LIDYA TARHAN
Curriculum Vitae
Assistant Professor, Department of Earth and Planetary Sciences
Assistant Curator, Division of Invertebrate Paleontology, Yale Peabody Museum
Yale University
P.O. Box 208109
New Haven, CT 06520
lidya.tarhan@yale.edu
http://campuspress.yale.edu/lidyatarhan/

EDUCATION

Ph.D., University of California, Riverside: Riverside, CA, September 2010–December 2013
Program: Paleobiology, Geological Sciences
Dissertation Topic: Exceptional Preservation and Substrate Evolution in Early Paleozoic Marine Shelfal Environments
Advisor: Dr. Mary Droser
Funding: NSF Graduate Research Fellowship (2010-2013)

M.S., University of California, Riverside: Riverside, CA, September 2008–June 2010
Program: Paleobiology, Geological Sciences
Master's Thesis Topic: New Morphological Diversity or Preservational Variability? Resolving the Taphonomic Context of Ediacaran Assemblage-Scale Heterogeneity
Advisor: Dr. Mary Droser

B.A., *magna cum laude*, with distinction, Amherst College: Amherst, MA, September 2004–May 2008
Majors: Geology (concentration in Paleontology) and English
Honors Thesis Topic: Taphonomy and Classification of Late Cambrian Medusae of Central Wisconsin and Northeastern New York: Problems of Preservation
Advisor: Dr. James Hagadorn

Geology Field Camp: Indiana University Geologic Field Station (IUGFS), Cardwell, MT, June–August 2007

APPOINTMENTS

- **Assistant Professor (AP2)**: Yale University (Department of Earth and Planetary Sciences), July 2023–
- **Assistant Professor (AP1)**: Yale University (Department of Earth and Planetary Sciences), July 2019–2023
- **Assistant Curator**: Yale Peabody Museum (Division of Invertebrate Paleontology), December 2021–
- **NSF EAR Postdoctoral Fellow**: Yale University (Department of Geology and Geophysics), January 2016–December 2017
- **Postdoctoral Associate**: Yale University (Department of Geology and Geophysics), January 2014–December 2015, January 2018–June 2019

TEACHING AND MENTORING

Teaching (Yale University except where indicated otherwise)

- **Instructor**: "Earth-Surface Processes" (EPS 232; Spring 2024, Spring 2023, Spring 2021, Spring 2020); "Topics in Geobiology" (EPS 721; Fall 2023, Fall 2022, Fall 2021, Fall 2020, Fall 2019); "Essentials of Earth and Planetary Sciences" (EPS 620; Fall 2024, Fall 2023, Spring 2023); "Seminar in Earth System Science" (EPS 755-756; Fall 2020-Fall 2021); "Colloquium in Earth and Planetary Sciences" (EPS 790; Fall 2021); "History of Life" (G&G 125; Spring 2015)
- **Seminar Instructor**: "Carbon Cycling and Bioturbation" (Fall 2023; weekly graduate seminar with YIBS Visiting Bass Scholar Thomas Bianchi)
- **Reading Group Leader**: Silica Reading Group (Spring 2022, Spring 2021)
- **Guest Lecturer and Laboratory Instructor**: "History of Life" (Spring 2019, Spring 2018, Spring 2017)
- **Guest Lecturer**: "Extraordinary Glimpses of Past Life" (EPS/G&G 355: Fall 2020, Fall 2018, Fall 2015); "Climate Change" (EPS 101: Fall 2020); "Invertebrates" (G&G 313: Fall 2019, Fall 2016); "Earth,

Resources, Energy and the Environment" (G&G 010: Fall 2019); "Earth-Surface Processes" (G&G 232: Spring 2018); "Productivity" (G&G 625: Fall 2014)

- **Guest Lecturer, other institutions**: Tufts University (Principles of Paleontology, Fall 2024), Stanford University (Fundamentals of Geobiology, Fall 2023), Smith College (Advanced Geobiology, Spring 2021), Amherst College (Paleontology, Spring 2017)
- **Field Trip Guest Instructor, Spain**: "Earth-Surface Processes" (Spring 2018)
- **Field Trip Guest Instructor, Barbados**: "Paleoenvironments" (Spring 2015)
- **Field Trip Co-Leader, Death Valley, CA**: "Paleoenvironments" (Spring 2014)
- **University Teaching Certificate** (University of California, Riverside), Winter-Spring 2012 (awarded June 2012): University-sponsored instructional and professional development program.
- **Teaching Assistant** (University of California, Riverside): "Headlines in the History of Life" (Spring 2010, Spring 2009), "Earth's Climate through Time" (Winter 2010), "The Earth's Crust and Interior" (Introductory Geology; Fall 2009), "Earthquake Country" (Winter 2009).
- **Teaching Assistant** (Amherst College): "Principles of Geology" (Introductory Geology; Fall 2006, Fall 2005, Spring 2005).

Mentoring

- **Yale Postdoctoral Fellow Supervisor**: Thomas Boag (YIBS Donnelley Postdoctoral Fellow, 2020-2022), Jiuyuan Wang (Yale Postdoctoral Associate, Agouron Geobiology Postdoctoral Fellow, 2021-2023), Sophie Westacott (Yale Seessel Postdoctoral Fellow, 2022-2023), Maya LaGrange Rao (YIBS Donnelley Postdoctoral Fellow, 2023-2025), Rachel Surprenant (Yale Seessel Postdoctoral Fellow, 2025)
- **Yale Ph.D. Supervisor**: Silvina Slagter (Ph.D. 2024), Kate Pippenger (NSF Graduate Research Fellow, Ph.D. 2021–), Sydney Riemer (Ph.D. 2022–), Ashley Rivas (Ph.D. 2022–), Lauren Gregory (Ph.D. 2024–)
- **Yale Secondary Ph.D. Project Supervisor**: Sophie Westacott (Ph.D. 2022; Cambrian bioturbation), Tom Reershemius (Ph.D. 2024; Cambrian fossilization), Brian Beaty (Ph.D. 2019–; Permo-Triassic bioturbation and biogeochemical cycling), James Pierce (Ph.D. 2021–; Mesozoic bioturbation), Maoli Vizcaíno (Ph.D. 2021–; bioturbation and oxygen stress); Samuel Shipman (Ph.D. 2021–; Cambrian carbonate factory), Nico Theunissen (Ph.D. 2023–; modern bioturbation and biogeochemical cycling)
- **Yale Ph.D. Committee Member**: Jack Shaw (Ph.D. 2022), Sophie Westacott (Ph.D. 2022), Roxanne Armfield (2019–2023), Tom Reershemius (Ph.D. 2024), Alexander Ruebenstahl (2019–), Brian Beaty (2019–), Jingjun Liu (2020–), James Pierce (2021–), Samuel Shipman (2021–), Isabella Chiaravalloti (2021–), Maoli Vizcaíno (2021–), Stacey Gerasimov (M.S. 2024), Ayesha Ahmed (2022–), Chloe Kent (2022–), Nico Theunissen (2023–), Olivia Gadson (2023–), Gareema Dhiman (2023–)
- **External Ph.D. Committee Member**: Sofia Rauzi (University of Waikato, Ph.D. 2021–), Emily Ellefson (Stanford University, Ph.D. 2021–)
- **External Ph.D. Examiner**: Patricia Gonzalez (University of Alberta, Ph.D. 2022), Giovanni Pasinetti (Memorial University, Ph.D. 2024)
- **Yale Postgraduate Fellow Supervisor**: Rhiannon Nolan (2019–2021), Nico Theunissen (2022–2023)
- **Yale Undergraduate Honors Thesis Supervisor**: Jaeger Johnson (Yale College '21)
- **Yale Undergraduate Thesis Reader**: Trina White (Yale College '20), Patrick Perry (Yale College '21), Gavrielle Welbel (Yale College '23), Lolyn Tejeda Lemus (Yale College '24)
- **Yale Undergraduate Student Research Supervisor**: Nadine Cubeisy (2021–2022), Victoria Smithson (2022–2023), Dana Polomski (2023–2024), Andrea Chow (2024–), Maxwell Cota (2024–)
- **Yale Summer Research Fellowship** on Devonian bioturbation and the stratigraphic record of *Rusophycus* (2016): Yasmeen Erritouni (Dartmouth College, A.B. '17)
- **Yale EPS 355 term research project** modeling fossil phosphatization (2015): Tess Maggio (Yale College, B.S. '16)
- **Yale EPS 355 term research project** on experimental silicification of *Metasequoia*, *Nematostella* and cyanobacterial mats (2015): Adrien Gao (Yale College, B.S. '17)
- **UCR undergraduate research supervisor and fieldwork mentor** (2011-2013): Cyntia Andres (UC Riverside, B.S. '13), Evelyn Conrado (UC Riverside, B.S. '13), James Minor (UC Riverside, B.S. '13), Mounga Nonu (UC Riverside B.S. '13), Alexandra Ruiz (UC Riverside, B.S. '13)

- **Yale first-year college advisor**: Bella Rosado (Yale College ’22), Nicholas Famularo (Yale College ’22), Liam Curtis (Yale College ’23), Kwaku Acquah (Yale College ’23), Libby Snowden (Yale College ’24), Pathid Liamtrakoolpanich (Yale College ’24), Jessica Le (Yale College ’25), Sophie Dauerman (Yale College ’25), Tate Evans (Yale College ’26), Kidus Abebe (Yale College ’26), Anna Keating (Yale College ’27), Kathleen Cain (Yale College ’27)
- **Yale second-year college advisor**: Bella Rosado (Yale College ’22), Liam Curtis (Yale College ’23), Kwaku Acquah (Yale College ’23), Libby Snowden (Yale College ’24), Pathid Liamtrakoolpanich (Yale College ’24)

FELLOWSHIPS, HONORS AND AWARDS

Yale University

- National Academy of Sciences (NAS) Kavli Fellow (2025)
- Arthur Greer Memorial Prize (2024)
- Sloan Research Fellowship (2023–2025)
- Geological Society of America Geobiology and Geomicrobiology Division Pre-Tenure Award (2022)
- Geological Society of America Donath Medal (2021)
- National Science Foundation (NSF) Earth Sciences Postdoctoral Fellowship (2016-2017)

University of California, Riverside

- National Science Foundation (NSF) Graduate Student Research Fellowship (2010-2013)
- “Best Student Talk,” 2012 California Paleontology Conference (2012)
- Dr. Janet M. Boyce Memorial Endowed Fund for Women Majoring in the Sciences (2012-2013)
- Dr. Janet Boyce Memorial Scholarship (2009-2010)
- Chancellor’s Distinguished Fellowship (2008-2009)

Amherst College

- John Mason Clarke Fellowship for the study of Geology and Paleontology (2008-2011)
- Walter F. Pond Prize in Geology (2008) (awarded annually to the senior who prepares the most-distinguished geology thesis)
- Phi Beta Kappa (2008)
- Sigma Xi Student Membership (2008)
- Belt-Brophy Prize in Geology (2007) (awarded annually to the junior determined to have shown the greatest promise for success as a geologist)
- Dean of Faculty Summer Research Fellowship (2007)
- Howard Hughes Medical Institute (HHMI) Summer Research Fellowship (2005)

FUNDED GRANTS

2024–2028: **NSF Frontier Research in Earth Sciences**, “Collaborative research: Testing the impact of land plants on the Earth system” (Co-PI and Institutional PI)
2024–2025: **Yale Seessel Endowed Postdoctoral Fellowship**, “Constraining the abundance, diversity, and ecological impacts of autotrophs and heterotrophs in Earth’s first complex animal ecosystems”
2023–2025: **Sloan Research Fellowship**, “The evolution of the marine carbonate factory and the rise of biomineralizing animals” (PI)
2023–2025: **NASA Exobiology Program**, “A multiple proxy approach to constrain Paleozoic marine oxygenation during early metazoan extinction and radiation events” (Co-I and Institutional PI)
2022–2025: **American Chemical Society Petroleum Research Fund Doctoral New Investigators Program**, “Sedimentary and Marine Biogeochemical Controls on Sandstone Authigenesis” (PI)
2022–2023: **Yale Seessel Endowed Postdoctoral Fellowship**, “Tracking the rise of the biological silica cycle”
2021–2022: **Yale Natural Lands** grant, “Seafloor communities in a warming world: the impact of thermal stress on bioturbation-biogeochemical feedbacks” (PI)
2021–2024: **Marsden Fund**, “Exploring the limits of climate regulation: Could a decline in marine biological silica uptake exacerbate global climate change?” (Associate Investigator)

2019-2022: **NASA Exobiology Program**, "Did the small inherit the Earth? Analysis of mm-scale Ediacara body and trace fossils (South Australia) with implications for the early evolution of animals" (Co-I and Institutional PI)
2014-2018: **NASA Exobiology Program**, "Catching the 'second wave' of the Ediacara Biota: Assessing the role of environment, ecology and diagenesis" (co-author and grant personnel)
2014: **National Geographic Society** (co-author and grant personnel), **American Philosophical Society** Lewis and Clark Fund for Exploration and Field Research in Astrobiology
2013: **Desert Legacy Fund** (The Community Foundation) Student Research Grant, **Paleontological Society** (PS) Student Research Grant, **Society for Sedimentary Geology** (SEPM) Student Research Grant, **Evolving Earth Foundation** Research Grant, **American Museum of Natural History** (AMNH) Roosevelt Memorial Fund, **Sigma Xi** Student Grant-in-Aid of Research
2012: **Society for Sedimentary Geology** (SEPM) Student Research Grant, **Ed Picou Fellowship Grant** for Graduate Studies in Earth Science (GCSSEPM), **American Association of Petroleum Geologists** (AAPG) David Worthington Grant, **InfoQuest Foundation** Student Field Research Grant
2011: **Society for Sedimentary Geology** (SEPM) Student Research Grant, **Geological Society of America** (GSA) Student Research Grant, **American Association of Petroleum Geologists** (AAPG) John E. Kilkenny Memorial Grant
2009: **Society for Sedimentary Geology** (SEPM) Student Research Grant, **Geological Society of America** (GSA) Student Research Grant
2007: **Amherst College Dean of Faculty** Doelling Undergraduate Research Grant

YALE UNIVERSITY AND DEPARTMENTAL (EPS) COMMITTEE SERVICE

- Earth-System Modeling Faculty Search Committee, EPS (Fall 2024–Spring 2025)
- Earth-System Modeling Faculty Search Committee, EPS (Fall 2023–Spring 2024)
- YIBS Bass Scholar Selection Committee (Spring 2024)
- Yale Peabody Museum Simpson Prize Selection Committee (Spring 2024)
- Yale Peabody Museum Associate Director of Marketing and Communications Search Committee (Fall 2023)
- Climate Science Faculty Search Committee, EPS (Fall 2022–Spring 2023)
- Yale Associates in Teaching Program Selection Committee (Spring 2023)
- Curriculum Committee, EPS (Fall 2022)
- Yale Peabody Museum Yamanaka Prize Selection Committee (Spring 2022)
- YIBS Donnelley Postdoctoral Fellowship Selection Committee (Fall 2021)
- Colloquium Committee, EPS (Fall 2019–Fall 2021)
- PhD Qualifying Examination Committee, EPS (Spring–Fall 2020, Fall 2021, Spring 2023)
- Graduate Admissions Committee, EPS (Fall 2020–Spring 2021, Spring 2024)
- Flint Committee, EPS (Fall 2019–Spring 2020, Spring–Fall 2023)

PROFESSIONAL SERVICE AND COMMUNITY OUTREACH

- **Journal Reviewer:** *Alcheringa; American Journal of Science; Biogeosciences; Current Biology; Estuaries and Coasts; Geobiology; Geochimica et Cosmochimica Acta; Geology; Global and Planetary Change; Gondwana Research; GSA Bulletin; GSA Today; Ichnos; Journal of the Geological Society; Journal of Sedimentary Research; Lethaia; Nature Communications; Nature Ecology and Evolution; Palaeogeography, Palaeoclimatology, Palaeoecology; Palaeontology; Palaios; Paleobiology; PNAS; Precambrian Research; Science; Science Advances; Scientific Data; Scientific Reports; Sedimentary Geology; Terra Nova*.
- **Grant Proposal Panel and Ad Hoc Reviewer**: ACS, NASA, NSF, NSERC, NERC, American Philosophical Society, Palaeontological Association, Marsden Fund, European Science Foundation.
- **Subject Editor**: *Geobiology*.
- **Associate Editor**: *Palaeogeography, Palaeoclimatology, Palaeoecology*; *American Journal of Science*.
- **Guest Editor, *Ediacaran Environments and Ecosystems***, Special Issue in *Palaeogeography, Palaeoclimatology, Palaeocology* (v. 434, 2015).
- **Event Day Convener and Instructor, Yale Pathways to Science** (2024).
- **Society for Sedimentary Geology (SEPM) Moore Medal Committee** (2022–2024).
- **Society for Sedimentary Geology (SEPM) Officer Nominating Committee** (2022).

- **Yale Campus Representative for Geological Society of America** (2019–).
- **Scientific Consultant, Peabody Museum Exhibit Design** (2020–).
- **Co-organizer, 2024 Northeast Geobiology Symposium** (2023–2024).
- **American Geophysical Union Outstanding Student Presentation Award Judge** (2022).
- **Geological Society of America, Division of Geobiology and Geomicrobiology Student Presentation Award Judge** (2016, 2021).
- **Geological Society of America, Division of Geochronology Student Presentation Award Judge** (2019)
- **Symposium Convener and Chair, GSA Connects 2025** (session proposal approved; Evolution of Life in the Cambrian Seas: Biotic, Biogeochemical, and Sedimentological Contexts).
- **Symposium Convener and Chair, GSA Connects 2023** (Session T67: The Early Paleozoic: Radiations, Extinctions, and Environment) (2023).
- **Symposium Convener and Chair, GSA Connects 2020** (Session T76: Exceptional Fossilization in Time and Space) (2020).
- **Symposium Convener and Chair, Goldschmidt 2019** (Session 7a: Co-evolution of Earth's Continents, Atmosphere, Oceans and Biosphere From the Neoproterozoic Through the Paleozoic) (2019).
- **Symposium Convener and Chair, 2019 North American Paleontological Convention** (Symposium 1: Behavioral Innovations and Environmental Feedbacks: Insights From the Trace Fossil Record and Other Archives) (2019).
- **Conference Field Trip Leader, 2019 North American Paleontological Convention** (Ediacaran-Cambrian Transition of the Southwestern USA) (2019).
- **Co-organizer, 2019 Second Geobiology Society Conference** (2019).
- **Symposium Convener and Chair, 2018 5th International Palaeontological Congress** (Session S9: Coevolution of Life and Environments: Integrating the Palaeoecological, Sedimentological and Geochemical Records).
- **Symposium Chair, 2018 5th International Palaeontological Congress** (Session S12: Early Animal Life).
- **Symposium Convener and Chair, 2017 Annual Meeting of the Geological Society of America** (Session T66: Exceptionally Preserved Proterozoic–Early Paleozoic Fossils).
- **Volunteer, Peabody Museum 'Dinosaur Days' ('Meet the Scientist')**, 2015.
- **Guest Lecturer for Institute of Learning in Retirement**, 2014 (Peabody Museum Extension Course 101, Session 3, "Fossils: How they form, why they matter and the changing face of the seafloor").
- **Symposium Convener and Chair, 2014 North American Paleontological Convention** (Symposium S01: Ediacaran Environments and Ecosystems).
- **Session Chair, 2012 California Paleontology Conference** (Session No. 3; University of California, Riverside).
- **Organizer, 2012 California Paleontology Conference** (University of California, Riverside): California-wide paleontological conference, with an emphasis upon student research and development.
- **Session Chair, 2011 Annual Meeting of the Geological Society of America** (Session No. 120, Paleontology II: Paleobotany and Behavior).
- **Treasurer, Earth Sciences Graduate Student Association (ESGSA)** (Department of Earth Sciences, University of California, Riverside), 2011–2013.
- **Organizer and volunteer, 2011 Climate Change Fair** (University of California, Riverside): Educational outreach event to Riverside community on the science, teaching and communication of climate change.
- **Participant, Geology Education Outreach Program (GEOP), 2008–2013** (Department of Earth Sciences, University of California, Riverside): Educational, hands-on geology presentations in Riverside Unified School District (RUSD) K-12 schools.

SCIENTIFIC CONSULTANT/INTERVIEWEE FOR POPULAR NEWS

New York Times, *Nature* News, *Science* News, *The Atlantic*, *New Scientist*, *Knowable Magazine*, *Yale News*, *Yale Daily News*, *USA Today*

PROFESSIONAL EXPERIENCE

- **Science Writing Internship, Office of Strategic Communications** (University of California, Riverside, CA; Winter–Spring 2010).
- **GSA GeoCorps Field Paleontologist, Bryce Canyon National Park** (Bryce Canyon National Park, UT; Tropic, UT; May–August 2008): Inventory of known fossil-bearing sites in Bryce Canyon National Park and paleontological prospecting for, collection and processing of vertebrate, invertebrate and plant macrofossil and microfossil material.
- **Dean of Faculty Summer Research Fellow, Amherst College Geology Department** (Amherst College, Amherst, MA; Fieldwork: Wisconsin; May–August 2007): Lab and field paleontological work conducting preliminary research for honors thesis on late Cambrian fossilized medusae.
- **Howard Hughes Medical Institute Summer Research Fellow, Amherst College Geology Department** (Amherst College, Amherst, MA; Fieldwork: Wisconsin, New York, Quebec, Ontario; June–August 2005): Lab and field paleontological work researching late Cambrian shoreline environments and the taphonomy and morphology of trace fossils, especially *Climactichnites wilsoni*.

FIELD AREAS

2009–present: Death Valley region and Great Basin, western USA (Proterozoic–Lower Paleozoic)
2009–present: South and central Australia (Ediacaran)
2010–present: Bahamas (Modern)
2012–present: Newfoundland, Canada (Lower Paleozoic)
2012–present: Appalachian Basin (Lower–Middle Paleozoic)
2015–2018: Georgia, USA (Modern)
2016–present: Connecticut and Long Island Sound, USA (Modern)
2023–present: Arctic Canada (Lower Paleozoic)
2022: Eastern Alaska (Lower–Middle Paleozoic)
2018, 2022: Svalbard (Permian–Triassic)
2016: South China (Neoproterozoic–Lower Paleozoic)
2016: Rocky Mountain region, USA (Lower Paleozoic)
2016: Zimbabwe and Botswana (Archean–Paleoproterozoic)
2015: Barbados (Cenozoic and Modern)
2011: Central Spain (Lower Paleozoic)
2008, 2013: Central Utah, USA (Mesozoic)
2007: Southwestern Montana, USA (Proterozoic–Quaternary)
2005, 2007–2008: Midwestern and Northeastern USA and Canada (Lower Paleozoic)
2012–2014: National Park Service Scientific Research and Collecting Permit (Study #DEVA-00344): Exceptional preservation and the evolution of seafloor colonization in early Paleozoic marine shelfal environments (Death Valley National Park)
2014–2016: National Park Service Scientific Research and Collecting Permit (Study #DEVA-00393): The evolution of seafloor colonization and exceptional preservation in early Paleozoic marine shelfal environments (Death Valley National Park)
2016–2019: National Park Service Scientific Research and Collecting Permit (Study #DEVA-00393): The evolution of seafloor colonization and exceptional preservation in early Paleozoic marine shelfal environments (Death Valley National Park)
2019–2022: National Park Service Scientific Research and Collecting Permit (Study #DEVA-00393): The evolution of seafloor colonization and exceptional preservation in early Paleozoic shallow marine environments (Death Valley National Park)
2023–2026: Bureau of Land Management Nevada Paleontological Resources Use Permit (N-101855)
2023–2024: Bureau of Land Management Utah Paleontological Resources Use Permit (UT23-002)

PROFESSIONAL MEMBERSHIPS

- Geological Society of America (GSA)
- Society for Sedimentary Geology (SEPM)
- American Geophysical Union (AGU)
- Geochemical Society (GS)

- The Geobiology Society
- The Paleontological Society (PS)
- The Palaeontological Association (PalAss)
- Sigma Xi, The Scientific Research Society
- American Chemical Society (ACS)
- National Association of Geoscience Teachers (NAGT)
- Association for Women Geoscientists (AWG)

SCIENTIFIC PUBLICATIONS

§*Papers for which L.G. Tarhan is corresponding or co-corresponding author*
**Mentored or supervised student*
***Mentored or supervised postdoctoral researcher*

In Review or Revision:

§**Tarhan, L.G.**, *Pippenger, K.H., Cribb, A.T., Zill, M., Phelps, W., Droser, M.L., Bottjer, D.J. and Clapham, M.E., In review, Tracking bioturbation through time: The evolution of the marine sedimentary mixed and transition layers.

*Slagter, S., **Wang, J., Syverson, D., Asael, D., Planavsky, N.J. and **Tarhan, L.G.**, In review, Silicon isotope exchange in silica biomineralizers.

*****Beaty, B., Foster, W.J., Zuchuat, V., Moller, S.R., Buchwald, S.Z., Brooks, H., *Rauzi, S., Isson, T., Planke, S., Rodríguez-Tovar, F.J., Senger, K., Planavsky, N.J. and **Tarhan, L.G.**, In revision, Bioturbation shapes marine biogeochemical cycling following the end-Permian mass extinction in Svalbard.

Alcott, L.J., **Tarhan, L.G.** and Planavsky, N.J., In revision, A new approach to gauging uncertainty associated with sampling resolution in the geological record.

Lazowski, C., Melnyk, S., Gutierrez Rueda, D., **Wang, J., **Tarhan, L.G.**, Hauck, T., Alessi, D., Konhauser, K. and Gingras, M., In review, Wind-blown lithium deposits in the Western Canada Sedimentary Basin.

Published, In Press or Accepted:

68. §**Tarhan, L.G.**, Hood, A.v.S. and Droser, M.L., 2025, Elevated marine dissolved silica levels explain a wide range of Ediacaran–Cambrian Ediacara-style fossil deposits: *Geobiology*, v. 23, article e70017, doi.org/10.1111/gbi.70017.

67. Kalderon-Asael, B., **Wang, J., Planavsky, N.J., Oehlert, A., Vitek, B., Reid, R.P. and **Tarhan, L.G.**, 2025, Evaluation of early diagenetic signatures of lithium and stable strontium isotopes in shallow marine carbonate sediments: *Chemical Geology*, v. 676, article 122590, doi.org/10.1016/j.chemgeo.2024.122590 (invited research article).

66. **Fakhraee, M., Crockford, P.W., Bauer, K.W., Pasquier, V., Sugiyama, I., Katsev, S., Raven, M.R., Gomes, M., Philippot, P., Crowe, S.A., **Tarhan, L.G.**, Lyons, T.W. and Planavsky, N.J., 2024, The history of Earth's sulfur cycle: *Nature Reviews Earth and Environment*, doi.org/10.1038/s43017-024-00615-0.

65. *Rivas, A., Myrow, P.M., Smith, E.F., Nelson, L.L., Briggs, D.E.G. and **Tarhan, L.G.**, 2024, Morphology and preservation of *Gaojiashania cyclus*, an enigmatic tubular fossil from the upper Ediacaran Dunfee Member, Deep Spring Formation, Nevada, USA: *Palaios*, v. 39, p. 444–461, doi.org/10.2110/palo.2024.007.

64. Ye, S., **Wang, J., Liu, Q. and **Tarhan, L.G.**, 2024, International collaboration in geoscience lags behind other subjects: *Nature Geoscience*, doi.org/10.1038/s41561-024-01566-3.

63. *Slagter, S., Konhauser, K., Briggs, D.E.G. and **Tarhan, L.G.**, 2024, Controls on authigenic mineralization in experimental Ediacara-style preservation: *Geobiology*, v. 22, article e12615, doi.org/10.1111/gbi.12615.

62. *Rauzi, S., Foster, W.J., Takahashi, S., Hori, R.S., *Beaty, B.J., **Tarhan, L.G.** and Isson, T., 2024, Lithium isotopic evidence for enhanced reverse weathering during the Early Triassic warm period: *Proceedings of the National Academy of Sciences*, v. 121, article e2318860121, doi.org/10.1073/pnas.2318860121.

61. **Westacott, S., §Zhao, M.Y. and §**Tarhan, L.G.**, 2024, Extent and biogeochemical impact of *Skolithos* piperock in the lower Cambrian Zabriskie Quartzite (California, USA): *Palaeogeography, Palaeoclimatology, Palaeoecology*, v. 651, article 112381, doi.org/10.1016/j.palaeo.2024.112381 (invited research article).

60. §Zhang, S., Solan, M. and §**Tarhan, L.G.**, 2024, Global distribution and environmental correlates of marine bioturbation: *Current Biology*, doi.org/10.1016/j.cub.2024.04.065.

59. Wei, G.-Y., Zhao, M., Sperling, E.A., Gaines, R.R., Kalderon-Asael, B., Shen, J., Li, C., Zhang, F., Li, G., Zhou, C., Cai, C., Chen, D., Xiao, K.-Q., Jiang, L., Ling, H.-F., Planavsky, N.J. and **Tarhan, L.G.**, 2024, Lithium isotopic constraints on the evolution of terrestrial clay mineral factory and oceanic oxygenation in the earliest Paleozoic Era: *Science Advances*, v. 10, article eadk2152, doi.org/10.1126/sciadv.adk2152.

58. *Slagter, S., **Tarhan, L.G.**, Blum, T.B., Droser, M.L. and Valley, J.W., 2024, Silica cementation history of the Ediacara Member (Rawnsley Quartzite, South Australia): Insights from petrographic and in situ oxygen isotopic microanalyses: *Precambrian Research*, v. 402, article 107288, doi.org/10.1016/j.precamres.2024.107288.

57. **Zhao, M.Y., Beaty, B., **Tarhan, L.G.** and Planavsky, N.J., 2023, Resetting of shallow-water carbonate B isotope values during marine burial diagenesis: *American Journal of Science*, v. 323, doi.org/10.2475/001c.91398.

56. **Zhao, M., §**Tarhan, L.G.**, Planavsky, N.J. and Isson, T., 2023, The influence of warming on phosphorus burial in continental margin sediments: *American Journal of Science*, v. 323, doi.org/10.2475/001c.85110.

55. **Fakhraee, M., **Tarhan, L.G.**, Reinhard, C.T. and Planavsky, N.J., 2023, Constraining the elemental stoichiometry of early marine life: *Geology*, v. 51, p. 1043 –1047, doi.org/10.1130/G51416.1.

54. §**Tarhan, L.G.**, *Nolan, R.Z., *Westacott, S., *Shaw, J.O. and Pruss, S.B., 2023, Environmental and temporal patterns in bioturbation in the Cambrian–Ordovician of western Newfoundland: *Geobiology*, v. 21, p. 571–591, doi.org/10.1111/gbi.12560.

53. **Fakhraee, M., §**Tarhan, L.G.**, Reinhard, C.T., Crowe, S.A., Lyons, T.W. and Planavsky, N.J., 2023, Earth's surface oxygenation and the rise of eukaryotes: *Earth-Science Reviews*, v. 240, article 104398, doi.org/10.1016/j.earscirev.2023.104398.

52. Myrow, P., Hasson, M., Taylor, J., Chen, J., **Tarhan, L.G.**, Fike, D., Ramirez, G., Fowlkes, G., Popov, L. and Lui, H., 2023, Revised Paleozoic stratigraphy of the Dinosaur National Monument area: Implications for structural and lithologic control of early Paleozoic hypsometry of western Laurentia and patterns of Cambrian transgression: *Sedimentary Geology*, article 106373, doi.org/10.1016/j.sedgeo.2023.106373.

51. Myrow, P., Hasson, M., Taylor, J., **Tarhan, L.G.**, Fike, D., Ramirez, G., Fowlkes, G., and Chen, J., 2023, Structural control of Cambrian paleotopography and patterns of transgression in western Laurentia: *Geology*, v. 51, p. 521–526, doi.org/10.1130/G51055.1.

50. **Wang, J., §**Tarhan, L.G.**, Jacobson, A.D., Oehlert, A.M. and Planavsky, N.J., 2023, The evolution of the marine carbonate factory: *Nature*, v. 615, p. 265–269, doi.org/10.1038/s41586-022-05654-5.

49. **Wang, J., Di, Y., Asael, D., Planavsky, N.J. and **Tarhan, L.G.**, 2023, An investigation of factors affecting high-precision Sr isotope analyses ($^{87}Sr/^{86}Sr$ and $\delta^{88}/^{86}Sr$) by MC-ICP-MS: *Chemical Geology*, v. 621, article 121365.

48. §**Tarhan, L.G.**, 2022, A multidisciplinary approach to reconstructing the history of early animal life on Earth: *Geology*, v. 50, p. 1-2, doi.org/10.1130/GEOL50THSEP.1 (invited perspective piece).

47. Wei, G.-Y., Hood, A.v.S. Li, D., Ling, H.-F., Planavsky, N.J. and §**Tarhan, L.G.**, 2022, Calcium isotope constraints on the transition from aragonite seas to calcite seas in the Cambrian: *Global Biogeochemical Cycles*, v. 36, article e2021GB007235.

46. **Zhao, M.Y., **Tarhan, L.G.**, Shull, D., Asael, D., Wang, X. and Planavsky, N.J., 2022, Covariation between molybdenum and uranium isotopes in reducing marine sediments: *Chemical Geology*, v. 603, article 120921.

45. *Slagter, S., Hao, W., Planavsky, N.J. and Konhauser, K. and **Tarhan, L.G.**, 2022, Biofilms as agents of Ediacara-style fossilization: *Scientific Reports*, v. 12, article 8631.

44. Droser, M.L., Evans, S.D., **Tarhan, L.G.**, Surprenant, R.K., Hughes, I.V., Hughes, E. and Gehling, J.G., 2022, What happens between depositional events, stays between depositional events: The significance of organic mat surfaces in the capture of Ediacara communities and the sedimentary rocks that preserve them: *Frontiers in Earth Science*, v. 10, article 826353.

43. §**Tarhan, L.G.**, Droser, M.L., and Gehling, J.G., 2022, Picking out the warp and weft of the Ediacaran seafloor: Paleoenvironment and paleoecology of an Ediacara textured organic surface: *Precambrian Research*, v. 369, article 106539, doi.org/10.1016/j.precamres.2021.106539.

42. Fakhraee, M., **Tarhan, L.G.**, Planavsky, N.J. and Reinhard, C.T., 2021, A largely invariant marine dissolved organic carbon reservoir across Earth's history: *Proceedings of the National Academy of Sciences*, v. 118, article e2103511118.

41. §**Tarhan, L.G.**, **Zhao, M.Y. and Planavsky, N.J., 2021, Bioturbation feedbacks on the phosphorus cycle: *Earth and Planetary Science Letters*, v. 566, article 116961.

40. Swaren, L., Hao, W., von Gunten, K., Wilson, S.A., Alessi, D.S., Planavsky, N.J., **Tarhan, L.G.**, Gingras, M.K. and Konhauser, K.O., 2021, The influence of invertebrate faecal material on compositional heterogeneity, diagenesis and trace metal distribution in the Ogeechee River Estuary, Georgia, USA: *Sedimentology*, v. 68, p. 788-804.

39. *Slagter, S., **Tarhan, L.G.**, Hao, W., Planavsky, N.J. and Konhauser, K., 2021, Experimental evidence supports early silica cementation of the Ediacara Biota: *Geology*, v. 49, p. 51–55.

38. **Zhao, M., **Tarhan, L.G.**, Zhang, Y., Hood, A., Asael, D., Reid, R.P. and Planavsky, N.J., 2020, Evaluation of shallow-water carbonates as a seawater zinc isotope archive: *Earth and Planetary Science Letters*, v. 553, article 116599.

37. Wei, G.-Y., Planavsky, N.J., **Tarhan, L.G.**, He, T., Wang, D., Shields, G.A., Wei, W. and Ling, H.-F., 2020, Highly dynamic marine redox state through the Cambrian explosion highlighted by authigenic $\delta^{238}U$ records: *Earth and Planetary Science Letters*, v. 544, article 116361.

36. Droser, M.L., §**Tarhan, L.G.**, Evans, S.D., Surprenant, R.K. and Gehling, J.G., 2020, Biostratinomy of the Ediacara Member (Rawnsley Quartzite, South Australia): implications for depositional environments, ecology and biology of Ediacara organisms: *Interface Focus*., v. 10, article 20190100, doi.org/10.1098/rsfs.2019.0100.

35. §**Tarhan, L.G.**, Myrow, P.M., Smith, E.F., Nelson, L.L. and Sadler, P.M., 2020, Infaunal augurs of the Cambrian Explosion: an Ediacaran trace fossil assemblage from Nevada, USA: *Geobiology*, v. 18, p. 486-496.

34. Planavsky, N.J., Hood, A. v. S., **Tarhan, L.G.**, Shen, S. and Johnson, K., 2020, Store and share ancient rocks: *Nature*, v. 581, p. 137–139

33. Zhao, M., Zhang, S., **Tarhan, L.G.**, Reinhard, C. and Planavsky, N.J., 2020, The role of calcium in regulating marine phosphorus burial and atmospheric oxygenation: *Nature Communications*, v. 11, article 2232.

32. Konhauser, K.O., Hao, W., Li, Y., von Gunten, K., Bishop, B.A., Alessi, D.S., **Tarhan, L.G.**, O'Connell, B., Robbins, L.J., Planavsky, N.J. and Gingras, M.K., 2020, *Diopatra cuprea* worm burrow parchment: a cautionary tale of infaunal surface reactivity: *Lethaia*, v. 53, p. 47–61.

31. Smith, E.F., §**Tarhan, L.G.** and Nelson, L.L., 2019, Ediacaran-Cambrian transition of the southwestern USA: *PaleoBios*, v. 36, Supplement 2, p. 1–31.

30. §**Tarhan, L.G.**, Hood, A.v.S., Droser, M.L., Gehling, J.G., Briggs, D.E.G., Gaines R.R., Robbins, L.J. and Planavsky, N.J., 2019, Comment on "Petrological evidence supports the death mask model for the preservation of Ediacaran soft-bodied organisms in South Australia": *Geology*, doi.org/10.1130/G46326C.1.

29. Droser, M.L., Gehling, J.G., **Tarhan, L.G.**, Evans, S.D., Hall, C.M.S., Hughes, I.V., Hughes, E.B., Dzaugis, M.E., Dzaugis, M.P., Dzaugis, P.W. and Rice, D., 2019, Piecing together the puzzle of the Ediacara Biota: excavation and reconstruction at the Ediacara National Heritage site Nilpena (South Australia): *Palaeogeography, Palaeoclimatology, Palaeoecology*, v. 513, p. 132–145.

28. §**Tarhan, L.G.**, 2018, Phanerozoic shallow marine sole marks and substrate evolution: *Geology*, v. 46, p. 755–758.

27. §**Tarhan, L.G.**, Droser, M.L., Cole, D.B. and Gehling, J.G., 2018, Ecological expansion and extinction in the late Ediacaran: weighing the evidence for environmental and biotic drivers. *Integrative and Comparative Biology*, v. 58, p. 688–702 (invited research article).

26. Wei, G.-Y., Planavsky, N.J., **Tarhan, L.G.**, Chen, X., Wei, W., Li, D. and Ling, H.-F., 2018, Marine redox fluctuation as a potential trigger for the Cambrian explosion: *Geology*, v. 46, p. 587–590.

25. §**Tarhan, L.G.**, 2018, The early Paleozoic development of bioturbation—evolutionary and geobiological consequences: *Earth-Science Reviews* (invited review), v.178, p. 177–207.

24. §**Tarhan, L.G.**, Planavsky, N.J., Wang, X., Bellefroid, E.J., Droser, M.L. and Gehling, J.G., 2018, Late-stage 'ferruginization' of the Ediacara Member (Rawnsley Quartzite, South Australia): insights from uranium isotopes: *Geobiology*, v. 16, p. 35–48.

23. Droser, M.L., **Tarhan, L.G.** and Gehling, J.G., 2017, The rise of animals in a changing environment: global ecological innovation in the late Ediacaran: *Annual Review of Earth and Planetary Sciences*, v. 45, p. 593–617.

22. §**Tarhan, L.G.**, 2017, Meiofauna mute the Cambrian Explosion: *Nature Ecology and Evolution*, doi: 10.1038/s41559-017-0324-2.

21. McMahon, S., **Tarhan, L.G.** and Briggs, D.E.G., 2017, Decay of the sea anemone *Metridium* (Actiniaria): implications for the preservation of soft-bodied diploblast-grade animals: *Palaios*, v. 32, p. 388–395.

20. §**Tarhan, L.G.**, Droser, M.L., Gehling, J.G. and Dzaugis, M.P., 2017, Microbial mat sandwiches and other anactualistic sedimentary features of the Ediacara Member (Rawnsley Quartzite, South Australia): implications for interpretation of the Ediacaran sedimentary record: *Palaios*, v. 32, p. 181–194.

19. Sappenfield, A.D., **Tarhan, L.G.** and Droser, M.L., 2017, Earth's oldest jellyfish strandings: a unique taphonomic window or just another day at the beach?: *Geological Magazine*, v. 154, p. 859–874.

18. §**Tarhan, L.G.**, Hood, A.v.S., Droser, M.L., Gehling, J.G. and Briggs, D.E.G., 2017, Delusions of dirt: Ediacara organisms were not soil dwellers—Reply: *Geology*, doi:10.1130/G38858Y.1.

17. §**Tarhan, L.G.**, Hood, A.v.S., Droser, M.L., Gehling, J.G. and Briggs, D.E.G., 2016, Exceptional preservation of soft-bodied Ediacara Biota promoted by silica-rich oceans: *Geology*, v. 44, p. 951–954.

16. Anderson, R.P., **Tarhan, L.G.**, Cummings, K.E., Planavsky, N.P. and Bjørnerud, M., 2016, Macroscopic structures in the 1.1 Ga continental Copper Harbor Formation: concretions or fossils?: *Palaios*, v. 31, p. 327–338.

15. §**Tarhan, L.G.**, Haddad, E., Hall, C.M.S., Dahl, R.M., Hancock, L.G., Henry, S.E., Joel, L.V., Thomson, T.J. and Droser, M.L., 2016, Seafloor colonization in the earliest Paleozoic: evidence from the Cambrian of Death Valley: *Proceedings of the Death Valley Natural History Association*, p. 355–379 (invited research article).

14. Darroch, S., Locatelli, E., McCoy, V., Clark, E., Anderson, R., **Tarhan, L.** and Hull, P., 2016, Taphonomic disparity in foraminifera as a paleo-indicator for seagrass: *Palaios*, v. 31, p. 242–258.

13. McCoy, V.E., Saupe, E.E., Lamsdell, J.C., **Tarhan, L.G.**, McMahon, S., Lidgard, S., Mayer, P., Whalen, C.D., Soriano, C., Finney, L., Vogt, S., Clark, E.G., Anderson, R.P., Petermann, H., Locatelli, E.R. and Briggs, D.E.G., 2016, The Tully Monster is a vertebrate: *Nature*, v. 532, p. 496–499.

12. Li, C., Planavsky, N.J., Shi, W., Zhang, Z., Zhou, C., Cheng, M., **Tarhan, L.G.**, Luo, G. and Xie, S., 2015, Ediacaran marine redox heterogeneity and early animal ecosystems: *Scientific Reports*, v. 5, doi: 10.1038/srep17097.

11. §**Tarhan, L.G.**, Droser, M.L., Planavsky, N.J. and Johnston, D., 2015, Protracted development of bioturbation through the early Palaeozoic Era: *Nature Geoscience*, v. 8, p. 865–869.

10. Planavsky, N.J., **Tarhan, L.G.**, Bellefroid, E.J., Evans, D.A.D., Reinhard, C.T., Love, G. and Lyons, T.W., 2015, Late Proterozoic transitions in climate, oxygen, and tectonics, and the rise of complex life: The Paleontological Society Papers, v. 21, p. 47–82.

9. §**Tarhan, L.G.**, and Laflamme, M., 2015, An examination of the evolution of Ediacaran paleoenvironmental and paleoecological research: *Palaeogeography, Palaeoclimatology, Palaeoecology*, v. 434, p. 1–3.

8. §**Tarhan, L.G.**, Droser, M.L. and Gehling, J.G., 2015, Depositional and preservational environments of the Ediacara Member, Rawnsley Quartzite (South Australia): assessment of paleoenvironmental proxies and the timing of 'ferruginization:' *Palaeogeography, Palaeoclimatology, Palaeoecology*, v. 434, p. 4–13.

7. §**Tarhan, L.G.**, Droser, M.L., Gehling, J.G. and Dzaugis, M.P., 2015, Taphonomy and morphology of the Ediacara form genus *Aspidella*: *Precambrian Research*, v. 257, p. 124–136.

6. §**Tarhan, L.G.**, Droser, M.L. and Hughes, N., 2014, Mixed layer development and exceptional trace fossil preservation in Cambro-Ordovician siliciclastic strata: *Cambro-Ordovician Studies V*, Memoirs of the Association of Australasian Palaeontologists (ed. Laurie, J.), v. 45, p. 71–88.

5. §**Tarhan, L.G.** and Droser, M.L., 2014, Widespread delayed mixing in early to middle Cambrian marine shelfal settings: *Palaeogeography, Palaeoclimatology, Palaeoecology*, v. 399, p. 310–322.

4. §**Tarhan, L.G.**, Hughes, N.C., Myrow, P.M., Bhargava, O.N., Ahluwalia, A.D. and Kudryavtsev, A.B., 2014, Precambrian–Cambrian boundary interval occurrence and form of the enigmatic tubular body fossil *Shaanxilithes ningqiangensis* from the Lesser Himalaya of India: *Palaeontology*, v. 57, p. 283–298.

3. §**Tarhan, L.G.**, Planavsky, N.J., Laumer, C.E., Stolz, J.F. and Reid, R.P., 2013, Microbial mat controls on infaunal abundance and diversity in modern marine microbialites: *Geobiology*, v. 11, p. 485–497.

2. §**Tarhan, L.G.**, Jensen, S. and Droser, M.L., 2012, Furrows and firmgrounds: evidence for predation and implications for Palaeozoic substrate evolution in *Rusophycus* "hunting burrows" from the Silurian of east-central New York: *Lethaia*, v. 45, p. 329–341.

1. §**Tarhan, L.G.**, Droser, M.L. and Gehling, J.G., 2010, Taphonomic controls on Ediacaran diversity: uncovering the holdfast origin of morphologically variable enigmatic structures: *Palaios*, v. 25, p. 823–830.

INVITED SEMINARS

2025: Virginia Tech (Department of Geosciences); Central Connecticut State University (Department of Earth and Space Sciences)
2024: University of Florida (Department of Geological Sciences); Nereis Park Seminar Series
2023: Stanford University (Department of Geological Sciences); University of Illinois, Chicago (Department of Earth and Environmental Sciences).
2022: University of California Museum of Paleontology and University of California, Berkeley (Department of Integrative Biology); University of California, Riverside (Virtual Seminar in Precambrian Geology); Harvard University (Department of Earth and Planetary Sciences); University of Connecticut (Department of Earth Sciences); Texas A&M University (Department of Oceanography); American Museum of Natural History (Comparative Biology Seminar); University of Massachusetts, Amherst (Geosciences Department); Northwestern University (Sloss Seminar).
2021: Lamont-Doherty Earth Observatory; Universität Hamburg (Mass Extinctions and Climate Change Webinar Series); Colby College (Geology Department); University of California, Santa Barbara (Earth Sciences Department).
2020: Yale University (Yale Institute for Biospheric Studies).
2019: Princeton University (Department of Geosciences); Yale University (Department of Geology and Geophysics).
2018: University of British Columbia (Department of Earth, Ocean and Atmospheric Sciences); University of Texas at Austin (Department of Geological Sciences).
2017: Amherst College (Five College Geology Seminar Series); Pomona College (Geology Department); University of California, Riverside (Alternative Earths Astrobiology Seminar Series).
2016: Northwest University (Department of Geology; Xi'an, China); Chinese Academy of Geological Sciences (Beijing, China); Colorado College (Geology Department).
2015: Lamont-Doherty Earth Observatory (Biology and Paleoenvironment Seminar Series).
2013: Dartmouth College (Department of Earth Sciences).
2012: Dartmouth College (Department of Earth Sciences).

CONFERENCE PRESENTATIONS

**Mentored or supervised student*
***Mentored or supervised postdoctoral associate/fellow*

*Pippenger, K., *Polomski, D., *Chow, A. and **Tarhan, L.G.**, 2025, Bioturbation intensity as a control on organic carbon preservation in middle Paleozoic sediments: Northeast Geobiology Symposium (Talk given by K. Pippenger).

LaGrange Rao, M.T., Gingras, M.K., *Pippenger, K.H., Harris, B.S. and **Tarhan, L.G., 2025, Effects of Pleistocene and Holocene environmental change on coastal bioturbation at Willapa Bay, Washington: Northeast Geobiology Symposium (Talk given by M. LaGrange Rao).

*Riemer, S., Moller, S.R., *Ellefson, E., Dewing, K., Melchin, M., Planavsky, N.J., Blake, R.E., Sperling, E. and **Tarhan, L.G.**, 2025, New insights into early vascular land plants as geobiological agents of phosphorus weathering: Northeast Geobiology Symposium (Poster presented by S. Riemer).

*Rivas, A., Myrow, P.M., Smith, E.F., Nelson, L.L., Briggs, D.E.G. and **Tarhan, L.G.**, 2025, The role of clay authigenesis in the fossilization of *Gaojiashania*, an enigmatic tubular fossil from the Ediacaran Dunfee Member, Deep Spring Formation, Nevada: Northeast Geobiology Symposium (Poster presented by A. Rivas).

Tarhan, L.G., 2025, How did the rise of complex life shape the evolution of the marine carbonate factory? Thirty-fifth Annual Kavli Frontiers of Science Symposium (Invited poster).

Tarhan, L.G., 2024, Bioturbation and blue carbon ecosystems: marine carbon cycling in a warming world. Blue Carbon Ecosystems Workshop. Yale Forest Forum, ELTI and YCNCC-sponsored workshop.

Tarhan, L.G., 2024, Bioturbators—agents or recipients of warming-induced biogeochemical change? Geological Society of America Abstracts with Programs, Paper No. 64-1, v. 56 (Invited keynote talk).

Tarhan, L.G., 2024, How biogeochemically impactful was *Skolithos* piperock? New insights from Cambrian field data and geochemical modeling: Geological Society of America Abstracts with Programs, Paper No. 239-8, v. 56 (Invited keynote talk).

*Pippenger, K., *Polomski, D. and **Tarhan, L.G.**, 2024, Assessing the relationship between bioturbation intensity and organic carbon preservation in middle Paleozoic sediments: Geological Society of America Abstracts with Programs, Paper No. 2-1, v. 56 (Talk given by K. Pippenger).

*Beaty, B., Foster, W., Zuchuat, V., Moller, S.R., Buchwald, S.Z., Brooks, H., *Rauzi, S., Isson, T., Planke, S., Rodríguez-Tovar, F.J., Planavsky, N.J. and **Tarhan, L.G.**, 2024, Bioturbation shapes marine nutrient cycling following the Permian-Triassic Mass Extinction: Geological Society of America Abstracts with Programs, Paper No. 15-1, v. 56 (Talk given by B. Beaty).

*Rivas, A. Pruss, S.B., Gill, B. and **Tarhan, L.G.**, 2024, Interrogating paleoenvironmental and evolutionary patterns in bioturbation in upper Cambrian and Lower Ordovician strata of the Great Basin, USA: Geological Society of America Abstracts with Programs, Paper No. 239-9, v. 56 (Talk given by A. Rivas).

*Riemer, S., Moller, S.R., *Ellefson, E., Dewing, K., Melchin, M., Blake, R.E., Planavsky, N.J., Sperling, E. and **Tarhan, L.G.**, 2024, New insights into early vascular land plants as geobiological agents of phosphorus weathering: Geological Society of America Abstracts with Programs, Paper No. 2-9, v. 56 (Talk given by S. Riemer).

Winters, G., Sperling, E.A., *Ellefson, E., **Tarhan, L.G.**, Melchin, M., Dewing, K. and Love, G., 2024, Assessing early land plant impacts on the evolving Paleozoic marine biosphere: Geological Society of America Abstracts with Programs, Paper No. 112-5, v. 56 (Poster presented by G. Winters).

Wei, G., Zhao, M., Zhang, F., Li, C., Sperling, E.A., Gaines, R., Planavsky, N.J. and **Tarhan, L.G.**, 2024, Continental weathering, clay formation and marine oxygenation across the Precambian – Cambrian transition: Goldschmidt, Session 7bO2 (Talk given by G. Wei).

Tarhan, L.G., 2024, The role of marine silica cycling in driving the exceptional fossilization of Earth's earliest animal communities: North American Paleontological Convention, Papers on Paleontology No. 39, p. 413 (Invited keynote talk).

*Pippenger, K. and **Tarhan, L.G.**, 2024, A combined stratigraphic and ichnological approach to reconstructing the evolution of the sedimentary mixed layer in the Devonian of the Appalachian Basin: North American Paleontological Convention, Papers on Paleontology No. 39, p. 346–347 (Talk given by K. Pippenger).

Tarhan, L.G., 2024, The role of marine silica cycling in shaping the fossilization of Earth's earliest animal communities: Astrobiology Science Conference, Paper No. 508-04 (Talk).

*Slagter, S., Konhauser, K.O., Briggs, D.E.G. and **Tarhan, L.G.**, 2024, Authigenic mineralization in experimental Ediacara-style preservation: Astrobiology Science Conference, Paper 327-226 (Poster presented by S. Slagter).

*Beaty, B., Foster, W.J., Zuchuat, V., Buchwald, S., Brooks, H.L., Rauzi, S., Isson, T., Planke, S., Rodríguez-Tovar, F., Planavsky, N.J. and **Tarhan, L.G.**, 2024, Bioturbation shapes marine nutrient cycling following the Permian-Triassic mass extinction: Northeast Geobiology Symposium (Talk given by B. Beaty).

Tarhan, L.G., **Fakhraee, M., Planavsky, N.J. and Reinhard, C.T., 2023, No evidence for marine dissolved organic carbon driving changes in Ediacaran ecology and diversity: Geological Society of America Abstracts with Programs, Paper No. 148-4, v. 55 (Talk).

Pruss, S., Gill, B.C. and **Tarhan, L.G.**, 2023, Life on the edge in the Cambrian: Lessons from taphonomy, redox and extinction: Geological Society of America Abstracts with Programs, Paper No. 125-9, v. 55 (Talk given by S. Pruss).

Wang, J., Kalderon-Asael, B., Oehlert, A.M., Reid, R.P., Vitek, B., Planavsky, N.J. and **Tarhan, L.G., 2023, Early diagenetic evaluation of stable strontium isotopes in shallow carbonate sediments: Geological Society of America Abstracts with Programs, Paper No. 129-4, v. 55 (Talk given by J. Wang).

*Riemer, S., **Fakhraee, M. and **Tarhan, L.G.**, 2023, Exploring pathways of soft-tissue preservation using geochemical modeling: Geological Society of America Abstracts with Programs, Paper No. 134-8, v. 55 (Talk given by S. Riemer).

*Rivas, A., Myrow, P., Smith, E.F., Nelson, L.L., Briggs, D.E.G. and **Tarhan, L.G.**, 2023, Morphology and fossilization of *Gaojiashania* from the upper Ediacaran Dunfee Member, Deep Spring Formation, Nevada, USA: Geological Society of America Abstracts with Programs, Paper No. 148-12, v. 55 (Talk given by A. Rivas).

*Pippenger, K., Cribb, A., Clapham, M.E., Droser, M.L., Bottjer, D. and **Tarhan, L.G.**, 2023, Phanerozoic trends in the depth of marine bioturbation: Geological Society of America Abstracts with Programs, Paper No. 196-7, v. 55 (Talk given by K. Pippenger).

*Ellefson, E., Sperling, E., **Tarhan, L.G.**, Leslie, A., Olson, H., Roney, Z. and Manson, M., 2023, The impact of land plants on Earth systems: Bottom water geochemistry of Silurian–Devonian open margin systems: Geological Society of America Abstracts with Programs, Paper No. 254-4, v. 55 (Talk given by E. Ellefson).

*Slagter, S., Hao, W., Planavsky, N.J., Konhauser, K.O. and **Tarhan, L.G.**, 2023, The role of substrate and seawater geochemistry in shaping the fossilization of Earth's earliest animal communities: Goldschmidt 2023, Session 8aP1 (Poster presented by S. Slagter).

Tarhan, L.G., **Fakhraee, M., Planavsky, N.J. and Reinhard, C.T., 2022, No major changes through geologic time in Earth's marine dissolved organic carbon reservoir: American Geophysical Union: PP52B-01 (Invited talk).

Wang, J., **Tarhan, L.G., Jacobson, A.D., Oehlert, A.M. and Planavsky, N.J., 2022, The evolution of the marine carbonate factory: American Geophysical Union: PP15A-01 (Talk given by J. Wang).

Tarhan, L.G., 2022, Life and death in the Ediacaran: Evolutionary, environmental and preservational dynamics: Geological Society of America Abstracts with Programs, Paper No. 140-12, v. 54 (Invited Pardee talk).

Tarhan, L.G., 2022, Paleoenvironmental and evolutionary patterns in Cambrian–Ordovician bioturbation: Geological Society of America Abstracts with Programs, Paper No. 87-08, v. 54 (Invited GBGM Awardee talk).

Boag, T. and **Tarhan, L.G., 2022, Early formation and taphonomic importance of authigenic clays associated with Ediacaran fossil preservation: Geological Society of America Abstracts with Programs, Paper No. 130-4, v. 54 (Poster presented by T. Boag).

*Pippenger, K. and **Tarhan, L.G.**, 2022, Characterizing bioturbation intensity and sedimentary mixed layer development in the Devonian of the Appalachian Basin: Geological Society of America Abstracts with Programs, Paper No. 228-5, v. 54 (Talk given by K. Pippenger).

*Slagter, S., Hao, W., Planavsky, N.J., Konhauser, K. and **Tarhan, L.G.**, 2022, Experimental taphonomic insights into Ediacara-style fossilization: Geological Society of America Abstracts with Programs: Paper No. 130-3, v. 54 (Poster presented by S. Slagter).

Wang, J., **Tarhan, L.G., Jacobson, A.D., Oehlert, A.M. and Planavsky, N.J., 2022, The evolution of the marine carbonate factory: Geological Society of America Abstracts with Programs: Paper No. 259-14, v. 54 (Talk given by J. Wang).

*Ellefson, E., Sperling, E., Leslie, A., **Tarhan, L.**, Olson, H. and Manson, M., 2022, Tracking the impact of land plants on Earth systems on the northwestern Laurentian margin: Geological Society of America Abstracts with Programs: Paper No. 273-30, v. 54 (Poster presented by E. Ellefson).

*Slagter, S., Hao, W., Planavsky, N.J., Konhauser, K. and **Tarhan, L.G.**, 2022, Moldic preservation of microbial mats and animal tissues in silica-rich solutions: implications for the preservation of the Ediacara Biota: Northeast Geobiology Symposium (Talk given by S. Slagter).

Wang, J., **Tarhan, L.G., Planavsky, N.J. and Jacobson, A.D., 2022, The evolution of the marine carbonate factory: Northeast Geobiology Symposium (Poster presented by J. Wang).

Tarhan, L.G., 2021, Young Scientist Award (Donath Medal): Tracking and modeling the development of the sedimentary mixed layer: Geological Society of America Abstracts with Programs: Paper No. 141-8, v. 53 (Invited Medalist talk).

*Slagter, S., Hao, W., Planavsky, N.J., Konhauser, K., and **Tarhan, L.G.**, 2021, Microbial-mediated fossilization in sandstones: an experimental approach: Geological Society of America Abstracts with Programs: Paper No. 76-7, v. 53 (Talk given by S. Slagter).

Tarhan, L.G., 2020, The Ediacara seafloor: environmental, ecological and preservational dynamics: Geological Society of America Abstracts with Programs: Paper No. 226-1, v. 52 (Invited talk and panelist).

Tarhan, L.G., 2020, Early Paleozoic bioturbation and feedbacks on phosphorus cycling: Geological Society of America Abstracts with Programs: Paper No. 245-6, v. 52 (Invited talk).

Droser, M., **Tarhan, L.**, Evans, S, Gehling, J. and Surprenant, R., 2020, Recognizing the textures of life: implications of diverse and ubiquitous Ediacaran organic surfaces for the detection of microbial structures on other planets: American Geophysical Union: abstract P024-0006 (Poster given by M. Droser).

*Slagter, S., **Tarhan, L.G.**, Hao, W., Planavsky, N.J. and Konhauser, K., 2020, Experimental silica precipitation onto organic tissues: implications for the preservation of the Ediacara Biota: Geological Society of America Abstracts with Programs: Paper No. 136-3, v. 52 (Talk given by S. Slagter).

Tarhan, L.G., Myrow, P.M., Smith, E.F., Nelson, L.L. and Sadler, P.M., 2019, Infaunal augurs of the Cambrian Explosion: an Ediacaran trace fossil assemblage from Mount Dunfee (Nevada, USA): International Meeting on the Ediacaran System and the Ediacaran-Cambrian Transition (Talk).

Tarhan, L.G., 2019, Reconstructing the preservation, paleoenvironments and paleoecology of Earth's earliest complex communities: Selwyn Symposium—Coevolution of Life and Precambrian Environments (Invited talk).

Tarhan, L.G., 2019, Early Phanerozoic shallow marine substrate evolution: the sole mark record: Geological Society of America Abstracts with Programs: Paper No. 293-12, v. 51 (Talk).

Tarhan, L.G., 2019, The rise of bioturbation: tracking and modelling the development of the sedimentary mixed layer: Royal Society Meeting—The Origin and Rise of Complex Life: Integrating Models, Geochemical and Palaeontological Data (Invited talk).

Tarhan, L.G., **Zhao, M. and Planavsky, N., 2019, The biogeochemical impact of early Paleozoic bioturbation: Goldschmidt 2019, Session 7A (Talk).

Wei, G., Planavsky, N., **Tarhan, L.**, Li, D., Chen, X. and Ling, H., 2019, Demise of dolomite-aragonite sea in the early Cambrian coincided with stabilization of oceanic oxygenation: Goldschmidt 2019, Session 7A (Talk given by G. Wei).

Tarhan, L.G., 2019, The evolution of bioturbation: timing and geobiological consequences: 2019 North American Paleontological Convention (Invited talk).

Tarhan, L.G., Zhao, M. and Planavsky, N., 2019, The biogeochemical impact of early Paleozoic bioturbation: 2nd Geobiology Society Conference (Poster).

Tarhan, L.G., 2019, A long fuse for the Cambrian Explosion: a 'Cambrian-style' trace fossil assemblage from the Ediacaran of Nevada: Women of Geology and Geophysics Symposium (Talk).

Tarhan, L.G., Zhao, M. and Planavsky, N., 2019, Early Paleozoic bioturbation and its influence on the global marine phosphorus cycle: Northeastern Geobiology Symposium (Poster).

Tarhan, L.G., Zhao, M. and Planavsky, N., 2018, The impact of early Paleozoic bioturbation upon phosphorus cycling: Goldschmidt 2018, Session 10D (Invited talk).

Zhao, M., Planavsky, N., **Tarhan, L.**, Zhang, S. and Reinhard, C., 2018, Significant influence of seawater calcium concentration on marine phosphorus burial: Goldschmidt 2018, Session 3L (Talk given by M. Zhao).

Wei, G., Planavsky, N., **Tarhan, L.**, Chen, X., Wei, W., Li, D. and Ling, H., 2018, Environmental fluctuation triggered the Cambrian Explosion?: Goldschmidt 2018, Session 7B (Talk given by G. Wei).

Tarhan, L.G., Droser, M.L. and Gehling, J.G., 2018, The importance of substrate for Ediacara paleoecology, paleoenvironment and taphonomy: 5th International Paleontological Congress (Talk).

Tarhan, L.G., Droser, M.L. and Gehling, J.G., 2018, Ecological innovation in the late Ediacaran: Society for Integrative and Comparative Biology 2018 Annual Meeting (Invited symposium talk).

Tarhan, L.G., Hood, A.v.S., Droser, M.L., Gehling, J.G. and Briggs, D.E.G., 2017, A silica driver of Ediacara-style fossilization: Geological Society of America Abstracts with Programs: Paper No. 198-5, v. 49 (Talk).

Droser, M.L., Gehling, J.G., Evans, S.D., **Tarhan, L.G.**, Hall, C.M.S., Dzaugis, M.E., Dzaugis, M.P., Dzaugis, P., Hughes, I.V., Hughes, E.B. and Rice, D., 2017, Snapshots and long exposures: Picturing life in the Ediacaran: Geological Society of America Abstracts with Programs: Paper No. 100-1, v. 49 (Talk given by M.L. Droser).

Tarhan, L.G., 2017, Development of bioturbation and implications for early Paleozoic biogeochemical cycling: Goldschmidt 2017, Session 14D (Invited talk).

Tarhan, L.G., 2017, The Protracted development of bioturbation through the early Paleozoic: 5th Nereis Park Conference—Biological Modification of the Seabed: Biogeochemical and Ecological Processes in a Changing World, Session 1, p. 8-9 (Talk).

Tarhan, L.G., Hood, A.v.S., Droser, M.L., Gehling, J.G. and Briggs, D.E.G., 2017, Exceptional preservation of soft-bodied Ediacara Biota promoted by silica-rich oceans: 2017 International Symposium on the Ediacaran-Cambrian Transition, Session 7B, p. 115 (Talk).

Tarhan, L.G., 2017, Development of bioturbation and implications for early Palaeozoic biogeochemical cycling: Geobiology Society Conference 2017 (Invited talk).

Tarhan, L.G., Droser, M.L., Gehling, J.G. and Dzaugis, M.P., 2017, Microbial mat sandwiches and other anactualistic sedimentary features of the Ediacara Member (Rawnsley Quartzite, South Australia): Implications for interpretation of the Ediacaran sedimentary record: Lyell Meeting 2017: Sticking Together. The Geological Society London, p. 67 (Talk).

Tarhan, L.G., 2017, Preservation and paleoecology of the Ediacara Biota—Earth's earliest complex communities: Women of Earth Science Symposium. Yale University, Department of Geology and Geophysics (Talk).

Tarhan, L.G., Hood, A.v.S., Droser, M.L., Gehling, J.G. and Briggs, D.E.G., 2016, Exceptional preservation of the soft-bodied Ediacara Biota promoted by silica-rich oceans: Geological Society of America Abstracts with Programs: Paper No. 183-3, v. 48 (Talk).

Tarhan, L.G., 2016, Protracted development of bioturbation and implications for global biogeochemical cycling through the early Paleozoic: Geological Society of America Abstracts with Programs: Paper No. 224-2, v. 48 (Invited talk).

Hall, C.M.S., **Tarhan, L.G.**, Evans, S.D., Dzaugis, M.P., Hughes, E.B., Hughes, I.V., Droser, M.L. and Gehling, J.G., 2016, Picking out the fabric of the Ediacara seafloor: Evidence of widespread, heterogeneous textured organic surfaces: Geological Society of America Abstracts with Programs: Paper No. 184-8, v. 48 (Talk given by C.M.S. Hall).

Tarhan, L.G., Hood, A.v.S., Droser, M.L., Gehling, J.G. and Briggs, D.E.G., 2016, Taphonomic history of the Ediacara Member, Rawnsley Quartzite (South Australia): Palaeo Down Under (Talk).

Tarhan, L.G., Hood, A.v.S., Droser, M.L., Gehling, J.G. and Briggs, D.E.G., 2016, A new model for Ediacara-style preservation: Northeastern Geobiology Symposium (Talk).

Tarhan, L.G., Planavsky, N.J., Droser, M.L. and Gehling, J.G., 2015, Depositional and preservational environments of the Ediacara Member, Rawnsley Quartzite (South Australia): Assessing the timing of 'ferruginization': Annual Meeting of the Palaeontological Association—Programme, Abstracts and AGM Papers, p. 45 (Talk).

Tarhan, L.G., Planavsky, N.J., Droser, M.L. and Gehling, J.G., 2015, Depositional and preservational environments of the Ediacara Member, Rawnsley Quartzite (South Australia): Assessing the timing of 'ferruginization': Geological Society of America Abstracts with Programs: Paper No. 338-10, v. 47 (Talk).

Tarhan, L.G., Droser, M.L., Gehling, J.G. and Briggs, D.E.G., 2015, Puckered, woven and grooved: the importance of substrate for Ediacara paleoecology, paleoenvironment and taphonomy: Northeastern Geobiology Symposium (Poster).

Tarhan, L.G., Droser, M.L. and Gehling, J.G., 2014, Puckered, woven and grooved: the importance of substrate for Ediacara paleoecology, paleoenvironment and taphonomy: Annual Meeting of the Palaeontological Association—Programme, Abstracts and AGM Papers, p. 48 (Talk).

Tarhan, L.G., Droser, M.L. and Johnston, D., 2014, Protracted development of bioturbation and implications for global sulfur cycling in early Paleozoic marine shelfal environments: Geological Society of America Abstracts with Programs: Paper No. 158-4, v. 46, p. 399 (Talk).

Tarhan, L.G. and Droser, M.L., 2014, Protracted development of infaunal sediment mixing: implications for substrate evolution and exceptional trace fossil preservation in early Paleozoic marine shelfal environments: Fourth International Palaeontological Congress: Symposium 12 ("Using Trace Fossils to Understand Evolutionary Trends"), p. 244 (Poster).

Tarhan, L.G. and Droser, M.L., 2014, Protracted development of the mixed layer: implications for substrate evolution and exceptional preservation in early Paleozoic marine shelfal environments: Northeastern Geobiology Symposium 2014, Oral Session 2-4, p. 12 (Talk).

Tarhan, L.G., Droser, M.L., Gehling, J.G. and Dzaugis, M.P., 2014, Taphonomy and morphology of the Ediacaran form genus *Aspidella* (Ediacara Member, Rawnsley Quartzite, South Australia): 10th North American Paleontological Convention, The Paleontological Society Special Publications, Session 36-7, v. 13, p. 160-161 (Talk).

Evans, S.D., Droser, M.L., Gehling, J.G. and **Tarhan, L.G.**, 2014, *Dickinsonia* lifts off: evidence of current-derived morphologies: 10th North American Paleontological Convention, The Paleontological Society Special Publications, Session 36-7, v. 13, p. 162 (Talk given by S.D. Evans).

Tarhan, L.G., Haddad, E., Solon, C.M., Dahl, R.M., Hancock, L.G., Henry, S.E., Joel, L.V., Thomson, T.J. and Droser, M.L., 2013, Seafloor colonization in the earliest Paleozoic: evidence from the Cambrian of Death Valley: First Annual Conference of the Death Valley Natural History Association (Talk).

Tarhan, L.G. and Droser, M.L., 2013, Protracted development of the mixed layer: implications for substrate evolution and exceptional preservation in early Paleozoic marine shelfal environments: Geological Society of America Abstracts with Programs, Paper No. 297-12, v. 45, p. 686 (Talk).

Evans, S.D., Droser, M.L., Gehling, J.G., **Tarhan, L.G.** and Dzaugis, M.P., 2013, Turning back the clock: deciphering time averaging and reconstructing colonization histories of Ediacara communities: Geological Society of America Abstracts with Programs, Paper No. 186-11, v. 45, p. 455 (Talk given by S.D. Evans).

Tarhan, L.G., Planavsky, N.J., Reid, R.P. and Droser, M.L., 2012, Microbial mat controls on infaunal abundance and diversity in modern marine microbialites: Geological Society of America Abstracts with Programs, Paper No. 61-2, v. 44, p. 169 (Talk).

Dahl, R.M., **Tarhan, L.G**. and Droser, M.L., 2012, Gastropod-dominated shellbeds from the Middle Ordovician Antelope Valley Limestone (Ikes canyon, Toquima Range, NV): Geological Society of America Abstracts with Programs, v. 44, p. 397 (Poster presented by R.M. Dahl).

Tarhan, L.G., Droser M.L., Gehling, J.G., Dzaugis, M.P., Dzaugis, M.E. and Rice, D., 2012, Taphonomic variability of the Ediacaran form genus *Aspidella* (Ediacara Member, South Australia): Geological Association of Canada-Mineralogical Association of Canada Joint Annual Meeting, v. 35, p. 48 (Talk).

Tarhan, L.G. and Droser, M.L., 2012, Exceptional trace fossil preservation and mixed layer development in Cambrian siliciclastic strata of the Great Basin (western USA) and central Spain: California Paleontology Conference, Session No. 3-3, p. 20-21 (Talk).

Tarhan, L.G., Planavsky, N.J., Reid, R.P. and Droser, M.L., 2012, Microbial mat controls on infaunal abundance and diversity in modern marine microbialites: Ninth Annual Southern California Geobiology Symposium, p. 24 (Poster).

Tarhan, L.G. and Droser, M.L., 2011, Exceptional trace fossil preservation and enigmatic substrate conditions in the Cambrian of the Great Basin, western USA: Geological Society of America Abstracts with Programs, Paper No. 120-1, v. 43, p. 310 (Talk).

Tarhan, L.G. and Droser, M.L., 2011, Cambrian ichnofabrics in fine-grained siliciclastic strata of the Great Basin (Utah and Nevada), western USA: Abstract Book of the XI International Ichnofabric Workshop, p. 96-97 (Talk).

Tarhan, L.G., Jensen, S. and Droser, M.L., 2010, Furrows and firmgrounds: evidence for predation and implications for Paleozoic substrate evolution in *Rusophycus* "hunting burrows" from the Silurian of east-central New York: Geological Society of America Abstracts with Programs, v. 42, p. 320 (Talk).

Dzaugis, M.P., Gehling, J.G., Droser, M.L., **Tarhan, L.G.**, Dzaugis, M.E. and Rice, D., 2010, Size distributions, morphology and taphonomy of the form genus *Aspidella*: Ediacara Member, South Australia: Geological Society of America Abstracts with Programs, v. 42, p. 96 (Poster).

Tarhan, L.G., Droser, M.L. and Gehling, J.G., 2010, Microbes and mops: elucidating the Ediacaran substrate: SEPM Field Conference: Microbial mats in siliciclastic settings (Archean to today) (Poster).

Tarhan, L.G., Droser, M.L. and Gehling, J.G., 2009, Puckers and pull-throughs: an Ediacaran action shot: Geological Society of America Abstracts with Programs, v. 41, p. 31 (Talk).

Tarhan, L.G. and Hagadorn, J.W., 2009, Taphonomy and classification of Late Cambrian medusae of central Wisconsin and northeastern New York: problems of preservation: Abstracts – North American Paleontological Convention, v. 9, p. 346 (Poster).

Tarhan, L.G. and Hagadorn, J.W., 2008, Taphonomy and classification of Late Cambrian medusae of central Wisconsin and northeastern New York: problems of preservation: 29th Annual Five College Geology Undergraduate Research Symposium (Poster).

Tarhan, L.G. and Hagadorn, J.W., 2008, Taphonomy and classification of medusae from the Late Cambrian of Wisconsin and New York: Geological Society of America (Northeastern Section) Abstracts with Programs, v. 40, p. 80 (Poster).

Tarhan, L.G. and Hagadorn, J.W., 2005, Paleoecology of an unusually preserved set of *Climactichnites wilsoni* trackways from the upper Cambrian of central Wisconsin: Howard Hughes Medical Institute Summer Research Symposium (Poster).

Updated April 2025