

JAMES SAULSBURY

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Ann Arbor, MI 48109

EDUCATION

University of Michigan, Ann Arbor (MI, USA)
Ph.D., Earth and Environmental Sciences 2021 (expected)

University of California, Berkeley (CA, USA)
Bachelor of Arts, Integrative Biology 2015

PUBLICATIONS

- Saulsbury, J.**; Baumiller, T.K. In press. Predation as an explanation for a latitudinal gradient in arm number among stalkless crinoids. *Journal of Biogeography*.
- Saulsbury, J.**; 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. [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.
- Saulsbury, J.** 2019. [Crinoid respiration and the distribution of energetic strategies among marine invertebrates.](#) *Biological Journal of the Linnean Society*.
- Saulsbury, J.**; Zamora, S. 2019. [The nervous and circulatory systems of a Cretaceous crinoid: preservation, paleobiology, and evolutionary significance.](#) *Palaeontology*.
- Saulsbury, J.**; 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. [Evaluating the influences of temperature, primary production, and evolutionary history on bivalve growth rates.](#) *Paleobiology* 45 (3): 405-420.
- Zamora, S.; Aurell, M.; Veitch, M.; **Saulsbury, J.**; 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.

CONFERENCE PRESENTATIONS

- Saulsbury, J.**; 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.** 2020. Latitude and range size in the shallow marine benthos. 5th World Conference on Marine Biodiversity. Virtual conference.
- Saulsbury, J.** 2019. Reconciling conflicting testimonies on the origin of the marine biodiversity hotspot. Great Lakes Student Paleoconference, Ann Arbor.
- Garcia, A.; **Saulsbury, J.**; Aurell, M.; Zamora, S. 2019. A new shallow water Aptian Echinoderm-Lagerstätte from Spain. Palaeontological Association's Annual Meeting. Valencia, Spain.

- Saulsbury, J.;** 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.;** 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.** 2018. Body size, allometry, and an unexplored mode of respiration in crinoids. 16th International Echinoderm Conference. Nagoya.
- Saulsbury, J.;** 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.;** Samuel Zamora. 2017. Internal anatomy and paleophysiology of the Cretaceous crinoid *Decameros ricordeanus*. 2017 Great Lakes Student Paleoconference, Ann Arbor.
- Saulsbury, J.;** 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.;** 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.

AWARDS AND GRANTS

- 2020-21:** Rackham Predoctoral Fellowship (support for final year of Ph.D.)
- 2018:** Society of Systematic Biology (\$2000)
- 2017:** Rackham Graduate Student Research Grant (\$1500)
- 2017:** Paleontological Society Student Research Grant (\$800)
- 2017, 2018:** Scott Turner Award (\$1925, \$1557)
- 2016-present:** Rackham Merit Fellowship (continued support throughout Ph.D.)

SERVICE, OUTREACH, AND EDUCATION

- 2020:** Graduate student instructor, EARTH 222: Introductory Oceanography
- 2019:** Special lecture (“Fossils, marine biodiversity, and the continuing story of crinoid evolution”) to the [Friends of the Museum of Paleontology](#)
- 2017, 2019:** Co-organizer, 1st and 3rd [Great Lakes Student Paleoconference](#)
- 2018-2019:** Graduate student instructor, EARTH 125: Evolution and Extinction
- 2018-2019:** Coach, Fossils event of Science Olympiad for Slauson Middle School
- 2017- present:** Research mentor
- 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”
- 2017:** National Ocean Science Bowl volunteer

SKILLS AND EXPERTISE

Programming languages: R, MATLAB, Python

Imaging techniques: computed tomography, scanning electron microscopy, traditional photography

Expertise and interests: Paleobiology, crinoid systematics and evolution, macroecology, biogeography

Misc.: SCUBA certified (PADI Open Water Diver)

PROFESSIONAL SOCIETY MEMBERSHIP

Geological Society of America

Linnean Society of London

Paleontological Society

Palaeontological Association

Society of Systematic Biologists