CURRICULUM VITAE

JAMES G. SAULSBURY

Postdoctoral Researcher University of Kansas Biodiversity Institute / Department of Ecology & Evolutionary Biology jgsauls@ku.edu

ACADEMIC QUALIFICATIONS

Academic degrees

Ph.D., University of Michigan, Ann Arbor, 2021

Department of Earth and Environmental Sciences and Museum of Paleontology

"Comatulid crinoids in a changing ocean: predation, respiration, and shifting centers of diversity"

B.A., University of California, Berkeley, 2015

Department of Integrative Biology

Academic appointments

2023– Present: Postdoctoral Researcher, Biodiversity Institute and Department of Ecology & Evolutionary Biology, University of Kansas

2021–2023: Postdoctoral Researcher, Natural History Museum, University of Oslo

2017, 2018, 2019: Museum Curatorial Assistant, Museum of Paleontology, University of Michigan, Ann Arbor

2015–2016: Research Technician, Museum of Paleontology, University of California, Berkeley

PUBLICATIONS

Peer-reviewed journal articles

- 1. **Saulsbury, J.G.**; Piwoni-Piórewicz, A.; Kukliński, P.; Di Martino, E.; Liow, L. H. <u>Evolution of skeletal mineralogy in cheilostome bryozoans from calcite to aragonite seas</u>. 2025, *Geology*.
- 2. **Saulsbury, J.G.**; Parins-Fukuchi, C.T.; Wilson, C.J.; Reitan, T.; Liow, L.H. <u>Reply to Johnson:</u> <u>Holistic evaluation of ecological models in paleobiology</u>. 2025, *Proceedings of the National Academy of Sciences*.
- 3. Saulsbury, J.G.; Baumiller, T.K.; Sprinkle, J.T. New comatulid crinoids from the Early Cretaceous Glen Rose Formation: paleobiology and evolutionary relationships of an extreme form. 2025, *Journal of Paleontology*.
- 4. Parins-Fukuchi, C.T.; Saulsbury, J.G. <u>The consequences of budding speciation on trees</u>. 2025, *Systematic Biology*.
- 5. **Saulsbury, J.G.**; Parins-Fukuchi, C.T.; Wilson, C.J.; Reitan, T.; Liow, L.H. 2024. <u>Agedependent extinction and the neutral theory of biodiversity</u>. *Proceedings of the National Academy of Sciences*. Press in <u>KU Today</u>.
- 6. Voje, K.L.; **Saulsbury, J.G.**; Starrfelt, J.; de Latorre, D.V.; Rojas, A.; Kinneberg, V.B.; Liow, L.H.; Wilson, C.J.; Saupe, E.; Grabowski, M. 2023. <u>Measurement theory and paleobiology</u>. *Trends in Ecology and Evolution*.
- 7. **Saulsbury, J.G.**; Baumiller, T.K. 2022. <u>Dispersals from the West Tethys as the source of the Indo-West Pacific diversity hotspot in comatulid crinoids</u>. *Paleobiology* 49 (1): 39-52.

- 8. **Saulsbury, J.G.**; Baumiller, T.K. 2020. <u>Predation as an explanation for a latitudinal gradient in arm number among stalkless crinoids</u>. *Journal of Biogeography* 47: 2657-2670.
- 9. **Saulsbury, J.G.**; Moss, D.K.; Ivany, LC..; Kowalewski, M.;Lindberg, D.R.; Gillooly, J.F.; Heim, N. A.; McClain, C.R.; Payne, J.L.; Roopnarine, P.D.; Schoene, B.; Goodwin, D.; Finnegan, S. 2020. <u>Idiographic and nomothetic approaches to heterogeneity are complementary: Response to comments on "Evaluating the influences of temperature, primary production, and evolutionary history on bivalve growth rates." *Paleobiology* 46 (2): 275-277.</u>
- 10. **Saulsbury, J.G.** 2019. <u>Crinoid respiration and the distribution of energetic strategies among marine invertebrates</u>. *Biological Journal of the Linnean Society* 129 (1): 244-258.
- 11. **Saulsbury, J.G.**; Zamora, S. 2019. The nervous and circulatory systems of a Cretaceous crinoid: preservation, paleobiology, and evolutionary significance. *Palaeontology* 63 (2): 243-253.
- 12. **Saulsbury, J.G.**; Moss, D.K.; Ivany, L.C.; Kowalewski, M.;Lindberg, D.R.; Gillooly, J.F.; Heim, N. A.; McClain, C.R.; Payne, J.L.; Roopnarine, P.D.; Schoene, B.; Goodwin, D.; Finnegan, S. 2019. <u>Evaluating the influences of temperature, primary production, and evolutionary history on bivalve growth rates. *Paleobiology* 45 (3): 405-420.</u>
- 13. Zamora, S.; Aurell, M.; Veitch, M.; Saulsbury, J.G.; López-Horgue, M.A.; Ferratges, F.A.; Arz, J.A.; Baumiller, T.K. 2018. Environmental distribution of post-Palaeozoic crinoids from the Iberian and south-Pyrenean basins, NE Spain. *Acta Palaeontologica Polonica* 63 (4): 779-794.

TEACHING AND AWARDS

Teaching experience

- 2024, 2025: Lead Instructor for fourth-year undergraduate seminar, "Big Ideas in Ecology & Evolution." University of Kansas.
- 2020: Graduate Student Instructor for "Introductory Oceanography." University of Michigan, Ann Arbor
- 2018, 2019: Graduate Student Instructor for "Evolution and Extinction." University of Michigan, Ann Arbor

Grants and awards

- 2025: KU Research Postdoctoral Achievement Award (\$5000)
- 2024: University of Oslo Natural History Museum Best Paper Award (Saulsbury et al. 2024, ~\$500)
- 2020-21: Rackham Predoctoral Fellowship (support for final year of Ph.D.)
- 2020, 2022: Ermine Cowles Case Memorial Student Award (Saulsbury & Zamora 2020, \$200; Saulsbury & Baumiller 2022, \$200)
- 2018: Society of Systematic Biology Graduate Student Research Award (\$2000)
- 2017: Rackham Graduate Student Research Grant (\$1500)
- 2017: Paleontological Society N. Gary Lane Student Research Grant (\$800)
- 2017, 2018: Scott Turner Award (\$1925, \$1557)
- 2016-present: Rackham Merit Fellowship (continued support throughout Ph.D.)

PRESENTATIONS

Invited talks

- Neutral models in paleobiology: new insights into age-dependent extinction, community turnover and the rise and fall of species. March 2025. Smithsonian National Museum of Natural History Seminar Series.
- Modeling the fates of biotas: Hotspots, extinctions, and abundance trajectories in the marine fossil record. March 2024. University of Kansas Department of Ecology and Evolutionary Biology Seminar Series.
- Origin of the modern Indo-West Pacific marine diversity hotspot by dispersal from the ancient West Tethys in comatulid crinoids. September 2021. University of Michigan Department of Ecology and Evolutionary Biology Seminar Series.
- Conference presentations (talk unless otherwise indicated)
- **Saulsbury, J.G.**; Wing, S.L.; Hunt, G. 2025. Measuring and modeling ecological rates with neutral theory. GSA Annual Meeting & Exposition.
- **Saulsbury, J.G.**; Liow, L.H. 2024. Biological meaning in the rise and fall of fossil species. 12th North American Paleontological Convention. Ann Arbor.
- Lee, Jaemin; Contreras, D.; **Saulsbury, J.G.**; Upchurch, G.; Looy, C. 2024. Large fruits in a Late Cretaceous tropical forest shows earlier expansion of angiosperm dispersal strategies. XI International Organization of Paleobotany Conference. Prague, Czechia.
- **Saulsbury, J.G.**; Piwoni-Piórewicz, A.; Kukliński, P.; Di Martino, E.; Liow, L.H. 2023. The evolution of skeletal mineralogy in cheilostome bryozoans: Paleontological and phylogenetic perspectives. GSA Annual Meeting & Exposition.
- **Saulsbury**, **J.G.**; Baumiller, T.K.; Sprinkle, J.T. 2022. The crinoid fauna of the Early Cretaceous Glen Rose Formation, including a new family of feather stars. 6th International Paleontological Congress. Khon Kaen, Thailand. (Poster)
- **Saulsbury**, **J.G.**; Liow, L.H. 2022. Fossil history of a contrarian latitudinal diversity gradient in cheilostome bryozoans. 6th International Paleontological Congress. Khon Kaen, Thailand.
- **Saulsbury**, J.G.; Parins-Fukuchi, C.; Reitan, T.; Wilson, C.J.; Liow, L.H. 2022. Age-dependent extinction and the neutral theory of biodiversity. GSA Annual Meeting & Exposition.
- **Saulsbury, J.G.** 2022. Better models for understanding patterns of range size across latitude. European Society for Evolutionary Biology 2022 Congress, Prague.
- **Saulsbury, J.G.**; Baumiller, T.K. 2020. Dispersals and the shifting marine biodiversity hotspot: an exploration with living and fossil crinoids. GSA Annual Meeting & Exposition. Virtual conference.
- **Saulsbury**, **J.G.** 2019. Reconciling conflicting testimonies on the origin of the marine biodiversity hotspot. Great Lakes Student Paleoconference, Ann Arbor.
- Garcia, A.; Saulsbury, J.G.; Aurell, M.; Zamora, S. 2019. A new shallow water Aptian Echinoderm-Lagerstätte from Spain. Palaeontological Association's Annual Meeting. Valencia, Spain.
- **Saulsbury, J.G.**; Baumiller, T.K. 2018. Niche breadth as a link between feeding morphology and extinction risk: an exploration with extant crinoids. GSA Annual Meeting & Exposition. Indianapolis.
- **Saulsbury**, **J.G.**; Zamora, S. 2018. Analysis of 3D comparative data for paleobiological inference: the circulatory system of a giant fossil crinoid as a case study. 5th International Paleontological Congress. Paris.
- **Saulsbury, J.G.** 2018. Body size, allometry, and an unexplored mode of respiration in crinoids. 16th International Echinoderm Conference. Nagoya.

- **Saulsbury, J.G.**; Messing, C.G.; Baumiller, T.K. 2018. Coelomic Skeletal Structures in Fossil and Recent Featherstars (Comatulida, Crinoidea): Diversity, Function, and Taxonomic Implications. Society for Integrative and Comparative Biology Annual Meeting 2018. San Francisco.
- **Saulsbury**, **J.G.**; Samuel Zamora. 2017. Internal anatomy and paleophysiology of the Cretaceous crinoid *Decameros ricordeanus*. 2017 Great Lakes Student Paleoconference, Ann Arbor.
- **Saulsbury, J.G.**; Finnegan, S.; Lindberg, D.R.; Moss, D.K.; Ivany, L.C.; Gilooly, J.F., Goodwin, D.; Heim, N.A.; Kowalewski, M.; McClain, C.R.; Payne, J.L.; Roopnarine, P.D.; Schoene, B.R. 2017. Evaluating the influences of temperature, productivity, and phylogenetic constraint on bivalve growth rates. 2017 GSA Annual Meeting & Exposition. Seattle.
- **Saulsbury, J.G.**; Contreras, D.L. 2016. Dispersal ecology of a Late Campanian flora from south-central New Mexico; implications for the breadth and timing of angiosperm reproductive strategies. 2016 GSA Annual Meeting & Exposition. Denver. (Poster)

PROFESSIONAL SERVICE

Service, outreach, and mentorship

2024–present: Associate Editor, *Paleobiology*

2022: Session chair, 2022 GSA Annual Meeting & Exposition: "Paleontology: Diversity/Origination/Extinction."

2022: Research mentor to a Norwegian University of Science and Technology undergraduate researcher.

2020: Guest instructor, Mentored Research, Wake Forest University

2019: Special lecture ("Fossils, marine biodiversity, and the continuing story of crinoid evolution") to the <u>Friends of the Museum of Paleontology</u>

2017, 2019: Co-organizer, 1st and 3rd Great Lakes Student Paleoconference

2018–2019: Coach, Fossils event of Science Olympiad for Slauson Middle School

2017–2021: Research mentor to University of Michigan undergraduates

- Rebecca To and Xiaoyang Song, 2020: "Sympatric speciation in the sea"
- Rebecca To, 2018-present: "Featherstar phylogeny"
- Emma Carley, 2019: "Digitizing natural history: processing and analyzing a vast historical SEM collection"
- Kia Billings, 2017-2018: "Exploring crinoid morphology with computed tomography"

Peer Review

Reviewer for Paleobiology, Methods in Ecology and Evolution, Swiss Journal of Paleontology, Palaios, Nature Ecology & Evolution, Nature Communications Earth & Environment, NSF SGP, Global Ecology & Biogeography, and PLOS ONE.

Professional Membership

Geological Society of America, Paleontological Society