Phoebe A. Cohen
Assistant Professor of Geosciences
203 Clark Hall
Williams College
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Education:

B.A. with distinction (2002) Cornell University College of Arts and Sciences
Major: Science of Earth Systems

Ph.D. (2010) Harvard University. Department of Earth and Planetary Sciences.
Dissertation: Investigations of Enigmatic Neoproterozoic Eukaryotes
Advisor: Andrew H. Knoll

Professional Experience:

Assistant Professor (2012 -) Department of Geosciences, Williams College

Education and Outreach Lead (2010 - 2013) MIT NASA Astrobiology Team.

Postdoctoral Associate (2010 - 2012) Department of Earth, Atmospheric, and Planetary Sciences, Massachusetts Institute of Technology. Advisor: Roger E. Summons.

Assistant to the Director (2002-2004) Paleontological Research Institute

Awards & Grants:

- Best Paper, Journal of Paleontology, 2012, awarded at the 2013 Annual Meeting of the Geological Society of America
- Sedimentary Geology, Time, Environment, Paleontology, Paleoclimate, and Energy Program short course proposal funded; “Biological and Environmental Transitions During the Neoproterozoic and Paleozoic”, to be held in February, 2014 at Smith College.
- Geological Society of America Subaru Outstanding Woman in Science Award, 2012
- NASA Astrobiology Institute Grant, “Foundations of Complex Life: Evolution, Preservation and Detection on Earth and Beyond” (Co-I and Education and Outreach Lead), 2013-2017, $150,856.
- NASA Astrobiology Education and Public Outreach Grant: ‘A Traveling Astrobiology Exhibit: Combining Youth Engagement with Public Outreach’; 2011
- Paleontological Society Education and Outreach Grant Award: ‘Telling Your Story: Facilitating Relationships between Geoscientists and K-12 Classrooms; 2010
- Derek Bok Excellence in Teaching Award, Harvard University, 2009
- Paleontological Society Gould Student Research Award, 2008
- Cushman Foundation Loeblich and Tappan Student Research Award, 2008
- National Science Foundation Graduate Fellowship, 2005-2008
- Harvard University Department of Earth and Planetary Sciences Student Field Work grant, 2007

PROFESSIONAL PUBLICATIONS:

Cohen, Phoebe A., Francis Macdonald, Sara Pruss, Emily Matys, and Tanja Bosak. Putative macroalgal fossils from the Cryogenian of Mongolia, in review at *Palaios*.

Cohen, Phoebe A., and Andrew H. Knoll (2012) Scale Microfossils from the mid Neoproterozoic Fifteenmile Group, Yukon. Journal of Paleontology 86 (5), 775-800

Wilson, J.P., Grotzinger, J.P., Fisher, W.W., Hand, K.P, Jensen, S., Knoll, A.H., Abelson, J., Metz, J.M., McLoughlin, N., Cohen, P.A., and M.M. Tice. (2012) Deep-Water Incised Valley Deposits at the Proterozoic-Cambrian Boundary in Southern Namibia Contain Abundant Treptichnus pedum. Palaios 27, 252-273

Cohen, Phoebe A., J. William Schopf, Nicholas J. Butterfield, Anatoliy Kudryavtsev, & Francis Macdonald, (2011) Phosphate biomineralization in mid-Neoproterozoic protists. Geology v. 39, no. 6, p. 539-542, doi:10.1130/G31833.1

Macdonald, F.A., and P. Cohen. (2011) The Tatonduk inlier, Alaska–Yukon border. In: Arnaud, E., Halverson, G., and Shields, G. Eds., The Geological Record of Neoproterozoic Glaciations, Geological Society of London Memoir, London.

Willman, Sebastian and Phoebe A. Cohen. 2011. Ultrastructural Approaches to the Microfossil Record: Assessing Biological Affinities by use of Transmission Electron Microscopy. In: Quantifying the Evolution of Early Life (Laflamme, M., Schiffbauer, J.D., and Dornbos, S.Q., Eds.) Springer, 462 p.

Macdonald, F.A., Schmitz, M.D., Crowley, J.L., Roots, C.F., Jones, D.S., Maloof, A.C., Strauss, J.V., Cohen, P.A., Johnston, D.T., and Schrag, D.P., 2010, Calibrating the Cryogenian: Science, v. 327, no. 5970, p. 1241-1243.

Macdonald, F.A., Cohen, P.A., Dudas, F.O., and Schrag, D.P., 2010, Early Neoproterozoic scale microfossils in the lower Tindir Group of Alaska and the Yukon Territory: Geology (Boulder), v. 38, no. 2, p. 143-146.

Cohen, Phoebe A., A.H. Knoll and R.B. Kodner. (2009) Large spinose microfossils in Ediacaran rocks as resting stages of early animals. Proceedings of the National Academy of Sciences. v. 106, p. 6519 – 6524

Cohen, Phoebe A. et al. (2009) Tubular Macrofossils from the Ediacaran Nama Group, Namibia. Journal of Paleontology v. 83, p. 110-122.

Allmon, W.D. and P. Cohen (2008). Palaeoecological significance of turritelline gastropod-dominated assemblages from the mid-Cretaceous (Albian-Cenomanian) of Texas and Oklahoma, USA. Cretaceous Research v. 29, 65-77

Knoll, A.H., Javaux, E.J., Hewitt, D., & Cohen, P. (2006). Eukaryotic organisms in Proterozoic oceans. Philosophical Transactions - Royal Society of London. Biological Sciences, v. 361, n. 1470 p. 1023-1038.

INVITED TALKS:

Before Animals: The Co-Evolution of Earth and Life in Deep Time. Bennington College Science Seminar, April 5th, 2013.

The Record of Eukaryotic Diversification in Proterozoic Seas. Geobiology Symposium, McGill University, February 24th, 2012.

Biomineralization and Exceptional Preservation in early Neoproterozoic Protistan Microfossils. MIT Chemical Oceanography and Biogeochemistry Seminar, October 15th, 2010.

Tracing the History of Eukaryotes in Precambrian Seas. Smithsonian Natural History Museum Paleobiology Seminar Series, June 24, 2010.

Tracing the History of Eukaryotes in Neoproterozoic Seas. Frontiers in Paleontology and Geomicrobiology, May 14-15, 2010, Yale University.

Two New Views of Neoproterozoic Life: Biomineralization in early Eukaryotes and an Ediacaran record of Metazoans. University of Chicago Department of Geophysical Sciences, October 2nd, 2009.

Making it in hostile waters: Metazoan evolution in stressful Ediacaran seas. Friday Harbor Marine Labs, July 23rd, 2009.

Beyond the Ediacarans: New Views of the Neoproterozoic. Cornell University Department of Earth and Atmospheric Sciences, January 21st 2009.

Fossils under the Gun: EM Applications to the study of early life. New England Society for Microscopy Annual Meeting, December 4th, 2008.

The expanding taxonomic affinity and hidden diversity of Neoproterozoic acritarchs. A world in transition: Geobiology of the Proterozoic-Cambrian Symposium, Yale University, 2007.

PROFESSIONAL TALKS & POSTERS:

Cohen, Phoebe A. (2013). Progress and Challenges in Assessing Proterozoic Eukaryotic Diversity. Abstracts with Programs - Geological Society of America Annual Meeting.

Cohen, Phoebe A., E. Matys, S. Pruss, F. Macdonald, and T. Bosak (2012) Macroscopic algal fossils from the Cryogenian of Mongolia. Abstracts with Programs - Geological Society of America Annual Meeting.

Justin V. Strauss, Andrew H. Knoll, Phoebe A. Cohen, and Francis A. Macdonald. (2012) Diverse vase-shaped microfossils in the Neoproterozoic Callison Lake dolostone, Coal Creek Inlier, Yukon Territory, Canada. Abstracts with Programs - Geological Society of America Annual Meeting.

Cohen, Phoebe A., and Irene Porro (2012) A Temporary, Portable, Astrobiology Exhibit: Combining Youth Engagement with Public Outreach. Astrobiology Science Conference 2012

Cohen, Phoebe A., Andrew H. Knoll (2011) Expanded Diversity of Scale Microfossils from the mid Neoproterozoic Fifteenmile Group, Yukon. Abstracts with Programs - Geological Society of America Annual Meeting.

Cohen, Phoebe A., Peter Mangiafico, David Patterson, and Roger E. Summons (2010). Moving WebQuests Forward in a Connected World: A Case Study using the Ediacaran Fauna. Abstracts with Programs - Geological Society of America Annual Meeting.

Cohen, Phoebe A., J. William Schopf, Nicholas J. Butterfield, Anatoliy Kudryavtsev, & Francis Macdonald (2009). Phosphatic Biomineralization of Early Neoproterozoic microfossils from the Yukon Territory. Abstracts with Programs - Geological Society of America Annual Meeting.

Cohen, Phoebe A., Schopf, W.J, Butterfield, N.J., Macdonald, F.M. (2009) Apatite microfossils from the Pre-Sturtian aged Lower Tindir Group, Yukon Territory. Abstracts with Programs – North American Paleontological Convention.

Cohen, Phoebe A., Robin B. Kodner, Andrew H. Knoll (2008). Evolutionary, Ecological, and Paleoenvironmental Implications of Acritarchs as Metazoan Resting Stages. Abstracts with Programs - Geological Society of America Annual Meeting.

Cohen, Phoebe A., Robin B. Kodner, Andrew H. Knoll (2007). Expanding the Taxonomic Affinities of Ediacaran and Phanerozoic Acritarchs. Palaeontological Association Annual Meeting, Uppsala, Sweden.

Cohen, Phoebe A. & A.H. Knoll (2007) Exploring the Taxonomic Affinities of Neoproterozoic and Paleozoic Acritarchs. Abstracts with Programs - Geological Society of America Annual Meeting.

Cohen, Phoebe A., Bradley, A. S., Knoll, A.H., et al. (2006). Tubular Macrofossils from the Nama Group, Namibia. Abstracts with Programs - Geological Society of America, 38.

Cohen, Phoebe A. & P. Sadler. (2005). High resolution biostratigraphic correlation of acritarch diversity in the Neoproterozoic and earliest Cambrian using CONOP9. Abstracts with Programs - Geological Society of America, 37(7), 369.

Allmon, W.D., Cohen, Phoebe A., (2003). Paleoecological significance of a Turritelline gastropod-dominated limestone in the Lower Cretaceous of Texas. Abstracts with Programs - Geological Society of America, 35(6), 502.

SHORT COURSES:

- "Scientfic drilling and the Evolution of the Earth System: Climate, Biota, Biogeochemistry, and Extreme Events," NSF funded workshop, Norman OK, May 17-19, 2013
- NAGT/NSF On the Cutting Edge Workshop for Early Career Geoscience Faculty, June 10-15, 2012
- Geological Society of America short course 521 Virtual Field Experiences in Geoscience Education (presenter). 2011.
- Geological Society of America short course 508 Education Research I: Conducting Qualitative Geoscience Education Research, 2010. (participant)
- Geological Society of America short course 518. Education Research II: Conducting Quantitative Geoscience Education Research, 2010. (participant)
- Agouron Institute, Advanced Geobiology Field course (Namibia), June 2006. (participant)
- USC Wrigley / Agouron Institute International Geobiology course, June-July 2005. (participant)

FIELD WORK:

- Lower Paleozoic of Western Newfoundland, July 2013.
- Neoproterozoic Fifteenmile Group, The Yukon Territory, June-July 2012.
- Shark Bay, Western Australia, June 2011.
- Flinders Range, Ediacaran localities, Southern Australia, April 2010.
- Neoproterozoic Fifteenmile Group, Alaska and The Yukon Territory, June 2007

- Ediacaran Nama Group, Namibia, June 2006.
- Ordovician Beaverfoot Formation, Canadian Rockies, September 2005.

TEACHING EXPERIENCE:

- GEOS 101 Co-Evolution of Earth and Life, Williams College, Fall 2012, 2013
- GEOS 212, Paleobiology, Williams College, Spring 2013
- Instructor, Astrobiology, MIT Independent Activities Period, January 2012
- Head Teaching Fellow, Paleobiological Perspectives on Ecology and Evolution, Harvard University Department of Organismic and Evolutionary Biology, Spring 2009.
- Teaching Fellow, Dinosaurs and Their Relatives, Harvard University Core Program, Spring 2008.
- Teaching Fellow, History of the Earth, Harvard University Department of Earth and Planetary Sciences, Spring 2006.
- Teaching Fellow, Environmental Risks & Disasters, Harvard University Core Program, Fall 2006.
- Teaching Assistant, Paleobiology, Cornell University Department of Earth and Atmospheric Sciences, Fall 2003.
- Teaching Assistant, Hawaii Earth Science Field Course, Cornell University Department of Earth and Atmospheric Sciences, January 2002.

RECENT EDUCATION AND OUTREACH ACTIVITIES:

- TED Ed video on Fossilization: http://ed.ted.com/lessons/how-to-fossilize-yourself-phoebe-a-cohen
- Student blogs about the geological histories of their hometowns: http://sites.williams.edu/geos101/

ORGANIZATIONAL AND COMMUNITY ACTIVITIES:

- Paleontological Society Representative to the Geological Society of America Annual Meeting Joint Technical Program Committee, 2013-2014
- Paleontological Society Social Media Coordinator, 2013-
- Paleontological Society Education and Outreach committee member, 2010 -
- Paleontological Society communications committee member, 2011 -
- Reviewer for Proceedings of the National Academy of Science, Precambrian Research, Geology, Palaios, Alcheringa, Journal of Paleontology, Nature Geoscience, and Nature Communications.
- Grant reviewer for the National Science Foundation, Petroleum Research Fund, NASA Education
- Seminar Co-organizer, Williams College Geoscience seminar series, 2013-2014.
- Member, Cornell University Department of Earth and Atmospheric Sciences Advisory Board, 2013-
- Member, Williams College Claire Booth Luce scholars program committee, 2013-
- Member, Williams College Campus Environmental Advisory Committee, 2013-
- Member, Williams College Faculty Review Panel, 2013-