microbiology and Immunology, MSU
- 2019–20 Visiting research assistant
Laboratory on Molecular Paleontology (PI: Qiaomei Fu)
Institute of Vertebrate Paleontology and Paleoanthropology
Chinese Academy of Sciences
- Freelance scientific editing
Earth, Atmospheric, and Planetary Sciences, Cactus Communications
- 2016–19 Graduate teaching assistant
Department of Earth Sciences, MSU
Department of Cell Biology & Neuroscience, MSU
- 2014–15 Lab technician
Gabriel Laboratory for Molecular Paleontology, Museum of the Rockies
- 2012–13 Lab technician
Whitlock Paleoecology Laboratory, MSU

Teaching & Student Engagement

Courses Taught

Sp. 2018 PSPP 594 – Graduate Seminar on Phylogenetics, MSU
Co-taught by Matt Lavin, Chris Organ, Frank Etzler, and myself

Teaching Assistantships (Avg. Instructor Rating = 4.90 / 5.0, n = 213 students*)

2021 GEO 413 – Macroevolution & The Fossil Record, STA**, MSU

2020–21 BIOH 201 – Human Anatomy and Physiology I, GTA**, MSU (4.97, 187)

2016–19 –

2016 EARTH 101 – Earth System Science, GTA, MSU (4.82, 26)
GEO 310 – Invertebrate Paleontology, STA, MSU

2015 BIOO 310 – Comparative Vertebrate Anatomy, STA, MSU

* Taught over 500 students total over six years

** STA: Student teaching assistant (volunteer); GTA: Graduate teaching assistant (appointment)

Master's and Undergraduate Mentorship

Lauren Wilson (2021), Isaura Aguilar-Pedrayes ('21–18), Carolyn Kocken ('18–19), Rudy Hummel and Thomas LaBarge ('17–19), Gia Fisher ('16–19), Kevin Surya ('16–19), Kevin Jones ('16–18), Mikayla Struble ('16–17)

Publications

* Authors contributed equally

† Mentored student

In Review

- Varricchio, David J., Jason D. Hogan, and **Jacob D. Gardner**. Troodontid specimens from the Cretaceous Two Medicine Formation of Montana (USA) and the validity of *Troodon formosus*. In revision at *Journal of Paleontology*.

Peer-Reviewed Articles

13. Krumenacker, L.J., David J. Varricchio, Chris L. Organ, **Jacob D. Gardner**, Clint Boyd, and Brooks Britt. 2024. Osteology and phylogenetic relationships of the mid-Cretaceous neornithischian dinosaur *Oryctodromeus cubicularis* Varricchio, 2007. *Journal of Vertebrate Paleontology*, e2330581. DOI: [10.1080/02724634.2024.2330581](https://doi.org/10.1080/02724634.2024.2330581).
12. LaBarge, Thomas W.†, **Jacob D. Gardner**, and Chris L. Organ. 2024. The evolution and ecology of gigantism in terror birds (Aves, Phorusrhacidae). *Proceedings of the Royal Society B*, 291(2021): 20240235. DOI: [10.1098/rspb.2024.0235](https://doi.org/10.1098/rspb.2024.0235).
11. Wilson, Lauren N.*†, **Jacob D. Gardner***, John P. Wilson, Alex Farnsworth, Zackary R. Perry, Patrick S. Druckenmiller, Gregory M. Erickson, and Chris L. Organ. 2024. Global latitudinal gradients and body size diversity in dinosaurs and mammals. *Nature Communications*, 15: 2864. DOI: [10.1038/s41467-024-46843-2](https://doi.org/10.1038/s41467-024-46843-2).
10. Aguilar-Pedrayes, Isaura†, **Jacob D. Gardner**, and Chris L. Organ. 2024. The coevolution of rostral keratin and tooth distribution in dinosaurs. *Proceedings of the Royal Society B*, 291(2015): 20231713. DOI: [10.1098/rspb.2023.1713](https://doi.org/10.1098/rspb.2023.1713)

9. Surya, Kevin, **Jacob D. Gardner**, and Chris L. Organ. 2023. Detecting punctuated evolution in SARS-CoV-2 over the first year of the pandemic. *Frontiers in Virology*, 3: 1066147. [DOI: 10.3389/fviro.2023.1066147](https://doi.org/10.3389/fviro.2023.1066147)
*Featured in *Frontiers in Bioinformatics Research Topic: Bioinformatics of COVID-19 – challenges in understanding and predicting the emerging properties of COVID-19 variants*
8. Xue, Jiayang, Wenjun Wang, Jing Shao, Xiangming Dai, Zhouyong Sun, **Jacob D. Gardner**, ... [14 authors] ..., Nu He, and Qiaomei Fu. 2022. Ancient mitogenomes reveal the origins and genetic structure of the Neolithic Shimao population in northern China. *Frontiers in Genetics*, 13: 909267. [DOI: 10.3389/fgene.2022.909267](https://doi.org/10.3389/fgene.2022.909267)
7. **Gardner, Jacob D.**, and Mark V.H. Wilson. 2022. The most complete amiid fish from the Coal Creek Member of the Eocene Kishenehn Formation in northwestern Montana. *Acta Palaeontologica Polonica*, 67(2): 493–508. [DOI: 10.4202/app.00733.2020](https://doi.org/10.4202/app.00733.2020)
6. Zhang, Ming*, Yichen Liu*, Zhipeng Li*, Peng Lu*, **Jacob D. Gardner***, ... [18 authors] ..., E. Andrew Bennett, Songmei Hu, and Qiaomei Fu. 2022. Ancient DNA reveals the maternal genetic history of East Asian domestic pigs. *Journal of Genetics and Genomics*, 49(6): 537–546. [DOI: 10.1016/j.jgg.2021.11.014](https://doi.org/10.1016/j.jgg.2021.11.014)
5. Wang, Wenjun*, Manyu Ding*, **Jacob D. Gardner***, Yongqiang Wang*, ... [25 authors] ..., Vikas Kumar, and Qiaomei Fu. 2021. Ancient Xinjiang mitogenomes reveal intense admixture with high genetic diversity. *Science Advances*, 7(14): eabd6690. [DOI: 10.1126/sciadv.abd6690](https://doi.org/10.1126/sciadv.abd6690)
4. **Gardner, Jacob D.**, and Chris L. Organ. 2021. Evolutionary sample size and consilience in phylogenetic comparative analysis. *Systematic Biology*, 70(5): 1061–1075. [DOI: 10.1093/sysbio/syab017](https://doi.org/10.1093/sysbio/syab017)
3. **Gardner, Jacob D.**, Michel Laurin, and Chris L. Organ. 2020. The relationship between metabolic rate and genome size in extant vertebrates. *Philosophical Transactions of the Royal Society B*, 375(1793): 20190146. [DOI: 10.1098/rstb.2019.0146](https://doi.org/10.1098/rstb.2019.0146)
bioRxiv [DOI: 10.1101/659094](https://doi.org/10.1101/659094)
2. **Gardner, Jacob D.***, Kevin Surya*, and Chris L. Organ. 2019. Early tetrapodomorph biogeography: Controlling for fossil record bias in macroevolutionary analyses. *Comptes Rendus Palevol*, 18(7): 609–709. [DOI: 10.1016/j.crpv.2019.10.008](https://doi.org/10.1016/j.crpv.2019.10.008)
bioRxiv [DOI: 10.1101/726786](https://doi.org/10.1101/726786)
1. Wilson, John P., D. Cary Woodruff, **Jacob D. Gardner**, Holley M. Flora, John R. Horner, Chris L. Organ. 2016. Vertebral adaptations to large body size in theropod dinosaurs. *PLoS ONE*, 11(7): e0158962. [DOI: 10.1371/journal.pone.0158962](https://doi.org/10.1371/journal.pone.0158962)

Conference Abstracts

29. Surya, Kevin, **Jacob D. Gardner**, John J. Borkowski, and Chris L. Organ. 2024. Speciation's role in evolutionary divergence is systematically underestimated in comparative studies. *Perspectives on Speciation, Linnean Society of London*. [Poster](#)
28. **Gardner, Jacob**, Lauren Wilson[†], John Wilson, Alex Farnsworth, Zackary Perry, Patrick Druckenmiller, Gregory Erickson, and Chris Organ. 2024. Bergmann's rule was absent in

Mesozoic dinosaurs and mammals. *200 Years of the Dinosaurs: New Perspectives on an Ancient World*, NHM London. [Oral](#)

27. **Gardner, Jacob D.**, John P. Wilson, Holley M. Flora, Xing Xu, and Chris Organ. 2022. Functional innovations drove evolutionary rates and diversification in dinosaurs. *Society of Vertebrate Paleontology*. [Oral](#)
26. Organ, Chris, Lauren Keller[†], and **Jacob D. Gardner**. 2022. Bergmann's rule was absent in Mesozoic dinosaurs and mammals. *Society of Vertebrate Paleontology*. [Oral](#)
25. Byrne, Paul. Lucas Legendre, Scott Echols, Colleen Farmer, **Jacob D. Gardner**, Yun-Hsin Wu, and Adam Huttenlocker. 2022. Elevated aerobic capacity in Triassic archosaurs supported by modeled reductions in red blood cell sizes. *Society of Vertebrate Paleontology*. [Oral](#)
24. **Gardner, Jacob D.**, John P. Wilson, Holley M. Flora, Xing Xu, and Chris L. Organ. 2022. Innovations in movement drove evolutionary rates and diversification in dinosaurs. *Symposium on Vertebrate Palaeontology and Comparative Anatomy*, NHM London. [Oral](#)
*Honourable Mention for Early Career Researcher talk prize competition
23. LaBarge, Thomas[†], **Jacob D. Gardner**, and Chris L. Organ. 2021. Bayesian reanalysis of the evolution of Phorusrhacidae (Aves, Cariamiformes). *Society of Vertebrate Paleontology*. [Oral](#)
22. LaBarge, Thomas[†], **Jacob D. Gardner**, and Chris L. Organ. 2021. Bayesian reanalysis of the evolution of Phorusrhacidae (Aves, Cariamiformes). *Geological Society of America Annual Meeting*. [Oral](#)
21. **Gardner, Jacob D.**, and Chris L. Organ. 2021. Evolutionary sample size and phylogenetic models of correlated evolution. *Evolution*. [Oral](#)
20. Aguilar-Pedrayes, Isaura[†], David Varricchio, Chris Organ, John Scannella, and **Jacob D. Gardner**. 2020. Facial keratin and tooth presence: Coevolution of traits in dinosaurs. *Society of Vertebrate Paleontology*. [Poster](#)
19. Struble, Mikayla K.[†], **Jacob D. Gardner**, and Alice Gibb. 2020. Grasping behavior in birds drives pedal adaptations. *Society for Integrative and Comparative Biology*. [Oral](#)
18. Hummel, Rudy R.[†], **Jacob D. Gardner**, and Chris L. Organ. 2018. Origin and dispersal of Gorgonopsia: A phylogenetic approach to Permian therapsid biogeography. *Society of Vertebrate Paleontology*. [Poster](#)
17. Wilson, John P., Ashley Ferguson, and **Jacob D. Gardner**. 2018. 'Pendular' swings in the evolution of centrosaurine cranial ornamentation. *Society of Vertebrate Paleontology*. [Poster](#)
16. Struble, Mikayla K.[†], **Jacob D. Gardner**, and Alice Gibb. 2018. The evolution of grasping behavior in birds and associated pedal adaptations. *Society for Integrative and Comparative Biology*. [Oral](#)
15. **Gardner, Jacob D.**, and Chris L. Organ. 2017. The macroevolutionary dynamics of vertebrate genome size. *Geological Society of America Annual Meeting*. [Oral](#)

14. Surya, Kevin[†], Isabelle M. Brenes, **Jacob D. Gardner**, Lázaro W. Viñola López, Chris L. Organ, and David J. Varricchio. 2017. Pelvic coevolution with egg size and shape in modern birds: Implication for reproductive biology of extinct dinosaurs. *Geological Society of America Annual Meeting*. [Oral](#)
13. **Gardner, Jacob D.** and Mark V. H. Wilson. 2017. A mostly complete bowfin (Amiidae: *Amia* sp.) from the Coal Creek Member of the Eocene Kishenehn Formation, Northwestern Montana. *Society of Vertebrate Paleontology*. [Poster](#)
12. Struble, Mikayla[†], **Jacob D. Gardner**, and Chris L. Organ. 2017. Biomechanical stresses of pedal grasping behavior within modern aves: Morphological adaptations and Mesozoic implications. *Society of Vertebrate Paleontology*. [Oral](#)
11. Surya, Kevin[†], Isabelle M. Brenes, **Jacob D. Gardner**, Lázaro W. Viñola López, Chris L. Organ, and David J. Varricchio. 2017. Pelvic sexual dimorphism in modern birds (Aves: Neornithes) and its evolutionary relationship with relative egg size. *National Conference for Undergraduate Research*. [Poster](#)
10. Jones, Kevin[†], **Jacob D. Gardner**, and Chris Organ. 2017. The evolution of human pregnancy. *National Conference for Undergraduate Research*. [Poster](#)
9. **Gardner, Jacob D.**, Chris L. Organ. 2016. Discrete models of correlated evolution are prone to false positive results. *Society of Vertebrate Paleontology*. [Oral](#)
8. Struble, Mikayla[†], **Jacob D. Gardner**, David J. Varricchio, and Chris L. Organ. 2016. Convergent evolution and biomechanics of the raptorial foot. *Society of Vertebrate Paleontology*. [Oral](#)
7. **Gardner, Jacob D.** and James G. Schmitt. 2016. Mineralogic evidence of preservational conditions in the Oligocene Canyon Ferry insect lagerstätte, Southwest Montana. *National Conference for Undergraduate Research*. [Poster](#)
6. **Gardner, Jacob D.** and James G. Schmitt. 2015. Mineralogic evidence of preservational conditions in the Oligocene Canyon Ferry insect lagerstätte, Southwest Montana. *Geological Society of America Annual Meeting*. [Poster](#)
5. **Gardner, Jacob D.**, D. Cary Woodruff, John P. Wilson, Holley M. Flora, John R. Horner, and Chris L. Organ. 2015. Biomechanical adaptations to increased body size in the neural spines of theropod dinosaurs. *Society of Vertebrate Paleontology*. [Poster](#)
4. Flora, Holley M., John P. Wilson, **Jacob D. Gardner**, and Denver W. Fowler. 2015. A probable oviraptorosaur from the Hell Creek Formation of Montana. *Society of Vertebrate Paleontology*. [Poster](#)
3. **Gardner, Jacob D.**, John P. Wilson, Holley M. Flora, and Chris L. Organ. 2015. Dinosaur running evolved in episodic bursts. *National Conference for Undergraduate Research*. [Oral](#)
2. **Gardner, Jacob D.**, John P. Wilson, Holley M. Flora, and Chris L. Organ. 2014. Dinosaur running evolved in episodic bursts. *Geological Society of America Annual Meeting*. [Oral](#)

1. **Gardner, Jacob D.**, John P. Wilson, Holley M. Flora, and Chris L. Organ. 2014. Accelerated biomechanical evolution precedes shifts in locomotion. *Geological Society of America Joint Rocky Mountain and Cordilleran Section Meeting*. [Oral](#)

Awards, Fellowships, Grants & Honors (Total Awarded Amount = \$29,161)

- 2022 PhD Research Studentship, University of Reading
Travel Grant, Society of Vertebrate Paleontology Jackson School of Geosciences (\$600)
Research Travel Grant, University of Reading, UK (£550)
- 2019 University of CAS Partial Scholarship for International Students
Student Club Match Funding (MSU) for the Earth Science Student Colloquium (\$750)
Awarded after raising \$2,000 in donations
- 2018 Student Club Mass Funding (MSU) for the Earth Science Student Colloquium (\$3,389)
- 2017 National Science Foundation, EAPSI Fellowship (\$5,000)
Project: Evolutionary Dynamics of Mesozoic Dinosaur and Mammal Ecomorphology
Host: Institute of Vertebrate Paleontology and Paleoanthropology, Beijing, China
[Award #1714036](#)
Student Club Mass Funding for the Dead Lizards Society (\$1,600)
Organized conference trip to Society of Vertebrate Paleontology, Calgary, CA
Dinosaur Research Institute Student Project Grant (\$1,600 CAD)
Annual Geological Society of America (GSA) Conference Travel Grants (\$650 total):
GSA Travel Grant, MSU Graduate School Travel Grant,
and MSU College of Letters and Science (CLS) Student Research Travel Grant
- 2016 Earth Sciences (MSU) Donald L. Smith Memorial Graduate Scholarship (\$2,700)
Student Club Mass Funding for the Dead Lizards Society (\$2,500, 2016–17)
Organized conference trip to Society of Vertebrate Paleontology, Salt Lake City, UT
Invited Speaker to MSU: Dr. Anthony Martin (Emory University)
- 2015 Paleontological Society, Student Ambassador (\$1,000)
Undergraduate Scholars Program (USP) Research Grant (Fall, \$900)
Project: Description of a Nearly Complete Bowfin (Family: Amiidae) Fossil from the Eocene Kishenehn Formation, Northwestern Montana
Annual GSA Conference Travel Grants (\$600 total):
GSA Travel Grant and MSU USP Travel Grant
USP Research Grant (Summer, \$616.17)
Project: Comparative Deposition and Fossilization of the Cenozoic Insect Lagerstätten of North America
ConocoPhillips Indiana University Field Camp Scholarship (\$1,500)
GSA Rocky Mountain Section Undergraduate Research Grant (\$750)
Project: Deposition & Fossilization of the Cenozoic Insect Lagerstätten of North America
- 2014 Smithsonian National Museum of Natural History, Research Internship (\$2,000)
Annual GSA Conference Travel Grants (\$1,525 total):
GSA Travel Grant, GSA On to the Future Travel Grant
MSU CLS Student Research Travel Grant, and MSU USP Travel Grant

USP Research Grant (\$1,360)

Project: Taphonomy and Paleoecology of an Oligocene Lacustrine Insect Lagerstätte, Canyon Ferry Reservoir, Montana

2013–15 Montana State University Letters and Science Dean's List

Professional Service

- Journal Peer-Review (n = 9)
 - Journals: *Biology Letters*, *Ecology and Evolution*, *Integrative Organismal Biology*, *Journal of Evolutionary Biology*, *Nature*, *Nature Ecology and Evolution*, *Philosophical Transactions of the Royal Society B*, *Proceedings of the Royal Society B*, *Systematic Biology*
- Book Chapter Peer-Review (n = 2)
 - *How Do We Know What Dinosaurs Looked Like?* (Chapter 15) in: *How Do We Know What We Know About Dinosaurs?* (1 ed.) by M.H. Schweitzer, E.R. Schroeter, and C.D. Czapka. 2020.
 - *Macroevolution* (Chapter 20) in: *Evolution* (4 ed.) by D. Futuyma and M. Kirkpatrick. 2017.
- Memberships
 - Geological Society of America
 - Paleontological Society
 - Society for the Study of Evolution
 - Society of Systematic Biologists
 - Society of Vertebrate Paleontology
 - MSU Dead Lizards Society (2012–2021; Vice President: '14–15; President: '15–17)
 - Tennis Club at Montana State University (2012–13, '16–19; Advisor: '18–19)
- Events Organized
 - MSU Earth Sciences Annual Colloquium committee (2017–22; Co-Chair: '17–18; Chair: '18–19)
 - MSU Earth Sciences Weekly Seminar committee (2016–19; Co-Chair: '17–18)
 - Organized symposium on macroevolution for the MSU Student Research Celebration titled, "Macroevolution: The Fellowship of the Tree" (2018)
 - Official researcher visits organized:
 - Dr. Jingmai O'Connor (Field Museum of Chicago) at MSU (2022)
 - Dr. Sara Wylie (Northeastern University) at MSU (2019)
 - Dr. Doug Emlen (University of Montana) at MSU (2019)
 - Dr. Tracy Heath (Iowa State University) at MSU (2018)
 - Dr. Tony Martin (Emory University) at MSU (2017)

Invited Talks & Guest Lectures

24. University of Reading's School of Biological Sciences Seminar – Locomotor Evolution and Ecological Diversification of Dinosaurs (Spring '24).
23. BI1BEA2 – Current Topics in Zoology and Ecology (University of Reading): The Evolution of Dinosaur Movement (Sp '24).
22. BI3CP8 – Palaeoecology (University of Reading): Approaches to Biomechanics in Palaeontology (Sp '24).
21. BI2ERD4 – Reptiles and Dinosaurs (University of Reading): Biomechanics of Extinct Reptiles (Fall '23).
20. Rayfield Lab, University of Bristol – Do Innovations in Movement Drive Functional Evolution? (Fall '22). [Invited](#)
19. GEO 211 – Earth History and Evolution (Montana State University): Archean Life (Sp '21).
18. GEO 211 – Earth History and Evolution (Montana State University): The Cretaceous Period (Sp '19).
17. GPHY 411 – Biogeography (Montana State University): Biogeography in Deep Time (Sp '19).
16. GEO 211 – Earth History and Evolution (Montana State University): Sedimentary Environments (Sp '19).
15. Montana State University's Department of Earth Sciences Seminar – Fossils and Diplomacy: Research and Collaboration in China (Fall '17). [Invited](#)

14. EARTH 101 – Earth System Science (Montana State University): Consilience: An Approach to Studying Deep Time (Fall '17).
13. EARTH 101 – Earth System Science (Montana State University): Life in the Rocks – How to Study and Interpret the Fossil Record (Fall '17).
12. GEO 211 – Earth History and Evolution (Montana State University): Neogene & Holocene (Sp '17).
11. GEO 211 – Earth History and Evolution (Montana State University): The Paleogene World (Sp '17).
10. EARTH 101 – Earth System Science (Montana State University): Life in the Rocks – How to Study and Interpret the Fossil Record (Sp '17).
9. GEO 211 – Earth History and Evolution (Montana State University): Sedimentary Environments (Sp '17).
8. EARTH 101 – Earth System Science (Montana State University): Consilience and Deep Time (Fall '16).
7. EARTH 101 – Earth System Science (Montana State University): Life, Death, and Evolution (Fall '16).
6. GEO 211 – Earth History and Evolution (Montana State University): Sedimentary Environments (Sp '16).
5. EARTH 101 – Earth System Science (Montana State University): Consilience and Deep Time (Sp '16).
4. EARTH 101 – Earth System Science (Montana State University): Life, Death, and Evolution (Sp '16).
3. Honors Presents: The Undergraduate Research Experience: A Paleontology Student's Perspective (Sp '16). [Invited](#)
2. FYRE: First Year Research Experience Program talk and Q&A: How to get started on research (Fall '15). [Invited](#)
1. Museum of the Rockies Volunteers: An Overview of Research, Fieldwork, and Lab Work Experience (Fall '15). [Invited](#)

Other Presentations

- Authored over 20 presentations at university conferences and colloquia (13 first-authored) (13 oral)
- Highlights:
 - Best 3rd-year student presentation in Ecology and Evolutionary Biology at the University of Reading's School of Biological Science Research Conference (2022)
 - People's Choice Prize winner at the University of Reading's Three-Minute Thesis Competition (2022)

Volunteer & Outreach

- Interview on *Patagotitan* exhibit at the London NHM, BBC Radio Berkshire with Andy Jones (Nov 30, '22)
- Interview on *Jurassic World: Dominion*, BBC Radio Berkshire with Katie Tyler (June 10, 2022)
- Interviews on BBC's *Dinosaurs: The Final Day*, BBC Radio Berkshire with Andy Jones (April 7 & 21, 2022)
- Organizer, Fossils Competition, Montana Science Olympiad, Montana State University (2021)
- Behind the Paper blog in *Nature Ecology & Evolution Community*
 - *Geographic Dispersal across the Tetrapod Water-Land Transition*; [March 19, 2020](#)
- Interviewee, graduate film semester project by Harrison Bach, Montana State University; [January 13, 2019](#)
- Montana State University Family Science Day (2018, '19)
- Co-organizer, Fossils Competition, Montana Science Olympiad, Montana State University (2018)
- National Fossil Day volunteer, Museum of the Rockies, MT (2018)
- Morning Star Elementary School STEM Expo (2018)
- Interviewee, Graduate School promotional video, Montana State University; [September 6, 2017](#)
- Scouts Day volunteer, 5 Dinosaur Families activity, Museum of the Rockies, MT (2017)
- Fossil preparation, field work, and exhibits (1,300+ hours), Museum of the Rockies, MT (2012–16)
- Organizer of the Annual Paleontology Symposium at Montana State University (2015, '16)
- Scouts Day volunteer, Make Your Own Dinosaur Dig activity, Museum of the Rockies, MT (2016)
- Volunteer Assistant AV-Technician (10 hrs) at the Geological Society of America annual meeting (2015)
- Montana State Renne Library Paleontology Exhibit (2015)
- SCOPE (Student Community Outreach ProjEcts) (2013–14)
 - Preparation, field work, exhibits, and curation (200+ hrs), Carter County Museum, MT
- Big Sky Breaks Away student volunteer assistant leader, Carter Country Museum, MT (Sp 2014)
- Destination Imagination volunteer official, Manhattan Elementary School, MT (2014)
- Volunteer program assistant (8 hrs) at the GSA Rocky Mountain/Cordilleran Section meeting (2014)
- Galapagos Islands Travel project (2013)
 - *Were there dinosaurs in the Galapagos Islands?* [May 9, 2013](#)

- Contributor, Galapagos Islands Travel Website for Montana Schools; [2013](#)
- AmpSurf volunteer: sharing the experience of surfing with veterans and citizens with disabilities (2012)

References

1. **Chris Organ**
Ph.D. supervisor
Department of Earth Sciences
Montana State University, Bozeman, MT, USA
organ@montana.edu
2. **Mark Pagel**
Postdoc supervisor at UoR
School of Biological Sciences
University of Reading, Reading, Berkshire, UK
m.pagel@reading.ac.uk
3. **David Varricchio**
Co-supervisor at MSU
Department of Earth Sciences
Montana State University, Bozeman, MT, USA
djv@montana.edu
4. **Chris Venditti**
Postdoc supervisor at UoR
School of Biological Sciences
University of Reading, Reading, Berkshire, UK
c.d.venditti@reading.ac.uk