Chris Organ

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Department of Earth Sciences
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Curriculum Vitae
05/10/2021

Appointments

2013- Assistant Research Professor, Department of Earth Sciences, Montana State University
2017-19 Senior Bioinformatician & Administrative Core, IDeA Network of Biomedical Research Excellence (INBRE, NIH), Montana State University
2017-19 Director/Chair, Directed Interdisciplinary Studies, Honors College, Montana State University
2014-19 Assistant Teaching Professor, WIMU Program in Veterinary Medicine, Department of Microbiology & Cell Biology, Montana State University
2010-12 Scientist II, Department of Genetics and Genomics, Biogen
2010 Research Scientist, Ragon Institute, MGH, MIT & Harvard
2009 Visiting Professor, Department of Ecology and Evolutionary Biology, Brown University
2005-10 Postdoctoral Fellow, Department of Organismic & Evolutionary Biology, Harvard University, advisor: Scott Edwards

Consulting

2021 Manager, Data Science, BioStat Solutions
2020 Bioinformatics Staff Scientist, Integrated DNA Technologies

Education

2004 Ph.D. Montana State University, Biological Sciences, advisor: Jack Horner
1996 B.S. Michigan State University, Material Science

Certifications

2021 Python Programmer Career Certificate, DataCamp
2020 Data Scientist with Python Career Certificate, DataCamp
2020 Machine Learning Fundamentals Certificate, DataCamp

Publications (bolded numbers indicate student co-authors)

50. Surya, K. and C. Organ. Molecular branch lengths describe trait evolution better than time. (in review).
49. Keller, L., J. D. Gardner, and C. L. Organ. Dinosaurs don't follow Bergmann's Rule (in review).
48. LaBarge, T. W. and C. L. Organ. A bayesian reanalysis of Phorusrhacidae and the evolution of gigantism (in review).
47. Surya, K., J. D. Gardner, C. L. Organ. SARS-CoV-2 evolution is punctuated. (in review).
46. Krumenacker, L. J., J. Gardner, D. Varricchio, D. Bowen, T. Dyman, and C. Organ. (*accepted*). The phylogenetic relationships of Orodrominae. *Journal of Vertebrate Paleontology*.
45. Gardner, J. and C. L. Organ (2021). Evolutionary sample size and consilience in phylogenetic comparative analysis. *Journal of Systematic Biology*. doi.org/10.1093/sysbio/syab017.
44. Gemmell, N.J., Rutherford, K., Prost, S. et al. (2020). The tuatara genome reveals ancient features of amniote evolution. *Nature.* https://doi.org/10.1038/s41586-020-2561-9.
43. Gardner, J., M. Laurin, and C. L. Organ (2020). The relationship between genome size and metabolic rate in extant vertebrates. *Philosophical Transactions of the Royal Society B*. (375): 1793. https://doi.org/10.1098/rstb.2019.0146.

42. Gardner, J., K. Surya, and C. L. Organ (2019). Early tetrapodomorph biogeography: controlling for fossil record bias in macroevolutionary analyses. *Comptes Rendus Palevol*. 18 (7): 693-908. doi.org/10.1016/j.crpv.2019.10.008.
41. Organ, C. L. (2018). Biogeography across the ages. *Nature Ecology & Evolution.* doi:10.1038/s41559-018-0486-6.
40. Jun Liu, J., C. L. Organ, M. J. Benton, M. C. Brandley, and J. C. Aitchison (2017). Live birth in an archosauromorph reptile. *Nature Communications:* 14445. doi:10.1038/ncomms14445.
39. Gates, T. D., C. L. Organ, and L. Zanno. (2016). Bony cranial ornamentation linked to rapid evolution of gigantic theropod dinosaurs. *Nature Communications.* doi: 10.1038/ncomms12931.
38. Wilson, J. P., J. D. Woodruff, J. Gardner, H. Flora, J. R. Horner, and C. L. Organ. (2016). Vertebral adaptations to large body size in theropod dinosaurs. *PLoS ONE 11(7): e0158962.* doi:10.1371/journal.pone.0158962*.*
37. Organ, C. L., M. Struble, A. Canoville, V. de Buffrénil, and M. Laurin. (2016). Macroevolution of genome size in sarcopterygians during the water-land transition. *Comptes Rendus Palevol*. 15: 67-75.
36. Laurin, M., A. Canoville, M. Struble, C. L. Organ, and V. de Buffrénil. (2016). Early genome size increase in urodeles. *Comptes Rendus Palevol*. 15: 77–85.
35. Moore, T. Y., C. L. Organ, S. V. Edwards, A. Biewener, C. Tabin, F. A. Jenkins, and K. L. Cooper. (2015). Multiple phylogenetically distinct events shaped the evolution of limb skeletal morphologies associated with bipedalism in the jerboas. *Current Biology*. 25(21): 2785–2794.
34. Organ, C. L., L. N. Cooper, and T. L. Hieronymus. (2015). Macroevolutionary developmental biology: embryos, fossils, and phylogenies. *Developmental Dynamics*. doi:10.1002/dvdy.24318.
33. Janes, D. E., C. L. Organ, R. Stiglec, D. O'Meally, S. D. Sarre, A. Georges, J. A. M. Graves, N. Valenzuela, R. A. Literman, K. Rutherford, N. Gemmell, J. B. Iverson, J. W. Tamplin, S. V. Edwards, and T. Ezaz. (2014). Molecular evolution of *Dmrt1* accompanies change of sex-determining mechanisms in Reptilia. *Biology Letters.* 10: 20140809*.*
32. Rashid, D. J., Chapman, S. C., Larsson, H. C. E., Organ, C. L., Bebin, A.-G., Merzdorf, C., Bradley, R., and J. R. Horner. (2014). From dinosaurs to birds: a tail of evolution*. EvoDevo*. *5:25.*
31. Wu, S., F. Zhang, S. V. Edwards, J. Ye, W. Wu, X. Ni, C. Quan, J. Meng, and C. Organ. (2014). The evolution of bipedalism in jerboas (rodentia: dipodoidea): origin in humid and forested environments. *Evolution.* 68-7: 2108–2118.
30. Amemiya, C. T. *et. al.* (2013). Comparative analysis of the genome of the African coelacanth, *Latimeria chalumnae*, sheds light on tetrapod evolution. *Nature*. (496): 311-316. **Cover article*
29. Organ, C. L. (2013). Origins of Cooking. *In McGraw Hill 2013 Yearbook of Science & Technology.* McGraw-Hill Publishers, New York, NY.
28. Friedlander, S. M., A. L. Herrmann, D. P. Lowry, E. R. Mepham, M. Lek, K. N. North, and C. L. Organ. (2013). *ACTN3* allele frequency in humans covaries with global latitudinal gradient. *PLoS One*. 8(1): e52282.
27. Organ, C. L. (2012). Genomics and the lost world: paleontological insights into genome evolution. *In Clone to Bone: The Synergy of Morphological and Molecular Tools in Palaeobiology*. (Eds.) R. Asher and J. Mueller. Cambridge University Press. 16-37.
26. Wu, S., Wu, W., Zhang, F., Ye, J., Ni, X., Sun, J., Meng, J., Edwards, S. V., and C. L. Organ. (2012). Molecular and Paleontological evidence for a post-Cretaceous Origin of Rodents. *PLoS One*. 7(10): e46445.
25. Organ, C. L., Z. Machanda, R. Wrangham, and C. Nunn. (2011). Phylogenetic rate shifts in chewing time during the evolution of *Homo*. *Proceedings of the National Academy of Sciences, USA*. 108 (35): 14555-14559.
24. Alfoldi, J. et. al. (2011). The genome of the green anole lizard and a comparative analysis with birds and mammals. *Nature*. 477(7366): 587-591.
23. Janes, D.E., C. Chapus, Y. Gondo, D.F. Clayton, S. Sinha, C. A. Blatti, C.L. Organ, M. Fujita, C.N. Balakrishnan, and S.V. Edwards (2011). Reptiles and mammals have differentially retained long

conserved noncoding sequences from the amniote ancestor. *Genome Biology and Evolution*. 3: 102-113.

22. Organ, C. L., A. Canoville, R. R. Reisz, and M. Laurin. (2011). Paleogenomic data suggest mammal-like genome size in the ancestral amniote and derived large genome size in amphibians. *Journal of Evolutionary Biology*. 24: 372–380.

21. Organ, C. L. and S. V. Edwards (2011). Major Events in the Evolution of the Avian Genome. *In The Evolution of Modern Birds*. (Eds.) G. Dyke and G. Kaiser. University of California Press. 325-337.

20. Janes, D. E., C. L. Organ, M. K. Fujita, A. M. Shedlock, and S. V. Edwards. (2010). Genome Evolution in Reptilia, the Sister Group of Mammals. *Annual Review of Genomics and Human Genetics*. 11: 239-264.

19. Janes, D. E., C. L. Organ, and S. V. Edwards. (2010). Variability in sex-determining mechanisms influences genome complexity in reptiles. *Cytogenetic and Genome Research*. 127:242-248.

18. Organ, C. L.*, M. Rasmussen*, M. W. Baldwin, M. Kellis, and S. V. Edwards (2010). A Phylogenomic Approach to the Evolutionary Dynamics of Gene Duplication in Birds. *In Evolution After Gene Duplication.* (Eds.) K. Dittmar and D. Liberles. Wiley & Sons. 253-268. *contributed equally.

17. Baldwin, M. W., Winkler, H., Organ, C. L., Helm, B. (2010). Wing pointedness associated with migratory distance in common-garden and comparative studies of stonechats (*Saxicola torquata*). *Journal of Evolutionary Biology*, 23(5):1050-1063.

16. Organ, C. L., D. E. Janes, A. Meade, and M. Pagel (2009). Genotypic sex determination enabled adaptive radiations of extinct marine reptiles. *Nature*. 461: 389-392. *[selected as a "must read" at the Faculty of 1000]*

15. Organ, C. L., S. Brusatte, and K. Stein (2009). Sauropod dinosaurs evolved moderately sized genomes unrelated to body size. *Proceedings of the Royal Society, B*.

14. Schweitzer, M. H., W. Zheng, C. L. Organ, R. Avci, Z. Suo, L. M. Freimark, V. S. Lebleu, M. B. Duncan, M. G. Vander Heiden, J. M. Neveu, W. S. Lane, J. S. Cottrell, J. R. Horner, L. C. Cantley, R. Kalluri, and J. M. Asara (2009). Biomolecular characterization and protein sequences of the Campanian hadrosaur *B. canadensis*. *Science*. 324: 626-361.

13. Organ, C. L. and A. M. Shedlock (2009). Paleogenomics of pterosaurs and the evolution of small genome size in flying vertebrates. *Biology Letters*. 5: 47–50.

12. Organ, C. L., R. Godinez Moreno, and S. V. Edwards (2008). Three tiers of genome evolution in reptiles. *Integrative and Comparative Biology*. 48(4): 494-504.

11. Organ, C. L. and D. Janes (2008). Evolution of sex chromosomes in Sauropsida. *Integrative and Comparative Biology*. 48(4): 512-519.

10. Organ, C. L. (2008). Paleogenomics. Pp. 249-251. *In McGraw Hill 2008 Yearbook of Science & Technology*. McGraw-Hill Publishers, New York, NY.

9. Janes, D. E., C. L. Organ and N. Valenzuela (2008). New resources inform study of genome size, content and organization in non-avian reptiles. *Integrative and Comparative Biology*. 48(4): 447-453.

8. Organ, C. L., M. H. Schweitzer, W. Zheng, L. M. Freimark, L. C. Cantley, J. M. Asara (2008). Molecular phylogenetics of mastodon and *Tyrannosaurus rex*. *Science*. 320 (5875): 499.

7. Organ, C. L., A. M. Shedlock, A. Meade, M. Pagel, S. V. Edwards. (2007). Origin of avian genome size and structure in non-avian dinosaurs. *Nature*. 446: 180-184.

6. Holmes, R. and C. L. Organ. (2007). An ossified tendon trellis in *Chasmosaurus* (Ornithischia: Ceratopsidae). *Journal of Paleontology*. 81(2): 411–414.

5. Organ, C. L. (2006). Biomechanics of ossified tendons in ornithopod dinosaurs. *Paleobiology*. 32(4): 649–662.

4. Organ, C. L. (2006). Thoracic epaxial muscles in living archosaurs and ornithopod dinosaurs. *The Anatomical Record Part A: Discoveries in Molecular, Cellular, and Evolutionary Biology*. 288A: 782-793.

3. Organ, C. L. and J. Adams. (2005). The histology of ossified tendon in dinosaurs. *Journal of Vertebrate Paleontology*. 25 (3): 602-613.
2. Adams, J. and C. L. Organ. (2005). Histologic determination of ontogenetic patterns and processes in hadrosaurian ossified tendons. *Journal of Vertebrate Paleontology*. 25 (3): 614-622.
1. Organ, C. L., J. B. Cooley, and T. L. Hieronymus. (2003). A non-invasive quarry mapping system. *Palaios*. 18(1): 74-77.

Grants

12. Franklin Education Foundation: Summer Research Internship Mentor Program. PI. $32,000.
11. NIH: award# 2 P20 GM103474-19 (2019-2023). MT INBRE: A Multidisciplinary Research Network. Senior Bioinformatician & Administrative Core. $18,077,970.
10. NSF: award# 1735124 (2017-2020). NRT-IGE: Nelson Story STEM Fellowship Program. Co-PI. $481,482.
9. Paleontological Society (2017). Invited Speaker Award. $400.
8. Montana State University Faculty Improvement Grant (2016). Discussing Science Outside of the Laboratory. Co-PI. $8,000.
7. Harvard Postdoctoral Travel Grant (2009) $1,000.
6. NSF: Reptile Genomics and Evolutionary Genetics Symposium (2007). Co-PI. $6,749.
5. Society for Integrative and Comparative Biology Symposium Grant (2008). Reptile Genomics and Evolutionary Genetics Symposium. Co-PI. $5,225.
4. Harvard Department of OEB Travel Grant (2007) $1,500.
3. NIH: award# 5F32GM075490-03 (2005-2007). NSRA Postdoctoral Fellowship: Evolution of *Bmp* Genes 2 and 4 in Archosaurs. $142,200.
2. International Society of Biomechanics, Dissertation Grant (2001). The Evolution of Tail Deflection and Erect Posture Synapsida and Diapsida. $4,000.
1. West Shore Art League Scholarship. (1991-1992). $3,000.

Teaching

Curriculum Design

2012-13 Science Curriculum, Daniels Academy: Curriculum design for private high school, Park City, Utah

2002-04 Howard Hughes Medical Institute, Undergraduate Biology Curriculum Improvement: Improving quantitative reasoning and skills in biology, Montana State University

Course Instructor [average evaluation = 93%]

20. Macroevolution, MSU (x1)
19. Biogeography, MSU (x1)
18. 21st Century Biology, MSU (x2), Eval: 97%
17. Cell Physiology, MSU & WSU (x6), Eval: 4.5/5.0
16. Comparative Vertebrate Anatomy, MSU (x5), Eval: 4.5/5
15. Dinosaurs!, MSU (x4), Eval: 4.6/5
14. Dinosaur Paleontology, MSU (x1), Eval: 4.9/5.0
13. Earth History and Evolution, MSU (x4), Eval: 4.6/5.0
12. Evolution and Diversity, University of Utah (x1), Eval: 5.7/6
11. Evolution, MSU (x2), with Matt Lavin and Kevin O'Neil
10. Evolutionary Biology, Brown University (x1)
9. Honors Evolution, MSU (x1)
8. Honors Seminar: Texts & Critics, MSU (x1), Eval: 4.75
7. Honors Seminar: Ultimate Cause of a Dog: How We Encounter Reality, MSU (x1), Eval: 4.9/5.0
6. Martial Philosophies of Asia, MSU (x3), Eval: 5.60/6.00
5. Phylogenetics, MSU (x1), with Matt Lavin

4. Survey of Evolutionary Biology, Harvard (x2), with Scott Edwards, Eval: 4.6/5.0
3. Taekwondo, MSU (x10), Eval: 4.9/5.0
2. Vertebrate Paleontology, MSU (x1), Eval: 4.9/5.0
1. Zoology, Simmons College (x2)

Teaching Fellow/Assistant [average evaluation = 90%]

5. Biology of Organisms, MSU (x1)
4. Comparative Vertebrate Anatomy, MSU (x3)
3. Foundations of Biological Diversity, Harvard (x1), Eval: 4.49/5.0
2. Genetics and Genomics, Harvard (x1), Eval: 4.45/5.0
1. Understanding Darwinism, Harvard (x1), Eval: 4.45/5.0

Undergraduates Mentored in Research (n=22)

Tanner Barney (2021-2021, MSU)
Sarah Montalbano (2018-2019, MSU)
Rudy Hummel (2016-2019, MSU)
Carolyn Kocken (2016-2019, MSU)
Isabelle Brenes (2016-2019, MSU)
John Wilson (2016-2018, MSU)
Holley Flora (2014-2016, MSU)
Angela Desmond (2010-2012, Boston College)
Amanda Herrmann (2009, Brown University)
Emily Mepham (2009, Brown University)
Jason Adams (1999-2003, MSU)
Lauren Keller (2021-2021, MSU)
Gia Fisher (2017-2019, MSU)
Kevin Surya (2016-2019, MSU)
Thomas LaBarge (2016-2019, MSU)
Kevin Jones (2016-2018, MSU)
Mikayla Struble (2013-2016, MSU)
Jacob Gardner (2014-2016, MSU)
Scott Friedlander (2009, Brown University)
Daniel Lowry (2009, Brown University)
Raelene Zospah (1999-2004, MSU)
Martha Middlebrooks (2000-2003, MSU)

Graduate Advising

7. Kevin Surya, PhD Advisor, Montana State University (2020-)
6. Jacob Gardner, PhD Advisor, Montana State University (2016-)
5. Isaura Aguilar, Masters Committee Member, Montana State University (2018-2019)
4. William Freimuth, Masters Committee Member, Montana State University (2017-2019)
3. Hogan, Jason, PhD Committee Member, Montana State University (2016-2019)
2. L.J. Krumenacker, PhD Committee Member, Montana State University (2016-2017)
1. Garrett Scofield, Masters Committee Member, Montana State University (2015-2018)

Professional Service

Memberships

- Society for the Study of Evolution
- Society for Vertebrate Paleontology
- European Society for Evolutionary Biology
- International Society for Evolution, Medicine, & Public Health
- Council on Undergraduate Research

Research Groups

2015-20 Tuatara Genome Group
2010-13 Coelacanth Genome Group
2009-11 *Anolis* Genome Group

Service to Profession

2016 Reviewer for *Evolution* (4th ed), Macroevolution chapter. Textbook by Doug Futuyma and Mark Kirkpatrick
2015-19 Editorial review board, *Journal of Evolutionary Biology*

2011-19 Editorial review board, *Frontiers in Ecology and Evolution*
2011-19 Editorial review board, *Frontiers in Earth Science*
2011-18 Editorial review board, *Frontiers in Genetics*
2011 Reviewer for *Evolution: Making Sense of Life*. Textbook by Carl Zimmer and Douglas Emlen
2009-11 Board, Science for the Public

- Grant reviewer (n=18): National Science Foundation, Royal Society of New Zealand Marsden Fund, European Research Council, The Leverhulme Trust
- Peer reviewer (n=175): *Nature, Nature Communications, Nature Ecology & Evolution, Proceedings of the Royal Society, Journal of Vertebrate Paleontology, Trends in Genetics, Trends in Ecology & Evolution, Global Change Biology, Biology Letters, Heredity, Journal of Anatomy, Frontiers in Genetics, Molecular Biology and Evolution, Systematic Biology, Evolution, BioEssays, Comptes rendus Palevol, Genome, Journal of Experimental Biology, PeerJ, PLoS One*

Departmental/University Service

2017-21 Presidential Scholarship Selection Committee, Honors College
2017-19 Chair, Faculty Advisory Committee, Directed Interdisciplinary Studies Degree Program
2017-19 Honors College Advisory Council
2017-18 Cameron Presidential Scholarship Selection Committee, Honors College
2015-18 Core 2.0 Steering Committee
2013-15 Faculty sponsor for the Montana State University Taekwondo Club
2013-15 Faculty sponsor for the Montana State European Medieval Fencing Club
2003 Search committee member, Dean, Museum of the Rockies

Invited Seminars

2021 Washington University. Deep-Time Data Science.
2020 LifeMine. Adventures in Phyloinformatics.
2019 Purdue University. Phylogenetic Data Science: Interdisciplinary Solutions using Evolutionary Modelling.
2016 Northeast Ohio Medical University. Sex Across Time: The Macroevolutionary Dynamics of Sex Chromosomes.
2016 University of Montana. Sex Chromosome Macroevolution & The Reproductive Biology of Dinosaurs.
2014 University of Mexico. Genome Macroevolution: Integrating NGS with Paleobiology.
2013 La Trobe University, Melbourne, Australia. Using Evolutionary Trees to Understand the Rise of the Human Species.
2013 La Trobe University, Melbourne, Australia. Genome Macroevolution: Insights from Genes, Phylogenies, & Fossils.
2012 Center for Scientific Research, Paris. Evolution of Sex Chromosomes: Using Comparative Methods to Study Traits That Do Not Fossilize.
2011 University of Wisconsin, Parkside. Macroevolution of Sex Chromosomes.
2011 Washington & Lee University. Phyloinformatics: using trees to study genomes, fossils, and disease.
2010 University of Massachusetts Medical School. Phylogenetic Methods for Studying Genomes and Disease.
2010 Michigan Technological University. Macroevolution: Biology in Deep Time.
2010 Worcester Polytechnic. Understanding Biology with Phylogenies and Fossils.
2010 Brown University. Integrating Biology with phylogenetic Comparative Methods.
2010 University of Chicago. Below the Surface: Discovering Biology with Trees and Fossils.
2009 American Museum of Natural History. Retrodiction.
2009 Novartis Pharmaceuticals. The Power of Phylogeny.

2009 Harvard University. Retrodiction: Phylogenetic Comparative Methods for Predicting the Past.
2009 SUNY Oswego. Beyond Homology and Analogy with Phylogenetic Comparative Methods.
2008 Miami University. Integrating Genomics and Paleontology.
2008 University of Wisconsin, Madison. Paleogenomics.
2008 Montana State University. There and Back Again.
2008 Ohio Wesleyan University. Paleogenomics: Teaching Old Bones New Tricks, Comparatively.
2007 University of Wisconsin, La Crosse. Paleogenomics: Genome Biology, Evolution, & the Fossil Record.
2007 Northern Michigan University. Paleogenomics: Genome Biology and Evolution.
2006 University of New Hampshire. The Genomes of Giants: Genome Evolution within the Dinosauria.
2006 University of Illinois, Urbana-Campaign. From the Fossils of Cells: Genome Architecture.

Awards & Outreach

Awards & Honors

2019 Cox Faculty Award for Creative Scholarship and Teaching (nominated)
2019 President Excellence in Teaching Award (nominated)
2019 Provost award undergraduate research creativity mentoring (nominated)
2018 Ron Wasserstein Award, Best Paper in Statistics Education for "STEM Storytellers, Improving Graduate Students' Oral Communication Skills".
2018 MSU's 125th Anniversary Celebration, Highlighted Faculty, Research Symposium
2017 Keynote Speaker, Paleogenomics Symposium. Geological Society of America, Seattle
2013 Keynote Speaker, Systems Biology Workshop, La Trobe University, Melbourne, Australia
2009 Research Feature in *Cell* (Issue 139, October 30, 2009)
2009 Bio featured in Abstractions column, *Nature* (Vol 461, Issue no. 7262, 2009)
2009 Faculty of 1000, “must read” paper (for Organ et. al. *Nature* 2009)
2007,13 Keynote Speaker, recruitment event for Molecular Biosciences Program, MSU
2005,08 Faculty Appreciation Dinner, Harvard University, student nominated
2004 Teacher Appreciation Day, Montana State University, student nominated

Engagement with the Media

- Consultant, '¡Boom!' tv quiz show, Spain (2021)
- Consultant, Trail Blazers TV series, The Discovery Channel (2015)
- Consultant for the series: Dinosaurs of North America, The Discovery Channel (2000)
- “For Extinct Monsters of the Deep, a Little Respect” NYT article by Sean B. Carroll (March 22, 2010)
- “Jurassic Genome” News focus in *Science* by Carl Zimmer (March, 2007)
- Other Media Coverage: NIH and NSF homepages, Computing Life (NIH educational publication), WIRED Magazine, National Geographic, New York Times, Washington Post, USA Today, Telegraph, Boston Globe, Science News, Cosmos Magazine, Discover Magazine, Science and Vie, Science Magazine, Nature, Heredity, Arstechnica.com, Slate.com, ScienceDaily.com, Museum of the Rockies, NBC, ABC, CNN, the Discovery Channel, BBC, NPR, Celebrity Science Club (Japanese TV show), Muse, Quanta Magazine, Scientific American, and dozens of U.S. and international newspapers.

Community Seminars/Outreach

2021 Dinosaur Rainbows: Vision & Color in Dinosaurs (Morning Star Elementary)
2015 Museum of the Rockies. Macroevolution: News ways to harness fossils and phylogenies
2015 WonderLust. Genomics: the information age of biology
2013 Museum of Science, Boston. Triceratops Symposium, Organizer and Speaker

2009 Boston Public Library. The Jurassic genome: discovering biology with fossils
2007 Nerd Night, Boston. Artisan breads for everyone
2006 Nerd Night, Boston. Dinosaur cells and *tyrannosaurus'* backache
2006 Marblehead Public School. Paleogenomics: the genomes of dinosaurs
2005 Traverse City Public Library. The biology of duckbill dinosaurs
1996 East Lansing High School. Biomechanics

Professional Development
2012 Project Based Learning Short Course, High Tech High, San Diego, CA
2011 Leadership Training Course, Biogen Idec, Cambridge, MA
2011 Complete Genomics Short Course, Boston, MA
2010 Complete Genomics Short Course, Boston, MA
2006 UCSC Genome Browser Short Course, Boston, MA

Conference Activity

Organized Workshops & Symposia
2018 Creative Inquiry and Undergraduate Research in the Arts and Humanities
2011-12 Phylogenetic Methods, Workshop at SVP, Organizer with Chris Venditti
2010 Bayesian Comparative Methods, workshop at Harvard, Organizer with Andrew Meade
2008 Reptile Genomics and Evolutionary Genetics. SICB, San Antonio. Organizer with Dan Janes
2008 Analytical Molecular Paleontology. Panelist. North Carolina State University

Presentations
52. Gardner, J. and C. Organ. Evolutionary sample size and consilience in phylogenetic comparative analysis (2021). Evolution (SSE).
51. Aguilar-Pedrayes, I, C. Organ, J. D. Gardner, and D. Varricchio (2020). Facial keratin and tooth presence: Coevolution of traits in dinosaurs. Society of Vertebrate Paleontology.
50. LaBarge, T. and C. Organ (2020). A Bayesian Reanalysis of Phorusrhacidae and the Evolution of Gigantism. Society of Vertebrate Paleontology.
49. LaBarge, T. and C. Organ (2020). The Interrelationships of Phorusrhacidae and the Evolution of Gigantism. NCUR.
48. Sakamoto, M., C. Organ, J. Baker, M. Benton, A. Meade, M. Pagel, and C. Venditti (2019). Different evolutionary dynamics govern body size evolution in dinosaur groups. Palaeontological Association.
47. Surya, K. and C. Organ (2019). Do branch lengths in time or substitutions better represent trait evolution? NCUR.
46. Surya, K. and C. Organ (2019). Does Trait Evolution Follow Time or Genetic Substitution? Evolution (SSE).
45. Green, J. L., S. D. Willoughby, LaMeres, B. J., B. E. Hughes, L. B. Sterman, C. L. Organ, and E. K. Davis (2019). The Art of Storytelling: Engaging Audiences with Podcasts and Curiosity Cafes. Joint Statistical Meetings.
44. LaMeres, B. J., S. D. Willoughby, C. L. Organ, J. L. Green, B. E. Hughes, E. K. Davis and L. B. Sterman (2019). Using Improvisational Acting Techniques to Improve the Oral Communication Skills of STEM Graduate Students. American Society for Engineering Education.
43. Sakamoto, M., Organ, C., Baker, J., Benton, M., Meade, A., Pagel, M., and C. Venditti (2018) Different evolutionary dynamics govern body size evolution in dinosaur groups. Palaeontological Association.
42. Organ, C. L. and G. Fisher. (2018) Analyzing Cellular Traits with Developmental Phylogenetics. International Society for Evolution, Medicine, and Public Health.

41. Willoughby, S., Hughes, B., Sterman, L., Organ, C., La Meres, B., and G. Green (2018) STEM Storytellers: Improving Graduate Students' Oral Communication Skills. American Association of Physics Teachers.
40. Gates, T. A., L. E. Zanno, and C. L. Organ (2018) Quantifying the Evolution Of Theropod Cranial Ornaments. Society of Vertebrate Paleontology.
39. Jennifer L. Green, J. L., S. Willoughby, B. LaMeres, B. Hughes, L. Sterman, C. Organ, and K. Davis (2018) STEM Storytellers: Improving Graduate Students' Oral Communication Skills. Joint Statistical Meetings.
38. Fisher, G. and C. L. Organ. (2018) How is Cancer Incidence Driven by Stem Cell Division Rate? NCUR.
37. Surya, K. and C. L. Organ. (2018) Which Phylogeny Better Fits Species Trait Data: Time or Molecular Tree? NCUR.
36. LaMeres, B. J., S. D. Willoughby, C. L. Organ, J. L. Green, B. E. Hughes, E. K. Davis and L. B. Sterman (2018). STEM Storytellers: Improving the Oral Communication Skills of STEM Graduate Students. American Society for Engineering Education.
35. Surya, K., L. W. Viñola-López, I. Brenes, J. D. Gardner, C. L. Organ, and D. J. Varricchio. (2017) Pelvic Sexual Dimorphism in Modern Birds (Aves: Neornithes) and Its Evolutionary Relationship with Relative Egg Size. NCUR.
34. Organ, C. L. (2017) Genome macroevolution: insights from fossils and phylogenies. Geological Society of America.
33. Gardner, J. and C. Organ. (2017) The macroevolutionary dynamics of vertebrate genome size. Geological Society of America.
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