

# Evan Thomas Saitta, Ph.D.

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## Appointments

<b>The Field Museum of Natural History</b>	Research, Advising, Outreach, & Fundraising
Research Associate, Negaunee Integrative Research Center, Life Sciences Section	2020-present
Bass Postdoctoral Researcher, Negaunee Integrative Research Center, Earth Sciences Section	June 2018-June 2020
Supervisor: Dr. Peter Makovicky	
<b>The University of Chicago</b>	Research, Teaching, & Outreach
Postdoctoral Scholar, Biological Sciences Division, Dept. of Organismal Biology and Anatomy	Oct. 2021-Dec. 2024
Supervisor: Dr. Paul Sereno	
<b>Benedictine University (Lisle, IL)</b>	Teaching
Adjunct Lecturer, Biological Sciences	Fall 2025
Courses taught: BIOL 4364 Ecology Laboratory; BIOL 1199 Principles of Biology Lab	
<b>The University of Illinois Chicago</b>	Teaching
Adjunct Lecturer, Dept. of Earth and Environmental Sciences	Spring 2022
Course taught: EAES/BIOS 360 Introduction to Paleontology	

## Education

<b>The University of Bristol (U.K.)</b>	#1 paleontology research group globally ( <i>Center for World University Rankings 2017</i> ) Russell Group
Ph.D. in Geology	2015-April 2018 (viva), Jan. 2019 (graduation ceremony)
Advisor: Dr. Jakob Vinther	
Thesis: "The taphonomy of soft tissues and the evolution of feathers"	
M.Sc. ( <i>Distinction</i> ) in Palaeobiology	2014-2015 (submission), Jan. 2016 (graduation ceremony)
Advisor: Dr. Jakob Vinther	
Thesis: "The taphonomy of keratin in archosaurs"	
<b>Princeton University</b>	#1 U.S. university ( <i>U.S. News &amp; World Report 2010, 2012-2014</i> ) Ivy League
B.A. ( <i>Magna Cum Laude</i> ) in Ecology and Evolutionary Biology	2010-2014
Advisor: Dr. James Gould	
Thesis: "Paleobiology of North American stegosaurs: Evidence for sexual dimorphism"	

## Publications

*h*-index = 17; *i10*-index = 17

(Year indicates date of initial online publication)

25) Sereno, PC, Vidal, D, Myrhvold, NP, Johnson-Ransom, E, Ciudad Real, M, Baumgart, SL, Sánchez Fontela, N, Green, TL, **Saitta, ET**, Adamou, B, Bop, LL, Keillor, TM, Fitzgerald, EC, Dutheil, DB, Laroche, RAS, Demers-Potvin, AV, Simarro, A, Gascó-Lluna, F, Lázaro, A, Gamonal, A, Beightol, CV, Reneleau, V, Vautrin, R, Bertozzo, F, Granados, A, Kinney-Broderick, G, Mallon, JC, Lindoso, RM, and Ramezani, J (Accepted, In press) **New scimitar-crested *Spinosaurus* species in riparian habitat caps stepwise spinosaurid radiation.** *Science*.

24) Sereno, PC, **Saitta, ET**, Vidal, D, Myrhvold, N, Ciudad Real, M, Baumgart, SL, Bop, LL, Keillor, TM, Erickson, M, and Derstler, K (2025) **Duck-billed dinosaur fleshy midline and hooves reveal terrestrial clay-template "mummification".** *Science* 391(6780), 1-15. <https://doi.org/10.1126/science.adw3536>

Altmetric score: 2,144

23) Prado, GMEM, Salvato, RCJPS, Becker-Kerber, B, Silva, EP, Pinheiro, FL, Osés, GL, Galante, D, Rodrigues, F, Dias, JJ, de Souza Carvalho, I, **Saitta, ET**, Lino, LM, and Anelli, LE (2025) **Fossil fish provide evidence of geomelanin preservation with implications on the visual accuracy of an extinct fish species.** *Lethaia* 58(3), 1-17. <https://doi.org/10.18261/let.58.3.7>

22) **Saitta, ET**, and Kaye, TG (2025) **Experimental maturation of pine resin in sediment to investigate the formation of synthetic copal and amber.** *Scientific Reports* 15, 7627. <https://doi.org/10.1038/s41598-025-89448-5> *Altmetric score: 45*

21) **Saitta, ET**, Balaji, L, Mitchell, JS, and Makovicky, PJ (2025) **Feather evolution following flight loss in crown group birds: relaxed selection and developmental constraints.** *Evolution* 79(5), 737-751. <https://doi.org/10.1093/evolut/qpaf020> *Altmetric score: 122*

20) Myhrvold, NP, Baumgart, SL, Vidal, D, Fish, FE, Henderson, DM, **Saitta, ET**, and Sereno, PC (2024) **Diving dinosaurs? Caveats on the use of bone compactness and pFDA for inferring lifestyle.** *PLoS ONE* 19(3), e0298957. <https://doi.org/10.1371/journal.pone.0298957> *Altmetric score: 747*

19) Longrich, NR, and **Saitta, ET** (2024) **Taxonomic status of *Nanotyrannus lancensis* (Dinosauria: Tyrannosauroidea) – a distinct taxon of small-bodied tyrannosaur.** *Fossil Studies* 2(1), 1-65. <https://doi.org/10.3390/fossils2010001> *Altmetric score: 832*

18) **Saitta, ET**, Vinther, J, Crisp, MK, Abbott, GD, Wheeler, L, Presslee, S, Kaye, TG, Bull, I, Fletcher, I, Chen, X, Vidal, D, Sanguino, F, Buscalioni, AD, Calvo, J, Sereno, PC, Baumgart, SL, Pittman, M, Collins, MJ, Sakalauskaitė, J, Mackie, M, Dal Bello, F, Dickinson, MR, Stevenson, MA, Donohoe, P, Heck, PR, Demarchi, B, and Penkman, KEH (2023) **Non-avian dinosaur eggshell calcite can contain ancient, endogenous amino acids.** *Geochimica et Cosmochimica Acta* 365, 1-20. <https://doi.org/10.1016/j.gca.2023.11.016> *Altmetric score: 141*

17) Roy, A, Pittman, M, Kaye, TG, and **Saitta, ET** (2023) **Sediment-encased pressure-temperature maturation experiments elucidate the impact of diagenesis on melanin-based fossil color and its paleobiological implications.** *Paleobiology* 49(4), 712-732. <https://doi.org/10.1017/pab.2023.11>

16) Mayr, G, Kaye, TG, Pittman, M, **Saitta, ET**, and Pott, C (2020) **Reanalysis of putative ovarian follicles suggests that Early Cretaceous birds were feeding not breeding.** *Scientific Reports* 10, 19035. <https://doi.org/10.1038/s41598-020-76078-2> *Altmetric score: 46*

15) **Saitta, ET**, Stockdale, MT, Longrich, NR, Bonhomme, V, Benton, MJ, Cuthill, IC, and Makovicky, PJ (2020) **Invited Review: An effect size statistical framework for investigating sexual dimorphism in non-avian dinosaurs and other extinct taxa.** *Biological Journal of the Linnean Society* 131(2), 231-273. <https://doi.org/10.1093/biolinnean/blaa105> *Altmetric score: 296*

14) Liang, R, Lau, MCY, **Saitta, ET**, Garvin, ZK, and Onstott, TC (2020) **Genome-centric resolution of novel microbial lineages in an excavated *Centrosaurus* dinosaur fossil bone from the Late Cretaceous of North America.** *Environmental Microbiome* 15, 8. <https://doi.org/10.1186/s40793-020-00355-w> *Altmetric score: 199*

13) **Saitta, ET**, and Vinther, J (2019) **A perspective on the evidence for keratin protein preservation in fossils: an issue of replication versus validation.** *Palaeontologia Electronica* 22.3.2E, 1-30. <https://doi.org/10.26879/1017>

12) Roy, A, Pittman, M, **Saitta, ET**, Kaye, TG, and Xu, X (2019) **Recent advances in amniote palaeocolour reconstruction and a framework for future research.** *Biological Reviews* 95(1), 22-50. <https://doi.org/10.1111/brv.12552> *Altmetric score: 63*

11) **Saitta, ET**, Liang, R, Lau, MCY, Brown, CM, Longrich, NR, Kaye, TG, Novak, BJ, Salzberg, SL, Norell, MA, Abbott, GD, Dickinson, MR, Vinther, J, Bull, ID, Brooker, RA, Martin, P, Donohoe, P, Knowles, TDJ, Penkman, KEH, and Onstott, T (2019) **Cretaceous dinosaur bone contains recent organic material and provides an environment conducive to microbial communities.** *eLife* 8, e46205. <https://doi.org/10.7554/eLife.46205.001> *Altmetric score: 405*

10) **Saitta, ET**, Fletcher, I, Martin, P, Pittman, M, Kaye, TG, True, LD, Norell, MA, Abbott, GD, Summons, RE, Penkman, K, and Vinther, J (2018) **Preservation of feather fibers from the Late Cretaceous dinosaur *Shuvuuia deserti* raises concern about immunohistochemical analyses on fossils.** *Organic Geochemistry* 125, 142-151. <https://doi.org/10.1016/j.orggeochem.2018.09.008>

9) **Saitta, ET**, Kaye, TG, and Vinther, J (2018) **Sediment-encased maturation: a novel method for simulating diagenesis in organic fossil preservation.** *Palaeontology* 62(1), 135–150. <https://doi.org/10.1111/pala.12386>

Altmetric score: 211

8) **Saitta, ET**, Clapham, C, and Vinther, J (2018) **Experimental subaqueous burial of a bird carcass and compaction of plumage.** *Paläontologische Zeitschrift* 92(4), 727–732. <https://doi.org/10.1007/s12542-018-0411-y>

Altmetric score: 29

7) Parry, LA, Smithwick, F, Norden, K, Saitta, ET, Lozano-Fernandez, J, Tanner, A, Bernard Caron, J, Edgecombe, GD, Briggs, DEG, and Vinther, J (2017) **Soft-bodied fossils are not simply rotten carcasses – towards a holistic understanding of exceptional fossil preservation.** *BioEssays* 40(1), 1700167. <https://doi.org/10.1002/bies.201700167>

Altmetric score: 251

6) **Saitta, ET**, Gelernter, R, and Vinther, J (2017) **Additional information on the primitive contour and wing feathering of paravian dinosaurs.** *Palaeontology* 61(2), 273–288. <https://doi.org/10.1111/pala.12342>

Altmetric score: 129

5) **Saitta, ET**, Rogers, CS, Brooker, RA, and Vinther, J (2017) **Experimental taphonomy of keratin: a structural analysis of early taphonomic changes.** *Palaios* 32(10), 647–657. <https://doi.org/10.2110/palo.2017.051>

Altmetric score: 36

4) **Saitta, ET**, Rogers, C, Brooker, RA, Abbott, GD, Kumar, S, O'Reilly, SS, Donohoe, P, Dutta, S, Summons, RE, and Vinther, J (2017) **Low fossilization potential of keratin protein revealed by experimental taphonomy.** *Palaeontology* 60(4), 547–556. <https://doi.org/10.1111/pala.12299>

Altmetric score: 69

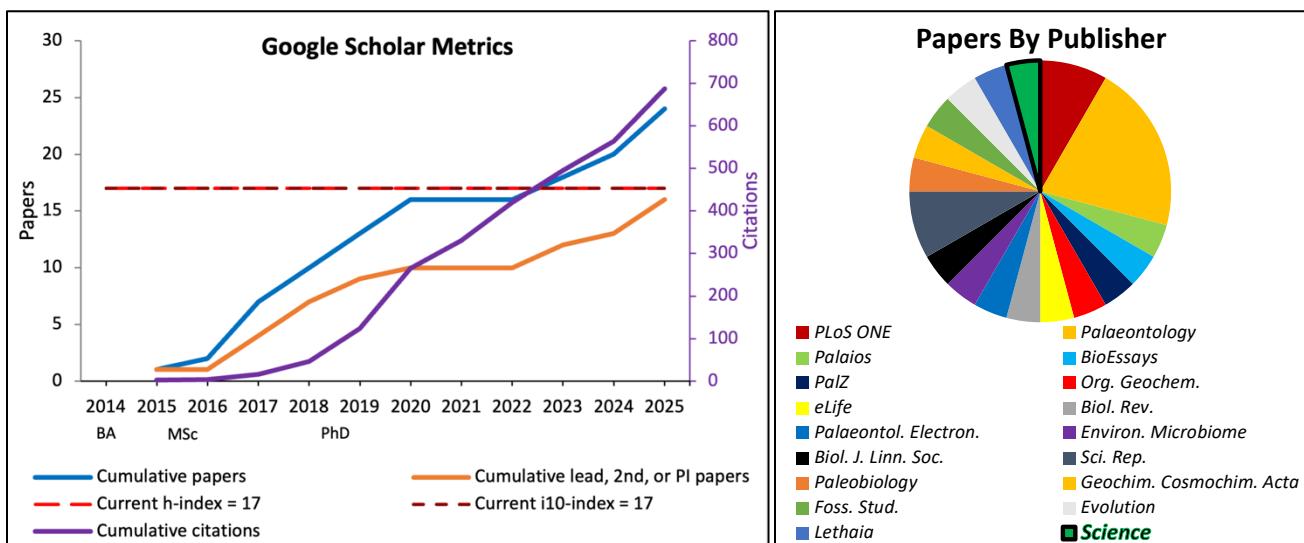
3) Smithwick, F, Mayr, G, **Saitta, ET**, Benton, M, and Vinther, J (2017) **On the purported presence of fossilised collagen fibres in an ichthyosaur and a theropod dinosaur.** *Palaeontology* 60(3), 409–422. <https://doi.org/10.1111/pala.12292>

2) Mayr, G, Pittman, M, **Saitta, E**, Kaye, T, and Vinther, J (2016) **Structure and homology of *Psittacosaurus* tail bristles.** *Palaeontology* 59(6), 793–802. <https://doi.org/10.1111/pala.12257>

Altmetric score: 279

1) **Saitta, ET** (2015) **Evidence for sexual dimorphism in the plated dinosaur *Stegosaurus mjosi* (Ornithischia, Stegosauria) from the Morrison Formation (Upper Jurassic) of western USA.** *PLoS ONE* 10(4), e0123503. <https://doi.org/10.1371/journal.pone.0123503>

Altmetric score: 670



## Unpublished Preprints

Saitta, ET (2025) Museums should curate beyond the natural: domestic breeds offer unique insight into evolutionary processes & human culture. *EcoEvoRxiv*. <https://doi.org/10.32942/X2VK88>

Saitta, ET, Bonhomme, V, Lukens, M, Vidal, D, Longrich, NR, Richmond, DR, and Stockdale, MT (2025) The function and evolution of stegosaur osteoderms and hypothesized sexual dimorphism in *Hesperosaurus*. *bioRxiv*. <https://doi.org/10.1101/2025.04.10.648273>

Saitta, ET (2020) The Society of Vertebrate Paleontology's publication policy is inconsistent with scientific epistemology. *PaleoRxiv*. <https://doi.org/10.31233/osf.io/xmkhb>

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## Manuscripts Under Review

Roy, A, Saitta, ET, Musa, M, Al-Kindi, S, Kaye, TG, and Pittman, M. A multi-spectroscopic investigation into the diagenesis of avian polyene pigments: simulated maturation, chemical pathways and palaeontological implications.

Saitta, ET (Under review) Distributions of sexual size dimorphism: significance thresholds, systematic errors, & scaling.

Saitta, ET (Under review) Are we underfitting dinosaur growth models? Methodologies reflect interpretations of paleobiology.

Longrich, NR, Makovicky, PJ, Tokaryk, T, Cooper, DML, Saitta, ET, Erickson, GM, Szekely, T and Snively, E (Under review) Hatchlings of *Tyrannosaurus rex* and the evolution of dinosaur reproductive strategies.

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## Achievements†, Funding\*, & Accepted Proposals

CNPEM Proposal - Brazilian Center for Research in Energy and Materials (Campinas, Brazil)	2024
PI: Kerber, BB. Co-Proposers: Saitta, ET, Prado, GMEM, Silva, EP "Can Raman spectroscopy really reveal biosignatures in fossil dinosaurs?"	
Paleontological Society Norman Newell Early Career Grant* "Characterizing the diagenesis of sex hormones"	2023
The Palaeontological Association Research Grant* "Characterizing the diagenesis of sex hormones"	2022
Honoring Our Professors' Excellence (HOPE) Award† University of Illinois Chicago Office of Campus Housing award as nominated by students	2022
University of Chicago Fossil Lab Postdoctoral Funding* Postdoctoral salary & research funds through the Sereno Fossil Lab, University of Chicago	2021-2024
Bass Postdoctoral Fellowship* Postdoctoral salary & research funds through the Negaunee Integrative Research Center, Field Museum of Natural History	2018-2020
Paleontological Society Stephen Jay Gould Award* Paleontological Society Student Research Grant: "Material properties of keratinous structures"	2017
The Daniel Pidgeon Fund* The Geological Society research grant: "Creating fossils in the lab: sediment-based maturation experiments"	2017
Bob Savage Memorial Fund* University of Bristol palaeobiology graduate student award	Received four times - 2016-2017
Jackson Student Travel Grant* Society of Vertebrate Paleontology award to support student travel to their annual meeting	2016

<b>M.Sc. Award: Distinction (University of Bristol)†</b>	<b>2015</b>
<b>University of Bristol Alumni Foundation Travel Grant*</b> University of Bristol student award to support conference attendance costs	<b>Received twice - 2015</b>
<b>Magna Cum Laude (Princeton University)†</b>	<b>2014</b>
<b>Elected to the Society of Sigma Xit</b>	<b>2014</b>
<b>Senior Thesis Poster Award in Behavior</b> Granted by Princeton University's Department of Ecology and Evolutionary Biology	<b>2014</b>
<b>Office of the Dean of the College Senior Thesis Research Funding*</b> Princeton University academic research grant	<b>2013</b>
<b>Fred Fox Fund*</b> Academic research award and grant through the Office of Religious Life at Princeton University	<b>2012</b>

### Pending Funds & Proposals

National Science Foundation - Life and Environments Through Time Institution: Field Museum of Natural History PI: Herrera, FA Co-PI: <u>Saitta, ET</u> "Experimental & Molecular Study of Plant Fossilization from Fossil Lake Lagerstätte" Requested Amount: \$794,906	Status: Pending 2026
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## R Packages

Bonhomme, V., Picq, S., Gaucherel, C., & Claude, J. (2014). **Momocs: Outline Analysis Using R**. *Journal of Statistical Software*, 56(13), 1-24. <https://doi.org/10.18637/jss.v056.i13>. **Acknowledgement:** "We are very grateful to (in alphabetical order): Sean Asselin, Laurent Bouby, Matt Bulbert, Simon Crameri, Julia Cooke, April Dinwiddie, Carl Lipo, Cedric Gaucherel, Catherine Girard, QGouil (GitHub), Christian Steven Hoggard, Sarah Ivorra, Glynis Jones, Nathalie Keller, Ricardo Kriebel, Remi Laffont, Fabien Lafuma, Matthias Mace, Stas Malavin, Neus Martinez, Ben Marwick, Sabrina Renaud, Marcelo Reginato, Evan Saitta, Bill Sellers, David Siddons, Eleanor Stillman, Theodore Stammer, Tom Stubbs, Norbert Telmon, Jean-Frederic Terral, Bill Venables, Daniele Ventura, Michael Wallace, Asher Wishkerman, John Wood for their helpful ideas and bug reports". <https://cran.r-project.org/web/packages/Momocs/refman/Momocs.html>

## Teaching

<b>Adjunct Lecturer (Benedictine University [Lisle, IL])</b> Lead, sole course instructor: Ecology Laboratory BIOL 4364 (2 sections) Section instructor: Principles of Biology Lab BIOL 1199 (1 section)	<b>Fall 2025</b> <b>Fall 2025</b>
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<b>Adjunct Lecturer (University of Illinois Chicago)</b> Lead, sole course instructor: Introduction to Paleontology EAES/BIOS 360	<b>Spring 2022</b>
<b>Guest Lecturer (University of Chicago)</b> Dinosaur Science BIOS 23100: "Taphonomy & Footprints" lecture	<b>Spring 2023</b>
<b>Field Teaching Assistant (University of Chicago)</b> Dinosaur Science BIOS 23100: Week-long dinosaur excavation in Wyoming	<b>Summer 2023</b>
<b>Graduate Teaching Assistant / Demonstrator (University of Bristol)</b> Geobiology EASC20024 Geology 1: Evolution of Earth and Life EASC10001 Evolution of the Biosphere EASC30008 ( <i>Master's level course</i> ) Environmental Geoscience: Climate and Ecology EASC10002	<b>Spring 2017</b> <b>Spring 2017</b> <b>Fall 2015</b> <b>Fall 2015</b>

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## Advising, Training, & Mentoring

<b>Mentoring</b> My sediment-encased maturation method has been used in collaboration with Ph.D. students from: <b>University of Hong Kong</b> - 2 thesis chapters <b>University of California Davis</b> <b>University of Chicago</b>	<b>2018-present</b>
<b>Advising</b> Undergraduate students: summer intern* & volunteer supervising <b>(Field Museum)</b> *Undergraduate summer intern became study coauthor & later pursued science in graduate school	<b>2018-2020</b>
<b>Training</b> Graduate teaching assistant training <b>(University of Illinois Chicago)</b>	<b>Spring 2022</b>

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## Academic Presentations

(Lead presenter only)

<b>Society of Vertebrate Paleontology annual meeting</b> Minneapolis, Minnesota, USA: Talk & Poster	<b>10/2024</b>
Talk - Exceptional preservation of integumental structures in hadrosaur 'mummies' via clay templating	
Poster - 'Synthetic fossils': experiments make taphonomy a better science	
<b>Cincinnati, Ohio, USA: Poster</b>	<b>10/2023</b>
Sexing dinosaurs: Possible detection of trace sex hormones in fossils as old as the Jurassic and the thermal stability of estrogen	
<b>*Virtual Conference: Poster</b> - *abstract accepted but later withdrawn due to registration cost	<b>11/2021</b>
Relaxing selective pressures on complex structures: feather evolution after flight loss in recent birds	
<b>Virtual Conference: Poster</b>	<b>10/2020</b>
Non-avian dinosaur eggshell calcite contains ancient, endogenous amino acids	
<b>Brisbane, Australia: Talk</b>	<b>10/2019</b>
Sexual dimorphism in non-avian dinosaurs and other extinct taxa: the importance of effect size statistics in paleontology	
<b>Albuquerque, New Mexico, USA: Talk (Romer Prize Session)</b>	<b>10/2018</b>
Molecular stability and mobility: Protein diagenesis in open and closed taphonomic systems	
<b>Calgary, Alberta, Canada: Talk (Romer Prize Session)</b>	<b>8/2017</b>
Creating fossils in the lab: replicating fossilization using sediment-based maturation	
<b>Salt Lake City, Utah, USA: Talk</b>	<b>10/2016</b>
The taphonomy of keratin in archosaurs	

<b>Palaeoproteomics and Archaeology, Society for Techniques and Advances (affiliate of The International Society for Biomolecular Archaeology)</b>	
PAASTA Talk Series: Virtual Talk	<b>7/2024</b>

<b>Weizmann Institute of Science</b>		
Kimmel Center for Archaeological Science Seminar: Virtual Talk Eggshell Time Capsules: Ancient Amino Acids		4/2024
<b>The University of Chicago</b>		
Darwinian Sciences Cluster Retreat: Poster Sexing dinosaurs: Possible detection of trace sex hormones in fossils as old as the Jurassic and the thermal stability of estrogen	9/2023	
Evolutionary Morphology Seminar Series: Talk Molecular fossil hunting: analytical and experimental taphonomy	10/2021	
<b>The University of Copenhagen (Denmark)</b>		
Globe Institute: Talk Molecular fossil hunting: analytical and experimental taphonomy	7/2022	
<b>The University of Illinois Chicago</b>		
EAES Departmental Seminar: Talk Molecular fossil hunting: analytical and experimental taphonomy	3/2022	
<b>Field Museum of Natural History</b>		
A. Watson Armour Seminar Series: Talk Mesozoic molecules: revealing information from fossils through taphonomy	9/2019	
<b>Argonne National Laboratory</b>		
Advanced Photon Source: Coffee Talk Exceptional fossils: feathers, soft tissues, and ancient molecules	8/2019	
<b>Palaeontological Association annual meeting</b>		
London, UK Talk - Approaching sexual dimorphism in non-avian dinosaurs and other extinct taxa Poster - Life inside a dinosaur bone: a thriving microbiome	12/2017	
Lyon, France Poster - Primitive contour feathers in paravian dinosaurs and the evolution of avian plumage Informal talk ('Friends of the Rotten' discussion meeting) - Taphonomy 2.0: Experimental P/T maturation using sediment as a taphonomic filter to investigate soft tissue preservation	12/2016	
Cardiff, UK Poster - The taphonomy of keratin in archosaurs Talk - Evidence for sexual dimorphism in the plated dinosaur <i>Stegosaurus mjosii</i> (Ornithischia, Stegosauria) from the Morrison Formation (Upper Jurassic) of western USA	12/2015	
<b>International Workshop on Konservat-Lagerstätten</b>		
Cork, Ireland: Talk Dinosaur eggshell calcite as a closed system: 'molecular Konservat-Lagerstätten'	7/2017	

## Popular Science Articles

<b>The Conversation</b>		
"Fossilized dinosaur eggshells can preserve amino acids, the building blocks of proteins, over millions of years"	4/2024	
"Did male and female dinosaurs differ? A new statistical technique is helping answer the question"	1/2022	
"How some dinosaur discoveries might be wishful scientific thinking"	11/2017	
Contributor to Longrich, NR "Dinosaur bones: hidden life revealed inside them"	7/2019	
<b>TheScienceBreaker (partner with Université de Genève)</b>		
"Long-dead dinosaurs support new life"	11/2019	

## Radio & Podcast Appearances

<b>The Primal Biology Show</b>		
Interview discussing my career and insights	7/2025	

<i>The Best of our Knowledge</i>	6/2025
Interview with WMAC Northeast Public Radio discussing Saitta & Kaye (2025, <i>Scientific Reports</i> )	
<i>The Skeptics Guide to the Universe</i>	6/2019
Twenty-minute interview on the podcast discussing Saitta <i>et al.</i> (2019, <i>eLife</i> )	
<i>Palaeocast</i>	6/2019
Hour-long interview on the podcast discussing Saitta <i>et al.</i> (2019, <i>eLife</i> )	
<i>These Vibes Are Too Cosmic</i>	5/2018
Hour-long interview with Princeton, New Jersey, radio show on my research in general	
<b>BBC Radio: National and Bristol</b>	4/2015
Interviews discussing Saitta (2015, <i>PLoS ONE</i> )	

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## Institutional Advancement & Fundraising

<b>Field Museum Giving Day Ambassador</b>	10/2019
Helped with grassroots fundraising for "Nurturing Future Scientists"	
<b>Field Museum Private Collections Tour</b>	8/2019
Showcased oversized fossil collections to Chairman's Circle member	
<b>Field Museum Donor Private Meeting</b>	6/2019
Talk given to museum donors at a small breakfast meeting	
<b>Field Museum Pop-up</b>	6/2019
Informal meet and greet with Field Museum board members at downtown 'dig site' pop-up	
<b>Field Museum Members' Night</b>	5/2019
Discussed my work with Field Museum members	
<b>Sue Celebration</b>	1/2019
Presented my work to Field Museum members and donors	
<b>Field Encounters</b>	11/2018
Talk given to Field Museum donors entitled "Creating synthetic fossils in the lab"	

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## Public Outreach

<b>Fossil Crates Live!</b>	3/2025
Expert guest on members-only Zoom call series hosted by Dr. Brian Curtice	
<b>Sereno Fossil Lab Open Houses</b>	2024
Engaged southside community in monthly open houses for the newly opened Fossil Lab at the University of Chicago	
<b>Southside Science Festival</b>	9/2023
Presenter at a booth for a University of Chicago science communication event for local community	
<b>Dinosaurs of the Sahara</b>	5/2023
Assisted Sereno Lab in preparing displays and specimens for public exhibit at the Cleveland Great Lakes Science Center	
<b>Gloucester Museum "Dinosaurs" Talks and Workshops</b>	9/2017
Feathers and colour in dinosaurs	
<b>Bristol Dinosaur Project</b>	2015
Educational outreach program directed at children	

<b>Jurassic Quest</b> Educational day directed at young children involving fossil displays	7/2014
<b>The Billings Clinic</b> Presented to TV/print media and the public about use of CT scanner for undergraduate thesis	7/2013
<b>Princeton Undergraduate Research and Public Service Symposium</b> Alumni Day showcase of independent research	2013

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## Peer Reviewer

<i>Nature Ecology &amp; Evolution</i>	<i>Royal Society Open Science</i>
<i>BMC Evolutionary Biology</i>	<i>Paleobiology</i>
<i>Journal of Proteomics</i>	<i>Neues Jahrbuch für Geologie und Paläontologie</i>
<i>Biology Letters</i>	<i>PeerJ; PeerJ Life &amp; Environment</i>
<i>Cretaceous Research</i>	<i>Princeton University Press: Remnants of Ancient Life</i>

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## Editorial Roles

<b>Associate Editor</b> , <i>Frontiers in Ecology &amp; Evolution</i> , Paleoecology section	2025-present
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## Societies & Groups

<b>The Society for the Study of Evolution</b>	2025-present
<b>The Society of Vertebrate Paleontology</b>	2013-present
<b>The Palaeontological Association</b>	2015-present
<b>The Paleontological Society</b>	2010-present
<b>DinoSoc</b> University of Bristol student paleontology society	2014-2017
<b>Bristol University Geology and Geoscience Society</b>	2014-2017
<b>myFOSSIL.org</b> Beta tester	2015
<b>Princeton Undergraduate Geosciences Society</b>	2012-2014
<b>University of Bristol Snowsports Club</b> Snowboard race team	2015-2018
<b>University of Bristol Athletics and Cross Country Club</b> Cross country	2014-2018
<b>Princeton University Cannon Dial Elm Club</b>	2012-2014

## Experience & Networks

### International collaborative research network:

- USA
- Germany
- China
- United Kingdom
- Ireland
- India
- Canada
- Spain
- Argentina
- Denmark
- Italy
- Brazil

### Paleontological (prospecting, quarrying, preparation), geological, & biological field experience:

- University of Chicago: Wyoming
- Field Museum: Montana, Utah, Missouri, & Argentina
- Royal Tyrell Museum: Dinosaur Provincial Park, Alberta (Canada)
- Royal Tyrell Museum Field Station (preparatory lab): Dinosaur Provincial Park, Alberta (Canada)
- Independent paleontological field & preparatory lab experience over seven summers: Montana
- Princeton University: geology (Spain, France, Utah, New Mexico, the Catskills, Kentucky, Delaware Water Gap, & Yellowstone National Park) & biology (Bermuda & Yellowstone National Park)
- Dinosoc: UK

### Laboratory experience:

- Princeton University
- University of Bristol (UK)
- University of York (UK)
- University of Newcastle (UK)
- University of Copenhagen (Denmark)
- Foundation for Scientific Advancement
- Field Museum
- Northwestern University
- Argonne National Laboratory
- University of Chicago

### Analytical experience:

- Specimen-based research (fossil & modern reptiles, birds, fish, invertebrates, plants)
- R-based morphometrics, statistics, & data analysis
- Fossil bone histology & thin sectioning
- Hospital & micro-CT scanning
- Decay & maturation experiments
- Light microscopy
- Electron microscopy
- Energy-dispersive X-ray spectroscopy
- Pyrolysis-gas chromatography-mass spectrometry
- Laser stimulated fluorescence imaging
- Amino acid racemization analysis
- DNA, protein, & lipid extraction
- Time-of-flight secondary ion mass spectrometry
- Radiocarbon analysis
- Attenuated total reflectance Fourier-transform infrared spectroscopy
- Synchrotron X-ray fluorescence
- Raman spectroscopy
- Portable X-ray fluorescence
- X-ray diffraction
- White light scanning
- Laser ablation-inductively coupled plasma-mass spectrometry
- Magnetic resonance imaging
- Laser diffraction particle size analysis

### Museum collections experience & research visits:

- Field Museum of Natural History
- American Museum of Natural History
- Senckenberg Naturmuseum Frankfurt (Germany)
- Paläontologische Museum München (Germany)
- Smithsonian National Museum of Natural History
- Yale Peabody Museum
- Carnegie Museum of Natural History
- Dinosaur National Monument
- Denver Museum of Nature and Science
- Sauriermuseum Aathal (Switzerland)
- Natural History Museum of Utah
- Wyoming Dinosaur Center
- Brigham Young University Museum of Paleontology
- Museum of Western Colorado
- Virginia Museum of Natural History
- Black Hills Institute of Geologic Research
- Utah Field House of Natural History State Park Museum
- Houston Museum of Natural Science
- Natural History Museum, London