

A. Hope Jahren, Ph.D.

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EDUCATION

Ph.D. in Soil Science, University of California at Berkeley, 1996
B.A. *cum laude* in Geology, University of Minnesota at Minneapolis, 1991

ACADEMIC EMPLOYMENT

Wilson Professor, CEED, University of Oslo, 09/16 – present
Full Professor with Tenure, SOEST, University of Hawaii, 07/08 – 06/16
Full Professor with Tenure, EPS, Johns Hopkins University, 07/06 – 06/08
Associate Professor, EPS, Johns Hopkins University, 07/03 – 06/06
Assistant Professor, EPS, Johns Hopkins University, 09/99 – 06/03
Assistant Professor, EAS, Georgia Tech, 09/96 -- 09/99

HONORS AND AWARDS

2016 Named to the TIME-100 list: Pioneer category
2016 WINGS WorldQuest Women of Discovery Leadership Award
2013 Best University Research Award, Department of Energy, Geosciences
2011 Aldo Leopold Leadership Fellow
2010 Fulbright Award in Arctic Science (Norway)
2010 Exceptional Reviewer, *Geology*
2010 Scientist of the Year: ARCS Honolulu Chapter
2005 Named one of the *Popular Science* “Brilliant 10”
2005 James B. Macelwane Medal:
American Geophysical Union Young Scientist Award
2005 Biogeochemistry Fellow: American Geophysical Union
2003 Fulbright Award in Environmental Science (Denmark)
2001 Donath Medal:
Geological Society of America Young Scientist Award
2001 Geological Society of America Fellow
1997 Georgia Institute of Technology Teaching Fellow Award
1994 Outstanding Graduate Student Instructor Award, UC Berkeley
1992 Fulbright Award in Geology (Norway)

LEADERSHIP POSITIONS HELD

Founding Member, Board of Directors, STEPPE – Geological Society of America
Secretary, AGU Biogeosciences Section (2010-2014)
Editor, *GSA Bulletin* (2010-2014)
Organizer, Goldschmidt Conference 2014 (Biogeochemistry Theme)

OTHER PROFESSIONAL SERVICE

Associate Editor, *GSA Bulletin* (2006-2009)
Editorial Board, *Geochemical Transactions* (2005-2009)
Editorial Board, *Geology* (2003-2006)
Selection Committee, AGU Fellows (2008-2010),
Selection Committee, AGU Union Medals and Awards (2012-2015)
Selection Committee, GSA Young Investigator Award (2004-2007),

OTHER PROFESSIONAL SERVICE (*cont'd*)

Selection Committee, GSA Student Research Grants (2006-2008)

Invited Participant, NSF Deep Time Earth-Life Observatories Workshop,
Washington, DC (April 2010)

Invited Participant, National Academy of Sciences Kavli Frontiers Conference,
Irvine, CA (October 2008)

Advisory Board, Department of Geology and Geophysics, University of Minnesota
(2006 and 2007)

PROFESSIONAL MEMBERSHIPS

Geological Society of America, American Geophysical Union

REVIEWER/PANELIST

Numerous Journals/Agencies including *Nature*, *Science*, *Geology*,
Geochimica Cosmochimica et Acta and NSF, DOE, USDA, EPA.

HISTORY OF PUBLICATION

73 peer-reviewed publications (1992 to present)

TOTAL CITATIONS: 2670

H-INDEX: 29

10 SELECT PUBLICATIONS

1. M.T. Rabanus-Wallace, M.J. Wooller, G.D. Zazula, E. Shute, **A.H. Jahren**, P. Kosintsev, J.A. Burns, J. Breen, B. Llamas and A. Cooper. 2017. Megafaunal isotopes reveal role of increased moisture on rangeland during Late Pleistocene extinctions. *Nature Ecology and Evolution* 1, 0125, DOI: 10.1038/s41559-017-0215.
2. B.A. Schubert, **A.H. Jahren**, S.P. Davydov and S. Warny. 2017. The transitional climate of the late Miocene Arctic: Winter-dominated precipitation with high seasonal variability. *Geology*, DOI: 10.1130/G38746.1.
3. B.A. Schubert and **A.H. Jahren**. 2015. Seasonal Temperature and precipitation recorded in the intra-annual oxygen isotope pattern of meteoric water and tree-ring cellulose. *Quaternary Science Reviews*, 125: 1-14. DOI: 10.1016/j.quascirev.2015.07.024.
4. B.A. Schubert and **A.H. Jahren**. 2015. Global increase in plant carbon isotope fractionation following the last glacial maximum caused by increase in atmospheric pCO₂. *Geology*, DOI: 10.1130/G36467.1.
5. B.A. Schubert and **A.H. Jahren**. 2013. Reconciliation of marine and terrestrial carbon isotope excursions based on changing atmospheric CO₂ levels. *Nature Communications*, 4:1653, DOI: 10.1038/ncomms2659.
6. B.A. Schubert and **A.H. Jahren**. 2012. The effect of atmospheric CO₂ concentration on carbon isotope fractionation in C₃ land plants. *Geochimica et Cosmochimica Acta*, 96: 29-43.
7. B.A. Schubert and **A.H. Jahren**. 2011. Quantifying seasonal precipitation using high-resolution carbon isotope analyses in evergreen wood. *Geochimica et Cosmochimica Acta*, 75(22) 7291-7303, doi: 10.1016/j.gca. 2011.08.002.
8. **A.H. Jahren** and B.A. Schubert. 2010. Corn content of French fry oil from national chain vs. small business restaurants. *Proceedings of the National Academy of Sciences*, 107(5), 2099–2101, doi: 2010.1073/pnas.0914437107.

9. **A.H. Jahren** and L.S.L. Sternberg. 2008. Annual patterns within tree rings of the Arctic middle Eocene (~45 Ma): Isotopic signatures of precipitation, relative humidity and deciduousness. *Geology*, 36(2), 99-102.
10. **A.H. Jahren**. 2007 (*Invited*). The Arctic forest of the middle Eocene. *Annual Review of Earth and Planetary Sciences*, 35, 509-540.

BOOK

A.H. Jahren. 2016. "Lab Girl" (Knopf).

Awards:

Winner, 2016 National Book Critics Circle Award, Autobiography

Winner, 2017 Excellence in Science Prize, AAAS/Subaru

Finalist, 2017 PEN/E.O. Wilson Literary Science Writing Award

Finalist, 2016 Discover Award in Nonfiction, Barnes & Noble

Longlisted, 2016 Andrew Carnegie Medals for Excellence in Nonfiction

RECENT ARTICLES FOR THE POPULAR PRESS

A.H. Jahren. (*Science Essay*). "Hope Springs Early, but Not Eternal, for the Deadnettle – or for Us." The New York Times, Mar 27, 2017.

A.H. Jahren. (*Opinion*). "The Farmers We Forgot." The New York Times, Nov 23, 2016.

A.H. Jahren. (*Ideas*). "GMOs Are Our Destiny." *TIME Magazine*, Oct 13, 2016.

A.H. Jahren. (*Opinion*). "My Father's Hackberry Tree." The New York Times, Aug 6, 2016.

A.H. Jahren. (*OpEd*). "She Wanted to Do Her Research. He Wanted to Talk 'Feelings'." The New York Times, Mar 4, 2016.

A.H. Jahren. (*OpEd*). "Science's Sexual Assault Problem." The New York Times, Sep 20, 2014.

TEACHING:

Graduate Courses:

GG711 Terrestrial Geobiology (U of Hawaii)

270.624 Stable Isotope Techniques (Johns Hopkins)

EAS 8103B Earth System Chemistry (Georgia Tech)

EAS 6625A Stable Isotope Geochemistry (Georgia Tech)

Undergraduate Courses:

GG102 Introduction to Global Change (U of Hawaii)

GG101 The Dynamic Earth (U of Hawaii)

270.222 Earth Materials (Johns Hopkins)

270.424 Geobiology (Johns Hopkins)

270.109 Exploring Earth's History through Fossils (Johns Hopkins)

270.120 The Extinction of the Dinosaurs (Johns Hopkins)

EAS 4803 Scientific Analysis of Environmental Change (Georgia Tech)

EAS 4802A Soil Biogeochemistry (Georgia Tech)

EAS 2501A Geology 1 (Georgia Tech)

Student Evaluations: Overall Course Rating = 4.64 out of 5.00 (Johns Hopkins)

HISTORY OF MAJOR FUNDING

\$ 3.2 M in total U.S. external funds (last 10 years only)

- NIH (NIDDK): “ $\delta^{13}\text{C}$ Added Sugar Intake Biomarker: Determining Validity in Children” 2014-2016 (subcontracted to VaTech P.I. B. Davy) \$61,750 to Jahren
- DOE Division of Geosciences (BES): “Fundamental Research on the Fractionation of Carbon Isotopes during Photosynthesis” 2014-2016 (no Co-P.I.) \$405,000 to Jahren
- NSF Division of Sedimentary Geology and Paleontology: “Paleoclimate Analysis of a Miocene Arctic Forest from the Kolyma River Basin, Northeastern Russia” 2013-2015 (Co-P.I. B. Schubert) \$170,000 to Jahren
- NIH (NIDDK): “SIPsmarter” 2011-2016 (subcontracted to VaTech P.I. J. Zoellner) \$230,402 to Jahren
- DOE Division of Geosciences (BES): “Development of the Carbon Isotope Signature of Terrestrial *n*-alkanes as a Potential Proxy for Palaeo- pCO_2 ” 2010-2013 (no Co-P.I.) \$599,338 to Jahren
- NSF (OS/MRI): “Acquisition of IRMS Instruments for Stable Isotope Analyses of New Geobiological Substrates” 2010-2013 (Co-P.I. B. Popp) \$716,368 to Jahren
- NSF Division of Arctic Sciences: “Collaborative Research: Transarctic Paleoclimate of the Eocene” 2008-2012 (Co-P.I.s J. Eberle, L. Sternberg and R. Summons) \$350,677 to Jahren
- NSF (EXE): “Method Development for Stable Isotope Characterization of High Explosives” 2007-2010 (no Co-P.I.) \$397,198 to Jahren
- DOE Division of Geosciences (BES): “Development of New Biomarkers for Surficial Earth Processes” 2006-2009 (no Co-P.I.) \$313,595 to Jahren