September 11, 2023

CURRICULUM VITAE

JAMES G. SAULSBURY

University of Oslo
Natural History Museum
Zoologisk Museum
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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

Employment history

2021 October – Present: Postdoctoral Research Fellow, Natural History Museum, University of Oslo
2021 September – October: Postdoctoral Researcher, Museum of Paleontology, University of Michigan, Ann Arbor
2017 May – August, 2018 May – August, 2019 May – August: Museum Curatorial Assistant, Museum of Paleontology, University of Michigan, Ann Arbor
2015 November – 2016 August: Research Technician, Museum of Paleontology, University of California, Berkeley

Teaching experience

2020 January – May: Graduate Student Instructor for "Introductory Oceanography." University of Michigan, Ann Arbor
2018 January – May, 2019 January – May: Graduate Student Instructor for "Evolution and Extinction." University of Michigan, Ann Arbor

Grants and awards

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.)

PUBLICATIONS AND CONFERENCE TALKS

Peer-reviewed journal articles

1. **Saulsbury, J.G.**; Parins-Fukuchi, C.T.; Wilson, C.J.; Reitan, T.; Liow, L.H. Age-dependent extinction and the neutral theory of biodiversity. Proceedings of the National Academy of Sciences (In Review; also on bioRxiv).
2. 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. Measurement theory and paleobiology. *Trends in Ecology and Evolution*.
3. **Saulsbury, J.G.**; Baumiller, T.K. 2022. Dispersals from the West Tethys as the source of the Indo-West Pacific diversity hotspot in comatulid crinoids. *Paleobiology* 49 (1): 39-52.
4. **Saulsbury, J.G.**; Baumiller, T.K. 2020. Predation as an explanation for a latitudinal gradient in arm number among stalkless crinoids. *Journal of Biogeography* 47: 2657-2670.
5. **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. 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.
6. **Saulsbury, J.G.** 2019. Crinoid respiration and the distribution of energetic strategies among marine invertebrates. *Biological Journal of the Linnean Society* 129 (1): 244-258.
7. **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.
8. **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. Evaluating the influences of temperature, primary production, and evolutionary history on bivalve growth rates. *Paleobiology* 45 (3): 405-420.
9. 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.

Preprints & in prep

1. **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. In prep.

2. Parins-Fukuchi, C.T.; **Saulsbury, J.G.** Functional morphological innovation corresponds to shifting lines of genetic least resistance. *bioRxiv*.

3. **Saulsbury, J.G.** Permutation tests for comparative data. *bioRxiv*.

Conference presentations (talk unless otherwise indicated)

Saulsbury, J.G.; Piwoni-Piórewicz, A.; Kukliński, P.; Di Martino, E.; Liow, L.H. 2023. Phylogenetic and paleontological perspectives on the evolution of skeletal mineralogy in cheilostome bryozoans. 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. 2021. Origin of the modern Indo-West Pacific marine diversity hotspot by dispersal from the ancient West Tethys in comatulid crinoids. University of Michigan Department of Ecology and Evolutionary Biology Seminar Series.

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)

OTHER PROFESSIONAL QUALIFICATIONS

Service, outreach, and mentorship

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 Friends of the Museum of Paleontology

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"

Reviewing

Reviewer for: *Paleobiology*, *Methods in Ecology and Evolution*, *Swiss Journal of Paleontology*, *Palaios, Nature Ecology & Evolution*.

Professional Membership

Geological Society of America, Paleontological Society

Professional development

2022 November: RevBayes Phylogenetics Workshop, Natural History Museum, University of Oslo
2021 July: Evolutionary Quantitative Genetics Workshop, Friday Harbor Laboratories, University of Washington (Virtual)
2019 June: Midwest Phylogenetics Workshop, Itasca Biological Station, University of Minnesota
2017 July: Paleontological Society Field Course in Stratigraphic Paleobiology, Montana