SUSANNAH M. PORTER

Department of Earth Science
University of California at Santa Barbara, Santa Barbara, CA 93106

EDUCATION

Harvard University, Ph.D. Biology	2002
Advisor: Andrew H. Knoll	
Yale University, B.A. Mathematics, *magna cum laude*	1995

POSITIONS

Chair, Department of Earth Science, UCSB	2021–
Full Professor, Department of Earth Science, UCSB	2017–
Associate Director, Earth Research Institute, UCSB	2011–2021
Vice Chair, Department of Earth Science, UCSB	2014–2021
Associate Professor, Department of Earth Science, UCSB	2010–2017
Assistant Professor, Department of Earth Science, UCSB	2003–2010
NRC Post-Doctoral Fellow, NASA Astrobiology Institute, UCLA	2002–2003

HONORS

Elected Fellow of the Geological Society of America	2023
Elected Fellow of the Paleontological Society	2019
GSA Geobiology and Geomicrobiology Division Post-Tenure Award	2017
GSA W. Storrs Cole Memorial Research Award	2013
UCSB Distinguished Teaching Award	2013
Voted “Inspiring Leader in STEM” by UCSB Earth Science Majors	2021
Voted “Most Helpful Professor” by UCSB Earth Science Graduate Students	2018
Voted “Faculty of the Year” by UCSB Earth Science Graduate Students	2009
Voted “Faculty of the Year” by UCSB Earth Science Graduate Students	2006
Voted “Professor of the Year” by UCSB Earth Science Majors	2006
NSF Graduate Student Fellowship	1996
Rhodes Scholar regional finalist	1995
US Rowing Academic All-American, first team	1995
Anthony D. Stanley Prize in Pure and Applied Mathematics, Yale	1995
Francis Gordon Brown ‘01 Yale Prize for academics, athletics, and character	1994
Presidential Scholar	1991

PROFESSIONAL SERVICE

Facilitator, Holistic Graduate Admissions Workshop, Equity in Graduate Education (formerly California Consortium for Inclusive Doctoral Education)	2021–
Member, Editorial Advisory Board, *Geobiology*	2008–
Co-editor, *Emerg. Topics Life Sci.* issue, *Early Earth and the Rise of Complex Life*	2017–2019
Co-editor, *Precambrian Research* issue, *Descent into the Cryogenian*	2016–2018
Chair, Fellows Committee, Paleontological Society	2021–2022

Member, Fellows Committee, Paleontological Society	2020
Member, Subcommission on Cryogenian Stratigraphy	2021–
Secretary, Subcommission on Cryogenian Stratigraphy	2012–2020
Panel Member, NASA, 2003, 2020; NSF, 2015; Swedish Research Council, 2019	
Member, Geological Society of America's Committee on Research and Grants	2008–2011
Member, Paleontological Society's Committee on Nominations	2008–2010
Co-led GSA pre-meeting field trip to the Uinta Mountain Group, Utah	2005
Co-organized/moderated conference sessions	2000, 2012
Reviewed 170 manuscripts, proposals, textbook chapters and book proposals	2003–
52 invited seminars and conference talks, including 5 keynotes	2003–

MENTORING

4 High school students and 28 undergraduate students directly supervised
Graduate students advised: Robin Nagy, M.S., 2007; John Moore, Ph.D. 2013; Leigh Anne Riedman, Ph.D., 2014; Miranda Stripe, M.S., 2015; Abby Wyant M.S. 2015; Kelly Tingle, M.S., 2021, Christina Woltz, Ph.D. 2022, Wentao Zheng, Ph.D., incoming Fall 2023
Member, 17 graduate student committees; advised or external examiner for 5 PhD/MS students
Postdoctoral Associates advised: Dr. Michael Vendrasco, 2005–2007; Dr. John Moore, 2014–2021; Dr. Luana Morais (visiting), 2018; Dr. Heda Agić, 2018–2022; Dr. Leigh Anne Riedman, 2020–present

TEACHING

Earth 2: Principles of Physical Geology
Earth 7: Age of Dinosaurs
Earth 18: Field Studies in Geological Sciences
Earth 111: Principles of Paleontology
Earth 143/243: The Early Evolution of Life and its Environmental Context
Earth 144/244: Invertebrate Paleobiology
Earth 189: Seminar in Paleobiology
Earth 127/227: Field Petrology
Earth 201a: Graduate Research and Field Seminar

EXTERNAL FUNDING (MY SHARE)

(pending) Collaborative Research: BoCP-Implementation: US-China: Multi-scale, multi-proxy, integrative investigation of functional biodiversity on a changing Proterozoic planet. NSF, 2023–2028, $439,331
Tracing the geologic record of eukaryotes. Simons Foundation 2020–22. $334,799
Collaborative Research: Using organic carbon isotopes of single microfossils to illuminate Proterozoic eukaryotic ecosystems. National Science Foundation—Sedimentary Geology and Paleontology 2019–22. $363,345
Collaborative Research: Toward a global timeline of biological and ocean geochemical change during the early Cambrian. National Science Foundation—Integrated Earth Systems. 2014–17. $421,588
Collaborative Research: Estimating the Tempo of the Cambrian Explosion. National Science Foundation—Sedimentary Geology and Paleontology Program, Division of Earth Sciences. 2013–14. $40,000

Reconstructing the morphology, ultrastructure, and biological affinities of acritarchs from the >742 ± 6 million-year-old Chuar Group, Grand Canyon, Arizona. Geological Society of America, W. Storrs Cole Memorial Research Award. 2013–14. $7,600

Evidence for Eutrophication During Neoproterozoic Low-Latitude Glaciations. Palaeontological Association Research Grant. 2010–11. £6,820 (~$11,000)

Collaborative Research: Ocean Oxidation and the Biosphere during Neoproterozoic Glaciation. National Science Foundation—Sedimentary Geology and Paleontology Program, Division of Earth Sciences. 2009–12. $218,098

Acquisition of a New Electron Imaging Facility. National Science Foundation—Instrumentation and Facilities Program, Division of Earth Sciences. 2007. $299,745

Using Skeletal Microstructure to Understand Early Animal Biomineralization. NASA Astrobiology: Exobiology and Evolutionary Biology. 2005–07. $190,939

Dynamical Change in Global Biogeochemical Cycles Accompanying Early Animal Evolution. National Science Foundation: Biocomplexity in the Environment: Coupled Biogeochemical Cycles. 2004–09. (Collaborator). $52,484

From Genes to Stars: An Integrated Study of the Prospects for Life in the Cosmos. NASA Astrobiology Institute. Performance Period: October 01, 2003 to September 30, 2008. (Collaborator). $40,597

SELECTED OUTREACH

Interviewed for: CNN | Science | Nature | BBC/PBS documentary on Snowball Earth |Geology Bites Podcast | UK Astrobiology podcast, The Tartan Tardigrade | National Geographic Online | Arizona Public Radio | Science News | David Attenborough's First Life: A Journey Back in Time with Matt Kaplan | The Scientist | Astrobiology Magazine

Fossil images used in: Smithsonian Museum| Museum of Comparative Zoology, Harvard|Grand Canyon National Park's Trail of Time | *Evolution* , 4th Edition | *Introduction to Paleobiology and the Fossil Record* | *Biology: How Life Works* | *Campbell Biology in Focus* | *Earth's Evolution Systems: The History of Planet Earth*

Consulted for National Geographic's *Cosmos*

Speaker for NPS-sponsored Grand Canyon GeoFest

FIELD EXPERIENCE

Grand Canyon Supergroup, Arizona, 1998, 1999, 2017, 2020 (Proterozoic paleontology); Oman Mountains, Oman, 2018, 2019 (field class on the Semail Ophiolite and Neoproterozoic glacial rocks); Forteau Formation, Labrador, Canada, 2016 (Cambrian paleontology); Southern Great Basin, Nevada, 2014, 2015 (Cambrian paleontology); Togari and Grassy groups, NW Tasmania and King Island, 2010 (Neoproterozoic paleontology); Shaanxi Province, China, 2008 (Cambrian paleontology); Yunnan Province, China, 2006 (Cambrian paleontology); Uinta Mountains, Utah; 2003, 2016 (Neoproterozoic paleontology); Vindhyan Basin, Uttar Pradesh & Madhya Pradesh, India, 2002 (Field workshop); Friday Harbor Labs, Washington, 1997, 2002 (Summer laboratory courses on marine invertebrates and algae) ; Volta Basin, western Africa, 1999; Neoproterozoic paleontology and chemostratigraphy); MacArthur Basin, Northern Territory, and Georgina Basin, Queensland, Australia, 1998 (Paleoproterozoic and Cambrian paleontology); Guadalupe Mountains, Texas, 1998 (Field workshop on sequence stratigraphy); Inner Mongolia, China, 1997 (aeolian stratigraphy and Quaternary climate change); Olorgesailie and Homa Bay, Kenya, 1994 (hominid paleontology); Tibetan Plateau, China, 1993 (loess stratigraphy and Quaternary climate change); Mauna Kea, Hawaii, 1989 (volcanism and Quaternary climate change).

SELECTED UNIVERSITY SERVICE

Chair, Department of Earth Science	2021–
Member, Search Committee, Department of Earth Science faculty hire	2022–2023
Member and Chair, Student-Faculty Committee on Student Conduct	2017–
Judge, Grad Slam	2017, 2021
Chair, Search Committee, Department of Earth Science faculty hire	2017–2018
Chair, Search Committee, CCBER Director	2015
Member, Search Committee, Earth Research Institute Director	2014
Member, Search Committee, Department of Earth Science faculty hire	2013–2014
Vice Chair, Department of Earth Science	2014–2021
Graduate Advisor, Department of Earth Science	2014–2021
Chair, Advisory Committee, Cheadle Center for Biodiversity and Ecological Restoration (CCBER)	2013–2022
Panel Member, Chancellor's Regional Reception	2014
Member, Council on Research and Instructional Resources	2013–2014
Member, Faculty Advisory Board, Certificate in College and University Teaching	2013–2018
Associate Director, Earth Research Institute	2011–2022
Member, Central Fellowship Committee	2011
Member, Committee on Learning Outcomes and Assessments	2011–2013
Member, Undergraduate Council	2010–2013
Member, Committee on Undergraduate Academic Programs and Policy	2010–2013
UCSB Children's Day - prepared activities on Dinosaurs	2007–2009

PUBLICATIONS (*student; °postdoc)

°Riedman, L.A., **Porter, S.M.,** dos Santos, A., Lechte, M., Halverson, G.P. In revision. Late Paleoproterozoic fossils of the Limbunya Group, Birrindudu Basin, northern Australia. *Papers in Palaeontology.*

*Woltz, C.M., Anderson, R.P. Tosca, N.J., **Porter, S.M.** In revision. The role of clay minerals in the preservation of Precambrian organic-walled microfossils. *Geobiology.*

Dehler, C.M., Schmitz, M., Bullard, A., **Porter, S.M.,** Timmons, M., Karlstrom, K., Cothren, H. In revision. Precise U-Pb age models refine Neoproterozoic western Laurentian rift initiation, correlation, and Earth system changes. *Precambrian Research*.

Porter, S.M., and °Riedman, L.A. In press. Frameworks for interpreting the early fossil record of eukaryotes. *Annual Review of Microbiology.*

Anderson, R., *Woltz, C.M., Tosca, N.J., **Porter, S.M.,** Briggs, D.E.G. 2023. The importance of fossilisation to our reading of animal antiquity. *Trends in Ecology and Evolution*. https://doi.org/10.1016/j.tree.2023.05.014

*Tingle, K., **Porter, S.M.,** Raven, M., Czaja, A., Webb, S., Bloeser, B. 2023. Organic preservation of vase-shaped microfossils from the late Tonian Chuar Group, Grand Canyon, Arizona. USA. *Geobiology*. https://doi.org/10.1111/gbi.12544

Planavsky, N.J., Asael, D., Rooney, A.D., Robbins, L.J., Gill, B.C., Dehler, C.M., Cole, D.B., **Porter, S.M.,** Love, G.D., Konhauser, K.O., and Reinhard, C.T. 2022. A sedimentary record of the evolution of the global marine phosphorous cycle. *Geobiology*. doi:10.1111/gbi.12536

Mänd, K., Planavsky, N.J., **Porter, S.M.,** Robbins, L.J., Wang, C., Kreitsmann, T., Paiste, K., Paiste, P., Romashkin, A.E., Deines, Y.E., Kirsimäe, K., Lepland, A., Konhauser, K.O. 2022. Chromium evidence for protracted oxygenation during the Paleoproterozoic *Earth and Planetary Science Letters* 584: 117501.

Wang, C., Lechte, M.A., Reinhard, C.T., Asael, D., Cole, D.B., Halverson, G.P., **Porter, S.M.,** Galili, N., Halevy, I., Rainbird, R.H., Lyons, T.W., Planavsky, N.J. 2022. Strong evidence for a weakly oxygenated ocean-atmosphere system during the Proterozoic. *Proceedings of the National Academy of Sciences* 119: e2116101119.

Farrell, Ú. C., Samawi, R., Anjanappa, S., Klykov, R., Adeboye, O. O., °Agić, H., ... **Porter, S.M**., ... & Sperling, E. A. 2021. The Sedimentary Geochemistry and Paleoenvironments Project. *Geobiology*. https://doi.org/10.1111/gbi.12462

Shields-Zhou, G.A., Strachan, R.A., **Porter, S.M.,** + 33 more authors. 2021. A template for an improved rock-based subdivision of the pre-Cryogenian time scale. *Journal of the Geological Society* 179. https://doi.org/10.1144/jgs2020-222

°Moore, J.L, **Porter, S.M**., Webster, M., and Maloof, A. 2021. Chancelloriid sclerites from the Dyeran–Delamaran (lower–middle Cambrian) boundary interval of the Pioche–Caliente region, Nevada, USA. *Papers in Palaeontology* 7:565-623. https://doi.org/10.1002/spp2.1274.

°Riedman, L. A., **Porter, S. M.,** and Czaja, A. 2021. Globally distributed phosphatic scale microfossils of the mid-Neoproterozoic. *Geobiology*. https://doi.org/10.1111/gbi.12439

*Woltz, C., **Porter, S.,** °Agić, H., Dehler, C., Junium, C., °Riedman, L. A., Hodgkiss, M., Wörndle, S., and Halverson, G. 2021. Total organic carbon and the preservation of organic-walled microfossils in Precambrian shale. *Geology* 49, https://doi.org/10.1130/G48116.1

Halverson, G., **Porter, S.,** and Shields-Zhou. 2020. The Tonian and Cryogenian periods. *In* Gradstein, F., Ogg, J., Schmitz, M., and Ogg, G., Geologic Timescale 2020. Elsevier. doi.org/10.1016/B978-0-444-63798-7.00017-3

Porter, S. M. 2020. Insights into eukaryogenesis from the fossil record. *Interface Focus* 10 (4), 20190105.

Cole, D., Mills, D., Erwin, D., Sperling, E., **Porter, S.,** Reinhard, C., and Planavsky, N. 2020. On the co-evolution of surface oxygen levels and animals. *Geobiology* 18 (3), 260-281.

Dahl, T. W., Connelly, J. M., Li, D., Kouchinsky, A., Gill, B. C., **Porter, S.,** Maloof., A., and Bizzarro, M. 2019. Atmosphere-ocean oxygen and productivity dynamics during early animal radiations. *Proceedings of the National Academy of Sciences* 116 (39), 19352-19361.

Gilbert, P., **Porter, S.**, Sun, C-Y., Xiao, S., Gibson, B.M., Shenkar N., and Knoll. A. 2019. Biomineralization by particle attachment in early animals. *Proceedings of the National Academy of Sciences* 116 (36) 17659-17665.

Morais, L., Lahr D., Rudnitzki, I., Freitas, B., Romero, G., **Porter, S.**, Knoll, A., and Fairchild, T. 2019. Insights into vase-shaped microfossil diversity and Neoproterozoic biostratigraphy in light of recent Brazilian discoveries. *Journal of Paleontology* 93(4): 612-627.

Porter, S. and °Riedman, L. A. 2019. Evolution: ancient fossilized amoebae find their home in the tree. *Current Biology* 29, R200-R223.

Porter, S., Agić, H., and °Riedman, L. A. 2018. Anoxic ecosystems and early eukaryotes. *Emerging Topics in Life Sciences* 2(2) 299–309.

Halverson, G., **Porter, S.**, and Gibson, T. 2018. Dating the late Proterozoic record. *Emerging Topics in Life Sciences* 2(2): 137–147.

Lyons, T., Droser, M., Lau, K., and **Porter, S**. 2018. Early Earth and the rise of complex life. *Emerging Topics in Life Sciences* 2 (2): 121–124.

Shields-Zhou, G., Halverson, G., and **Porter, S**. 2018. Descent into the Cryogenian. *Precambrian Research* 319:1–5.

Moore°, J.L., and **Porter, S.M.** 2018. Plywood-like shell microstructures in hyoliths from the middle Cambrian (Drumian) Gowers Formation, Georgina Basin, Australia. *Palaeontology* 61 (3): 441–467.

Riedman*, L.A., **Porter, S.M.,** and Calver, C. 2018. Vase-shaped microfossil biostratigraphy with new data from Tasmania, Svalbard, Greenland, Sweden and the Yukon. *Precambrian Research* 319: 19–36.

Vendrasco, M. J., Checa. A.G., and **Porter, S.M.** 2017. Shell microstructures and tubules in the unusual Cambrian hyolith *Cupitheca. Spanish Journal of Paleontology* 32(1): 95–108.

Dehler, C.M., Gehrels, G., **Porter, S.M.**, Heizler, M., Cox, G., Karlstrom, K., Crossey, L., and Timmons, M. 2017. Correlation of the mid-Neoproterozoic Chuar Group, Uinta Mountain Group, and Pahrump Group (ChUMP strata), western U.S. Implications for a changing Earth System at ca. 740–780 Ma. *Geological Society of America Bulletin* 129 (5-6): 607-624.

Porter, S.M., and *Riedman, L.A. 2016. Systematics of organic-walled microfossils from the ~780–740 Ma Chuar Group, Grand Canyon, Arizona. *Journal of Paleontology* 90: 815-853.

*Riedman, L.A. and **Porter, S.M**. 2016. Organic-walled microfossils of the early to mid-Neoproterozoic Alinya Formation, Officer Basin, Australia. *Journal of Paleontology* 90: 854-897.

Porter, S.M. 2016. Tiny vampires in ancient seas: evidence for predation via perforation in fossils from the 780–740 Ma Chuar Group, Grand Canyon, USA. *Proceedings of the Royal Society B* 283: 20160221.

Shields-Zhou, G., **Porter, S.M.**, and Halverson, G.P. 2016. A new rock-based definition for the Cryogenian Period (circa 720 – 635 Ma). *Episodes* 39: 3–8.

Brocks, J. J., Jarrett, A.J.M., Sirantoine, E., Kenig, F., Moczydłowska, M., **Porter, S**. and Hope, J. 2016. Early sponges and toxic protists: possible sources of cryostane, an age diagnostic biomarker antedating Sturtian Snowball Earth. *Geobiology*. doi:10.1111/gbi.12165.

Vendrasco, M. J., Rodríguez-Navarro, A. B., Checa, A. G., Devaere, L., and **Porter, S.M.** 2016. To infer the early evolution of mollusc shell microstructures. Pp. 113-133 *in* Biomineralization: From Fundamentals to Biomaterials and Environmental Issues, Marin, F., Brümmer, F., Checa, A., Furtos, G., Lesci, I.G., and Siller, L. (eds.). *Key Engineering Materials*, v. 672.

*Riedman, L.A., **Porter, S.M.**, Halverson, G.P., Hurtgen, M.T., and Junium, C.K. 2014. Organic-walled microfossil assemblages from glacial and interglacial Neoproterozoic units of Australia and Svalbard. *Geology* 42:1011-1014.

*Moore, J.L., **Porter, S.M.**, and Li, G. 2014. Two unusual small shelly fossils from the lower Cambrian of southeastern Shaanxi Province, China. *Journal of Paleontology* 88: 348-358.

*Moore, J.L., Li, G., and **Porter, S.M**. 2014. Chancelloriid sclerites from the Lower Cambrian (Meishucunian) of eastern Yunnan, China, and the early history of the group. *Palaeontology* 57: 833-878.

Dehler, C. M., **Porter, S. M.,** and Timmons, M. 2012. The Neoproterozoic Earth System revealed from the Chuar Group of Grand Canyon. *In* Timmons, J.M., and Karlstrom, K.E., eds., Grand Canyon Geology: Two Billion Years of Earth's History: *Geological Society of America Special Paper* 489, p. 49–72, doi:10.1130/2012.2489(03).

°Vendrasco, M.J., Kouchinsky, A., **Porter, S.M**., and Fernandez, C. 2011. Phylogeny and escalation in *Mellopegma* and other Cambrian molluscs. *Palaeontologica Electronica* 14: 11A.

Porter, S.M. 2011. The rise of predators. *Geology* 39:607-608.

Maloof, A.C., **Porter, S.M.,** *Moore, J.L., Dudás, F.Ö., Bowring, S.A., Higgins, J. A., Fike, D. A., and Eddy, M.P. 2010. The earliest Cambrian record of animals and ocean geochemical change. *Geological Society of America Bulletin* 122:1731-1774.

*Moore, J.L. **Porter, S.M.**, Steiner, M., and Li, G. 2010. *Cambrothyra ampulliformis*, an unusual coeloscleritophoran from the lower Cambrian of Shaanxi Province, China. *Journal of Paleontology* 84: 1040-1060.

Porter, S.M. 2010. Calcite and aragonite seas and the *de novo* evolution of carbonate skeletons. *Geobiology* 8:256-277.

Maloof, A.C., Ramezani, J., Bowring, S.A., Fike, D.A., **Porter, S. M.**, and M. Mazouad. 2010. Constraints on early Cambrian carbon cycling from the duration of the Nemakit-Daldynian-Tommotian boundary $\delta^{13}C$ shift, Morocco. *Geology* 38: 623-626.

Halverson, G.P., Hurtgen, M.T., **Porter, S.M.**, and Collins, A.S. 2010. Biogeochemical Events Across the Precambrian-Cambrian Boundary. Pp. 351-365 in: Gaucher, C., Sial, A., Halverson, G. P., and H. Frimmel (eds.). *Neoproterozoic-Cambrian Tectonics, Global Change and Evolution: A Focus on Southwestern Gondwana.* Elsevier, Developments in Precambrian Geology Series.

Johnston, D.T., Poulton, S.W., Dehler, C.M., **Porter, S.M.**, Husson, J., Canfield, D.E., and Knoll, A.H. 2010. An emerging picture of Neoproterozoic ocean chemistry: Insights from the Chuar Group, Grand Canyon, USA. *Earth and Planetary Science Letters* 290: 64-73.

°Vendrasco, M.J., **Porter, S.M**., Kouchinsky, A.G., Li, G., and Fernandez, C.Z. 2010. New data on molluscs and their shell microstructures from the middle Cambrian Gowers Formation, Australia. *Palaeontology* 53: 97-135.

°Vendrasco, M.J., **Porter, S.M**., Kouchinsky, A.G., Li, G., and Fernandez, C.Z. 2010. Shell microstructures in early mollusks. *Festivus* 42: 43-54.

°Vendrasco, M. J. Li, G., **Porter, S. M.**, and Fernandez, C.Z. 2009. New data on the enigmatic *Ocruranus-Eohalobia* group of early Cambrian small skeletal fossils. *Palaeontology* 52: 1373-1396.

*Nagy, R.M., **Porter, S.M**., Dehler, C.M., and Shen, Y. 2009. Biotic turnover driven by eutrophication before the Sturtian low-latitude glaciation. *Nature Geoscience* 2: 414-417.

Porter, S.M. 2008. Skeletal microstructure indicates halkieriids and chancelloriids are closely related. *Palaeontology* 51: 865-879.

Dehler, C.M., **Porter, S.M**., Sprinkel, D.A., DeGrey, L.D. 2007. The Neoproterozoic Uinta Mountain Group revisited: a synthesis of recent work on the Red Pine Shale and undivided clastic strata, northeastern Utah. Pp. 151-166 in Link, P.K., & Lewis, R. (eds.): *Proterozoic Geology of Western North America and Siberia*. SEPM Special Publication 86.

Porter, S.M. 2007. Seawater chemistry and early carbonate biomineralization. *Science* 316: 1302.

Porter, S.M. 2006. The early fossil record of heterotrophic protists. In Xiao, S. and Kaufman, A.J. (eds.): *Neoproterozoic Geobiology*. Topics in Geobiology Series: 1-21.

*Nagy, R.M., and **Porter, S.M.** 2005. Paleontology of the Neoproterozoic Uinta Mountain Group. Dehler, C.M., Pederson, J.L., Sprinkel, D.A., and Kowallis, B.J. (eds.) *Uinta Mountain Geology*. Utah Geological Association Publication 33.

Dehler, C.M, Sprinkel, D.A. and **Porter, S.M.** 2005. Neoproterozoic Uinta Mountain Group of northeastern Utah: pre-Sturtian geographic, tectonic, and biologic evolution. *Geological Society of America Field Guide* 6.

Porter, S.M. 2004. Halkieriids in Middle Cambrian phosphatic limestones from Australia. *Journal of Paleontology* 78: 574-590.

Porter, S.M. 2004. Closing the 'phosphatization window': implications for interpreting the record of small shelly fossils. *Palaios* 19: 178-183.

Porter, S.M., A. H. Knoll, and Affaton, P. 2004. Chemostratigraphy of a Neoproterozoic 'cap' carbonate from the Volta Basin, West Africa. *Precambrian Research* 130: 99-112.

Porter, S.M. 2004. The fossil record of early eukaryotic diversification. *Paleontological Society Papers* 10: 35-50.

Porter, S.M., R. Meisterfeld, and Knoll, A.H. 2003. Vase-shaped microfossils from the Neoproterozoic Chuar Group, Grand Canyon: a classification guided by modern testate amoebae. *Journal of Paleontology* 77: 409-429.

Porter, S.M., and Knoll, A.H. 2000. Neoproterozoic testate amoebae: evidence from vase-shaped microfossils in the Chuar Group, Grand Canyon. *Paleobiology* 26: 360-385.

Karlstrom, K.E., Bowring, S.A., Dehler, C.M., Knoll, A.H., **Porter**, **S.M.,** Des Marais, D.J., Weil, A.B., Sharp, Z.D., Geissman, J.W., Elrick, M.B., Timmons, J.M., Crossey, L.J., and Davidek, K.L. 2000. Chuar Group of the Grand Canyon: record of breakup of Rodinia, associated change in the global carbon cycle, and ecosystem expansion by 740 Ma. *Geology* 28: 619-622.

Dehler, C., **Porter, S.**, and Karlstrom, K. 1999. Grand Canyon Supergroup. *Boatman's Quarterly Review* 12: 31-35.